Chapter 173-162 WAC

REGULATION AND LICENSING OF WELL CONTRACTORS AND OPERATORS

WAC

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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-162-110 Examinations—Conducting examinations. [Order DE 73-10, § 173-162-110, filed 6/29/73.] Repealed by 88-08-070 (Order 88-58), filed 4/6/88. Statutory Authority: Chapter 18.104 RCW.

173-162-140 What are the requirements to become an on-site testing advisor? [Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-140, filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-140, filed 4/6/88; Order DE 73-10, § 173-162-140, filed 6/29/73.] Repealed by 06-23-121 (Order 06-08), filed 11/21/06, effective 12/22/06. Statutory Authority: Chapter 18.104 RCW.

173-162-150 Licenses—Conditional license. [Order DE 73-10, § 173-162-150, filed 6/29/73.] Repealed by 88-08-070 (Order 88-58), filed 4/6/88. Statutory Authority: Chapter 18.104 RCW.

173-162-160 Temporary authorization. [Order DE 73-10, § 173-162-160, filed 6/29/73.] Repealed by 88-08-070 (Order 88-58), filed 4/6/88. Statutory Authority: Chapter 18.104 RCW.

173-162-170 Retaking examination.[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-170, filed 4/6/88; Order DE 73-10, § 173-162-170, filed 6/29/73.] Repealed by 98-08-031 (Order 97-08), filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080.

173-162-180 Water well contractors—Identification numbers. [Order DE 73-10, § 173-162-180, filed 6/29/73.] Repealed by 88-08-070 (Order 88-58), filed 4/6/88. Statutory Authority: Chapter 18.104 RCW.

WAC 173-162-010 What is the purpose of these regulations? These regulations are adopted under chapter 18.104 RCW in order to establish procedures for the examination, licensing and regulation of well contractors and operators.

[Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-010, filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-010, filed 4/6/88; Order DE 73-10, § 173-162-010, filed 6/29/73.]

WAC 173-162-020 To whom do these regulations apply? These regulations apply to all well contractors and operators who are contracting for well construction or constructing wells in the state of Washington.

[Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-020, filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-020, filed 4/6/88; Order DE 73-10, § 173-162-020, filed 6/29/73.]

WAC 173-162-025 What are the reasons for suspending or revoking an operator license? (1) In cases other than those relating to the failure of a licensee to renew a license, the director may suspend or revoke a license issued pursuant to this chapter for any of the following reasons:

(a) For fraud or deception in obtaining the license;

(b) For fraud or deception in reporting under RCW 18.104.050;

(c) For violating the provisions of this chapter, or of any lawful rule or regulation of the department or the department of health.

(2) The director shall immediately suspend any license issued under this chapter if the department of social and health services has determined that the holder of the license is not in compliance with the support order or a residential or visitation order issued pursuant to chapter 74.20A RCW. If the person has continued to meet all other requirements for reinstatement during the suspension, reissuance of the license shall be automatic upon the director's receipt of a release issued by the department of social and health services stating that the person is in compliance with the order.

(3) No license shall be suspended for more than six months, except that a suspension under subsection (2) of this section shall continue until the department receives a release issued by the department of social and health services stating that the person is in compliance with the order.

(4) No person whose license is revoked shall be eligible to apply for a license for one year from the effective date of the final order of revocation.

[Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-025, filed 3/23/98, effective 4/23/98.]

WAC 173-162-030 How are the words and phrases used in this chapter? See other definitions under chapter 173-160 WAC.

(1) "Constructing a well" or "construct a well" means:

(a) Boring, digging, drilling, or excavating a well;

(b) Installing casing, sheeting, lining, or well screens, in a well;

(c) Drilling a geotechnical soil boring; or

(d) Installing an environmental investigation well.

"Constructing a well" or "construct a well" includes the alteration of an existing well.

(2) "Continuing education provider" is any person, organization, school or other entity involved in education that has received approval from the department for their continuing education plan and curriculum.

(3) "Continuing education unit" is one credit approved by the department for time spent participating in training or instruction in subject areas approved by the department.

(4) "Decommissioning" means to fill or plug a well so that it will not produce water, serve as a channel for move-

ment of water or pollution, or allow the entry of pollutants into the well or aquifers.

(5) "Department" means the department of ecology.

(6) "Dewatering well" means a cased or lined excavation or boring that is intended to withdraw or divert ground water for the purpose of facilitating construction, stabilizing a land slide, or protecting an aquifer.

(7) "Director" means director of the department of ecology.

(8) "Domestic water supply" is any water supply which serves a family residence(s).

(9) "Driven well" is a well constructed by joining a "drive point" to a length of pipe, then driving the assembly into the ground.

(10) "Dug well" is a well generally excavated with hand tools or by mechanical methods. The side walls may be supported by material other than standard weight steel casing.

(11) "Environmental investigation well" means a cased hole intended or used to extract a sample or samples of ground water, vapor, or soil from an underground formation and which is decommissioned immediately after the sample or samples are obtained. An environmental investigation well is typically installed using direct push technology or auger boring and uses the probe, stem, auger, or rod as casing. An environmental investigation well is not a geotechnical soil boring.

(12) "Geotechnical soil boring" or "boring" means an uncased well drilled for the purpose of obtaining soil samples to ascertain structural properties of the subsurface.

(13) "Ground source heat pump boring" means a vertical boring constructed for the purpose of installing a closed loop heat exchange system for a ground source heat pump.

(14) "Ground water" means and includes ground waters as defined in RCW 90.44.035.

(15) "Grounding well" means a grounding electrode installed in the earth by the use of drilling equipment to prevent buildup of voltages that may result in undue hazards to persons or equipment. Examples are anode and cathode protection wells.

(16) "Instrumentation well" means a well in which pneumatic or electric geotechnical or hydrological instrumentation is permanently or periodically installed to measure or monitor subsurface strength and movement. Instrumentation well includes bore hole extensometers, slope indicators, pneumatic or electric pore pressure transducers, and load cells.

(17) "Monitoring well" means a well designed to obtain a representative ground water sample or designed to measure the water level elevations in either clean or contaminated water or soil.

(18) "Observation well" means a well designed to measure the depth to the water or water level elevation in either clean or contaminated water or soil.

(19) "Operator" means a person who:

(a) Is employed by a well contractor;

(b) Is licensed under this chapter; or

(c) Who controls, supervises, or oversees the construction of a well or who operates well construction equipment.

(20) "Owner" or "well owner" means the person, firm, partnership, copartnership, corporation, association, other entity, or any combination of these, who owns the property on which the well is or will be constructed or has the right to the well by means of an easement, covenant, or other enforceable legal instrument for the purpose of benefiting from the well.

(21) "Public water supply" is any water supply intended or used for human consumption or other domestic uses, including source, treatment, storage, transmission and distribution facilities where water is furnished to any community, collection or number of individuals, available to the public for human consumption or domestic use, excluding water supplies serving one single-family residence and a system with four or fewer connections all of which serve residences on the same farm.

(22) "Remediation well" means a well intended or used to withdraw ground water or inject water, air (for air sparging), or other solutions into the subsurface for the purpose of remediating, cleaning up, or controlling potential or actual ground water contamination.

(23) "Resource protection well" means a cased boring intended or used to collect subsurface information or to determine the existence or migration of pollutants within an underground formation. Resource protection wells include monitoring wells, observation wells, piezometers, spill response wells, remediation wells, environmental investigation wells, vapor extraction wells, ground source heat pump boring, grounding wells, and instrumentation wells.

(24) "Resource protection well contractor" means any person, firm, partnership, copartnership, corporation, association, or other entity, licensed and bonded under chapter 18.27 RCW, engaged in the business of constructing resource protection wells or geotechnical soil borings.

(25) "Spill response well" means a well used to capture or recover any spilled or leaked fluid which has the potential to, or has contaminated the ground water.

(26) "Structured properties" means subsurface engineering properties or geotechnical information used for the purpose of designing structures such as bridges, buildings, highways, pipelines, or for assessing slope stability samples.

(27) "Test well" is a well (either cased or uncased), constructed to determine the quantity of water available for beneficial uses, identifying underlying rock formations (lithology), and to locate optimum zones to be screened or perforated. If a test well is constructed with the intent to withdraw water for beneficial use, it must be constructed in accordance with the minimum standards for water supply wells, otherwise they shall be constructed in accordance with the minimum standards for resources protection wells. A water right permit, preliminary permit, or temporary permit shall be obtained prior to constructing a test well unless the anticipated use of water is exempt as provided in RCW 90.44.050. A "test well" is a type of "water well."

(28) "Vapor extraction well" means a well used to withdraw gases or vapors from soil, rock, landfill, or ground water or allow air or vapor to enter subsurface soil or rock for the purpose of remediating soil and/or ground water contamination.

(29) "Water well" means any excavation that is constructed when the intended use of the well is for the location, diversion, artificial recharge, observation, monitoring, dewatering or withdrawal of ground water. Water well includes ground source heat pump borings and grounding wells.

(30) "Water well contractor" means any person, firm, partnership, copartnership, corporation, association, or other entity, licensed and bonded under chapter 18.27 RCW, engaged in the business of constructing water wells.

(31) "Well alterations" include(s), deepening, hydrofracturing or other operations intended to increase well yields or change the characteristics of the well. Well alterations does not include general maintenance, cleaning, sanitation, and pump replacement.

(32) "Well contractor" means a resource protection well contractor and a water well contractor licensed and bonded under chapter 18.27 RCW.

(33) "Well driller(s)" or "driller(s)" means a resource protection well contractor or operator and a water well contractor or operator.

(34) "Well" means water wells, resources protection wells, dewatering wells, and geotechnical soil borings. Well does not mean an excavation made for the purpose of obtaining or prospecting for oil, natural gas, geothermal resources, minerals, or products of mining, or quarrying, or for inserting media to repressure oil or natural gas bearing formations, or for storing petroleum, natural gas, or other products.

[Statutory Authority: Chapter 18.104 RCW. 06-23-121 (Order 06-08), § 173-162-030, filed 11/21/06, effective 12/22/06. Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-030, filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-030, filed 4/6/88; Order DE 73-10, § 173-162-030, filed 6/29/73.]

WAC 173-162-040 How do I comply with licensing requirements? (1) A water well operator license is required for all operators engaged in constructing or decommissioning water wells.

(2) A water well operator training license is required for any trainee engaged in constructing or decommissioning water wells under the training program provisions of this chapter.

(3) A resource protection well operator license is required for all operators engaged in constructing or decommissioning resource protection wells and geotechnical soil borings.

(4) A resource protection well operator training license is required for any trainee engaged in constructing or decommissioning resource protection wells and geotechnical soil borings under the training program provisions of this chapter.

(5) General contractors, engineering firms, designers, consulting firms, or other entities need not have a licensed well operator in its employ: Provided, That all well construction and decommissioning associated with their various projects and/or contracts is conducted by a licensed well operator licensed under the provisions of this chapter except as provided in WAC 173-162-050.

[Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-040, filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-040, filed 4/6/88; Order DE 73-10, § 173-162-040, filed 6/29/73.]

WAC 173-162-050 Who is exempt? (1) No license under this chapter shall be required of:

(a) Any individual who personally constructs a well on land which is owned or leased by the individual, or in which the individual has a beneficial interest as a contract purchaser and is used by the individual for farm or single-family residential use only. Provided, the individual shall construct not more than one well every two years.

(b) An individual, except trainees, who performs labor or services for a well contractor in connection with the construction or decommissioning of a well at the direction and under the direct supervision and control of a licensed operator who is present at the construction site.

(c) A person licensed under the provisions of chapter 18.08 or 18.43 RCW if in the performance of duties covered by those licenses.

(2) An individual who constructs or decommissions a well without a license under this subsection shall comply with all other requirements of this chapter and rules adopted by the department. Those requirements include, but are not limited to:

(a) Well construction and decommissioning standards;

(b) Payment of well construction fees; and

(c) Notification of well construction required by RCW 18.104.048.

[Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-050, filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-050, filed 4/6/88; Order DE 73-10, § 173-162-050, filed 6/29/73.]

WAC 173-162-055 What types of operator licenses are available? Seven types of drilling licenses are available:

(1) Water well operator training license.

(2) Resource protection well operator training license.

(3) Resource protection well operator license.

(4) Water well operator license.

(5) Conditional licenses for water or resource protection well drilling.

(6) Retirement license for water and/or resource protection well drilling.

(7) Inactive license for water and/or resource protection well drilling.

[Statutory Authority: Chapter 18.104 RCW. 06-23-121 (Order 06-08), § 173-162-055, filed 11/21/06, effective 12/22/06. Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-055, filed 3/23/98, effective 4/23/98.]

WAC 173-162-060 How do you qualify for each license? (1) **Training licenses.**

(a) You are qualified to receive either a water or a resource protection training license if you:

(i) Submit a completed application to the department on forms provided by the department and pay the department a seventy-five dollar application fee; and

(ii) Have completed at least six hundred hours of drilling experience working under the direct supervision of a licensed operator who has held a Washington state water and/or resource protection well drilling license for at least three years; and

(iii) Have obtained six continuing education units as approved by the department; and

(iv) Pass a written examination as provided for in RCW 18.104.080; and

(v) Pass an on-site examination by the department; and

(vi) Present a statement by a person or persons licensed under this chapter, other than a trainee, signed under penalty of perjury as provided in RCW 9A.72.085, verifying that:

(A) The applicant has acquired a minimum of six hundred hours of field experience required under this chapter; and

(B) The operator has assumed liability for any and all well construction activities of the applicant while the applicant was gaining his/her six hundred hours of field experience. The operator shall not be subject to any penalties or orders that may be issued for wells constructed by the applicant that were not the responsibility of the operator to have direct supervision and control over; and

(C) A licensed operator, except a trainee, who will sponsor the trainee, has been identified on the signed statement. The licensed operator who will be sponsoring the trainee, shall assume liability for any and all well construction activities of the trainee accomplished under the operator's control during the period of the trainee's license; and

(vii) In obtaining a statement from a well operator(s) under (a)(vi) of this subsection, an applicant who has gained drilling experience under more than one operator shall submit a statement from each operator. It is not necessary to accumulate all qualifying experience under one operator. Field experience for which a statement of verification and liability cannot be obtained, shall not be used as qualifying experience under this section.

All statements shall be entered on forms provided by the department.

(b) **Terms and conditions of a training license.**

(i) A person with either a resource protection or a water well training license may construct only those types of wells for which they are licensed without being under the direct supervision of a licensed operator provided:

(A) A licensed operator is available by radio, telephone, or other means of communication; and

(B) The licensed operator can reach the drill site within one hour.

(ii) A trainee shall maintain a daily drilling log identifying all work accomplished that day. The log shall remain in the possession of the trainee at all times and shall be reviewed and initialed daily by the responsible licensed operator. The drilling log shall be available for review by department and county officials whose county has received delegated authority as provided in RCW 18.104.043.

(iii) The work documented and initialed in the drilling log shall be used in your application for a license under the training program completed, licensing category of this chapter.

(iv) All verifiable work performed by a trainee under the control of a licensed operator may be carried over to subsequent operator(s) who assume liability for the trainee.

(v) A trainee may apply and qualify for both a resource protection and a water well drilling training license, provided they meet the provisions of WAC 173-162-060 (1)(a) for each license they apply for.

(2) **Water well or resource protection well operator licenses.**

A person shall be qualified to receive either a water or resource protection well operator license if you meet the requirements of one of the following categories:

(a) **New applicant category.**

Applicants who have never held a well operator license qualify if they:

(i) Submit a completed application to the department on forms provided by the department and pay the department a seventy-five dollar application fee; and

(ii) Submit proof that they have acquired five thousand four hundred hours of drilling experience under the direct supervision of a licensed well operator. Experience gained as a licensed trainee may be applied towards the experience requirements of this subsection; and

(iii) Submit proof that they have obtained thirty-two continuing education units; and

(iv) Pass a written examination as provided for in RCW 18.104.080.

(v) The department shall evaluate and approve all qualifying experience and educational training. If your qualifying drilling experience under (a)(ii) of this subsection is from another state, the department may require an on-site examination.

(b) **Training program completed category.**

Applicants who have held a valid training license will be qualified to receive an operator license if they:

(i) Submit a completed application to the department on forms provided by the department and pay the department a seventy-five dollar application fee; and

(ii) Submit proof that they have worked as a licensed trainee under the provisions of this chapter for at least three thousand six hundred hours; and

(iii) Have obtained fourteen continuing education units while working under the training program.

(c) **Licensed experience category.**

(i) **Applicants who have never held an operator license in Washington state qualify if they:**

(A) Submit a completed application to the department on forms provided by the department and pay the department a seventy-five dollar application fee; and

(B) Hold a valid well operator license, or equivalent, in another state and can show proof that the license has been held for a period of at least three years. The department shall evaluate and approve all experience acquired by out-of-state licensed operators; and

(C) Have obtained thirty-two continuing education units as approved by the department; and

(D) Pass a written examination as provided for in RCW 18.104.080; and

(E) Passed an on-site examination by the department. The on-site examination may be waived by the department.

(F) Proof of licensing under (c)(i)(B) of this subsection shall be submitted with the application for license. Proof of drilling experience may include drilling logs, federal or state tax records; employment records; or other records acceptable to the department.

(ii) **Individuals, other than trainees, whose Washington operator license has been suspended, revoked, expired or whose license status has changed to retired or inactive may apply for a new license. These individuals qualify to receive a license if:**

(A) The terms of the order of suspension or revocation have been met; and

(B) They submit a completed application to the department on forms provided by the department and pay the department a seventy-five dollar application fee; and

(C) They have obtained seven continuing education units for each year or portion of a year the license has been revoked, suspended, inactive, retired, or expired; and

(D) They pass a written examination as provided for in RCW 18.104.080; and

(E) They pass an on-site examination by the department.

(F) The written and/or on-site examination(s) under (c)(ii)(D) and (E) of this subsection may be waived by the department.

(3) Individuals who received an operator license for either water well or resource protection well drilling are qualified to receive the other license if they:

(a) Currently hold a valid well operator license under one of the categories in subsection (2) of this section; and

(b) Submit a completed application to the department on forms provided by the department and pay a seventy-five dollar application fee; and

(c) Pass a written examination; and

(d) Pass an on-site examination if their field experience was gained in another state. The department may waive the on-site examination.

(e) Submit proof of at least six hundred hours of additional well drilling experience for the other type of license you wish to obtain. **EXAMPLE -** You currently hold a water well operator license that was issued by the department after the effective date of these regulations. You also wish to be licensed to construct resource protection wells. You will qualify to receive the resource protection operator license by making an application, paying the fee, and showing proof of six hundred hours of resource protection well drilling experience, passing a written exam, and passing an on-site exam if your drilling experience was gained in another state. Proof of experience will consist of drilling reports showing you were the operator of record on at least fifteen resource protection wells, or other documentation showing experience approved by the department.

(4) **Conditional license.**

(a) A conditional license may be issued to a former licensed operator for the sole purpose of authorizing the well operator to comply with an order to correct a problem with a well. The terms of the license shall detail the extent and limitations placed on the well operator. This may include limitations of work to be completed on a specific well, license expiration, and any other limitation set by the department.

(b) A conditional license cannot be issued to a person who has never held an operator license issued under the provisions of this chapter.

(5) **Retirement license.**

(a) A person shall be qualified to receive a retirement license if you meet the following requirements:

(i) Submit a completed application to the department on forms provided by the department and pay the department a seventy-five dollar application fee; and

(ii) Hold a current active license for a minimum of ten years; and

(iii) Have no outstanding enforcement actions.

(b) The holder of a retirement license may not engage in any licensed activities. The holder of a retirement license may apply for a new license under WAC 173-162-060(2).

(6) **Inactive license.**

(a) A person shall be qualified to receive an inactive license if you meet the following requirements:

(i) Submit a completed application to the department on forms provided by the department and pay the department a seventy-five dollar application fee; and

(ii) Show proof of inactive status based on military documents, hospitalization records, out of country drilling or other extraordinary circumstances as determined by the department; and

(iii) Hold a current active license; and

(iv) Have no outstanding enforcement actions.

(b) Extraordinary circumstances do not include failure to notify the department of a change of address; postal service error and domestic disputes (divorce or separation).

(c) The holder of an inactive license must resubmit an application to extend inactive license status at the end of each two-year period. The holder of an inactive license may not engage in any licensed activities. The holder of an inactive license may apply for a new license under WAC 173-162-060(2).

[Statutory Authority: Chapter 18.104 RCW. 06-23-121 (Order 06-08), § 173-162-060, filed 11/21/06, effective 12/22/06. Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-060, filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-060, filed 4/6/88; Order DE 73-10, § 173-162-060, filed 6/29/73.]

WAC 173-162-070 What application fees are required? Application fees are seventy-five dollars for each operator or training license.

[Statutory Authority: Chapter 18.104 RCW. 06-23-121 (Order 06-08), § 173-162-070, filed 11/21/06, effective 12/22/06. Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-070, filed 3/23/98, effective 4/23/98; Order DE 73-10, § 173-162-070, filed 6/29/73.]

WAC 173-162-075 How often do I need to renew my license? (1) Licenses issued under this chapter, except a training license, shall be renewed every two years.

(2) A training license shall be valid for a period of two years from the time it was originally issued. A training license cannot be renewed. However, a one-time extension may be granted upon show of good cause by the trainee. The limit of the extension shall be for no longer than twenty-four months. The trainee will be required to earn seven continuing education units for each year or portion of a year the license is held. The department may waive the continuing education requirement of this subsection. Each request will be evaluated on a case-by-case basis. A seventy-five dollar fee will be charged for the extension.

[Statutory Authority: Chapter 18.104 RCW. 06-23-121 (Order 06-08), § 173-162-075, filed 11/21/06, effective 12/22/06. Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-075, filed 3/23/98, effective 4/23/98.]

WAC 173-162-080 What are the conditions and cost of renewing a drilling license? (1) Between the 1993 legislation, Laws of 1997, chapter 387, and the adoption of these

regulations implementing the legislation, the well operator licenses issued and renewed by the department met the requirements of the 1993 legislation and may be renewed for either a water well or resource protection well operator license or both as provided in subsection (2) of this section.

(2) A holder of a valid license may renew the license if they:

(a) Submit a completed application on forms approved by the department; and

(b) Show proof that they successfully completed fourteen continuing education units during the past twenty-four months of the license term. A minimum of two continuing education units out of the fourteen required units must be about Washington state drilling or licensing regulations; and

(c) Pay a seventy-five dollar renewal fee for each license they wish to renew.

(3) If you fail to submit a completed application for renewal, the license shall expire at the end of its effective term. A complete application includes the submission of the renewal fee and proof of completion of the required continuing education.

(4) If your license has expired, you will have thirty days in which to renew it. The thirty-day extension period is to be used only to submit a late application and fee. It is not to be used to gain continuing education units. You must not engage in any licensed activities during this time. If you fail to submit your renewal application, fee, and proof of continuing education after the extension period has expired, you must apply for a new license as provided in this chapter.

(5) The department may refuse to renew a license if the license is currently suspended or revoked, or the licensee has not complied with an order issued by the department or has not paid a penalty imposed under RCW 18.104.155, unless the order or penalty is under appeal.

(6) Operators shall not construct or decommission a well after their license has expired.

[Statutory Authority: Chapter 18.104 RCW. 06-23-121 (Order 06-08), § 173-162-080, filed 11/21/06, effective 12/22/06. Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-080, filed 3/23/98, effective 4/23/98; Order DE 73-10, § 173-162-080, filed 6/29/73.]

WAC 173-162-085 Continuing education. Ecology, with the assistance of the technical advisory group created in RCW 18.104.190, shall develop and administer a program for continuing education for the purpose of ensuring continued professional growth and competency of licensed operators.

(1) What is continuing education? Continuing education is your opportunity to gain additional knowledge into subjects that directly relate to the well drilling profession. It is designed to enhance your knowledge, drilling skills, and keep you informed on technological advances, as well as keeping you informed on current state and local regulations. The ultimate goal is to ensure the highest quality of professionalism in the well drilling industry. Continuing education is required of every person applying for an operator's license and for every licensed operator renewing their license. Continuing education units (CEUs) are earned by attending continuing education programs. Continuing education programs consist of approved training, classes, courses, workshops, offerings, correspondence instructions, or other means of providing instruction.

(2) How do I obtain required continuing education units?

(a) Except as provided for in this chapter, continuing education units will only be obtained from an approved continuing education provider (a continuing education provider is: Any person, organization, school or other entity involved in education and have received approval from the department for their continuing education plan and curriculum).

(b) The department shall maintain a current list of all continuing education providers and programs. This list will be available on the department's web page and/or by request.

(c) In order to receive continuing education units you must successfully complete continuing education programs. You must be present throughout the entire instructional period in order to be eligible to receive full credit.

(3) How do I become an approved continuing education provider? Persons, organizations, schools, and other entities that provide training and education must submit a continuing education plan to the department for approval. Upon approval of the plan, the requestor becomes an approved continuing education provider. The department may waive the requirement to have a continuing education plan for colleges, universities, or other entities that have an accreditation requirement of their own.

(a) What are the required elements of a continuing education plan? A continuing education plan must contain the following required elements:

(i) Contact information. Name of the person, organizations, schools, and other entities applying to become an approved continuing education provider. Their mailing address, telephone number(s), and e-mail address. Names of a contact person(s), their mailing address, telephone number(s), and e-mail address.

(ii) Statement of qualifications. A statement of qualifications consists of a summary of the provider's experience in providing education programs; references; and lists of any licenses they hold and/or membership in any professional organizations.

(iii) Statement of resources. A statement of resources shall identify the location(s) of the continuing education program and the number of individuals required to put on the program.

(iv) Statement of organization. A statement of organization consists of a summary of how the courses will be advertised; number and frequency of classes offered during the year; a description of the method to be used to evaluate courses; a description of how attendance will be verified and reported to the department; a description of the type of proof of completion to be awarded to each student; and a cancellation policy.

(v) Statement of accountability. The statement of accountability shall justify the cost of the class and include a statement assuring delivery of courses by the provider.

(b) As provided for in this chapter, the department in consultation with the technical advisory group created in RCW 18.104.190 may waive the requirement for a provider to have a continuing education plan consistent with the goals of this WAC.

(4) How do I get credit for participating in a continuing education program and report units to the department?

(a) A person is qualified to receive continuing education units after the program has been evaluated and upon showing proof of attendance and completion of an approved continuing education program. Each continuing education provider is required to provide their students with documentation, approved by the department, showing successful completion of the program.

(b) All operators/trainees must report their continuing education units to the department prior to their license renewal date.

(c) The department will keep a record of the licensees' continuing education units as they are submitted. You may access your record through the department's web site or request a copy of your record.

(d) It is the individual's responsibility to track and maintain records of their continuing education units.

(5) General information on continuing education:

(a) Continuing education units received during a renewal period that are in excess of the requirements cannot be used for any succeeding years.

Example: A driller earning twenty continuing education units during their two-year renewal period cannot apply the six extra units towards any future renewal.

(b) New applicants may have continuing education units assigned for courses, workshops, classes, or seminars attended no more than five years prior to their application date.

(c) An individual licensed for both water well and resource protection well construction need only obtain fourteen continuing education units per renewal period.

(d) An individual applying for a new license for both a water well and resource protection well operator's license need only meet the continuing education unit requirements for one license.

(e) For new applicants or currently licensed individuals, two continuing education units must cover Washington state department of ecology laws and regulations provided by the department or their designee. This section will take effect one year from the effective date of this rule.

(6) What topics will be approved for continuing education programs? General topics include: Occupational health and safety; business and office skills; interpersonal skills; technical aspects associated with well design, construction, development, maintenance, and testing; geology and ground water sciences, safety, welding, HAZMAT training, first aid; and other topics relating directly to well construction and the ground water industry as approved by the department. The department may also request approved continuing education providers to cover certain topics in their continuing education plan based on trends or observations from department compliance officers.

(7) How will continuing education units be assigned?

(a) The following criteria shall be utilized when evaluating programs and assigning continuing education units.

(i) The subjects' relevance to the business, technical, and/or regulatory aspects of well drilling;

(ii) How well the subject will enhance the knowledge, skills, and abilities required in the well drilling profession;

(iii) Length of program; and

(iv) Final group selection.

The program syllabus must be reviewed in order to address these criteria.

(b) A program syllabus shall contain the following:

(i) Course title.

(ii) Instructor name(s).

(iii) Instructor qualifications.

(iv) Course length.

(v) Course outline, detailing specific subject material to be taught and testing schedule.

(vi) A statement regarding how the course pertains to the business, technical, regulatory, and safety aspects of well construction.

(vii) A statement regarding the goals and objectives of each class.

(viii) A statement that the class will be open to all who desire to attend.

(ix) Admission cost.

(x) A description of textbooks, supplemental readings, or materials such as safety equipment, calculators, or other items the attendee will need to provide.

(xi) The date and time of the course and driving directions.

(c) Based on the syllabus review, each continuing education program will be categorized into one of seven groups:

(i) Group one - Subjects that directly relate to the business, technical, regulatory, and safety aspects of well construction; and subjects that enhance ground water protection and increased professionalism within the drilling community.

(A) Washington well construction and licensing statutes and regulations.

(B) Construction methodology, well design, development, maintenance, and testing.

(C) Protection of the ground water resource.

(D) Hydrogeology and ground water science.

(E) Equipment operation and maintenance.

(F) Computer skills.

(G) Welding.

(H) Business management and office skills.

(I) Interpersonal skills.

(J) Occupational health and safety.

(K) Map reading skills.

(L) Local and state health regulations.

(M) DOT regulations.

(ii) Group two - Subjects that will improve the industries' knowledge and understanding of subjects related to ground water.

(iii) Group three - Subjects not covered under group one or two, but benefit the driller in their professional development.

(A) Vendor specific product/sales courses.

(B) Pumps.

(iv) Group four - Miscellaneous courses.

(A) College courses.

(B) Correspondence courses.

(C) Trade school courses that do not fall into another group.

(v) Group five - Attending conventions (trade show).

(A) Washington Ground Water Association.

(B) National Ground Water Association.

(C) Pacific Northwest Expo.

(D) Other state recognized conventions.

(vi) Group six - Preapproved classes.

(A) OSHA HAZWOPPER 40 hour basic course - 20 credits.

(B) OSHA HAZWOPPER 8 hour refresher - 4 credits.

(C) Red Cross 8 hour first aid/CPR - 4 credits.

(D) Others as approved by the department.

(vii) Group seven - Programs for which no credits are assigned.

(d) A program will be assigned continuing education unit(s) based on the group that best describes the training session and the published length of the training session.

The following is a unit value for each group:

Group one - One unit per hour.

Group two - One-half unit per hour.

Group three - One-quarter unit per hour.

Group four - Unit value equal to the education credit, not to exceed four continuing education units per license renewal period or trainee applicant. No more than eight for all other applicants.

Group five - One unit per convention.

Group six - As listed.

Group seven - No unit value.

(e) Operators/trainees who have attended continuing education programs that were not previously approved may receive continuing education units by providing an application to become a provider and class syllabus form to the department.

(f) Individuals may receive continuing education units for preparing and presenting classes as follows:

(i) No continuing education units will be assigned for class preparation/presentation to nondrilling audiences.

(ii) One continuing education unit per hour of presentation and one CEU per hour of preparation time. Continuing education units allowed for preparation time are limited to no more than twice the time it took to present the course. Example - one hour class, no more than two hours preparation time allowed. Total three CEUs.

(g) All continuing education programs must be open to anyone who wants to attend. This requirement does not preclude a provider from imposing reasonable requirements for attendees such as, but not limited to, fees, space limitations and providing their own safety equipment.

(8) What is the department's role in providing continuing education?

(a) The department shall approve all continuing education programs and assign continuing education units required by this chapter. The technical advisory group shall assist the department in their evaluation by reviewing continuing education programs and recommending assignment of continuing education units on classes referred to them by the department.

(b) The department will provide technical support including those meeting the requirements in subsection (5)(e) of this section, in the form of speakers and materials for use in continuing education programs to approved continuing education providers upon request and at their sole discretion.

[Statutory Authority: Chapter 18.104 RCW. 06-23-121 (Order 06-08), § 173-162-085, filed 11/21/06, effective 12/22/06. Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-085, filed 3/23/98, effective 4/23/98.]

WAC 173-162-090 Examinations—Notification of examinations. Upon receipt of a properly completed application, the department shall notify the applicant of the date, time and place of the next scheduled examination. All incomplete application forms will be returned for completion. The applicant should notify the department if the examination schedule cannot be met and the reasons therefor.

[Order DE 73-10, § 173-162-090, filed 6/29/73.]

WAC 173-162-095 What should I know about the written and on-site examinations? The written and on-site examinations for licenses issued under this chapter are prepared, administered, and evaluated by the department.

(1) **What subjects will the written exam cover?** The examinations are prepared to test the knowledge and understanding of the following subjects:

(a) Washington state ground water laws as they relate to constructing and decommissioning wells;

(b) Sanitary standards for constructing wells;

(c) Types of well construction and decommissioning;

(d) Drilling techniques, tools and equipment;

(e) Geology (including soil and rock description) as it relates to well construction;

(f) Rules and regulations of the department relating to constructing a well, test pumping, and equipment maintenance;

(g) Preparation of intent forms, well reports, and requests for variances;

(h) Township and range location system as it relates to location of wells;

(i) Basic ground water hydraulics as it relates to well construction and protection of the resource; and

(j) Rules and regulations of the Washington state department of health relating to source approval and source protection of public drinking water systems.

(2) **What subjects will the on-site test cover?**

The on-site examination shall test the applicant's field skills and knowledge in the following areas:

(a) Safety.

(b) General knowledge of equipment operation.

(c) Equipment maintenance.

(d) Drilling knowledge.

(e) Well development.

(f) Implementation of the construction standards under chapter 173-160 WAC.

(3) **When and where are the written examinations given?**

(a) Examinations will be held at such a time and place as may be determined by the department, but not later than thirty days after the department accepts the completed application package consisting of:

(i) A completed application form with appropriate fee; and

(ii) Proof of required continuing education; and

(iii) Proof of required drilling experience.

(b) Upon receipt of a completed application package, the department shall notify you of the date, time and place of the next scheduled written examination. You shall notify the department at least twenty-four hours prior to your scheduled exam date if you cannot meet the examination schedule. Your notice shall include the reason(s) why you cannot meet the

schedule. If you fail to notify the department, or fail to reschedule your exam within thirty days of your initial exam date, you will forfeit your application and fee. You must submit a new application and fee in accordance with WAC 173-162-060 if you wish to take the exam.

(c) If your application package is received after an examination has been scheduled and there is either insufficient time for the department to notify you of the time and place of the examination or you are unable to take the examination at the scheduled time, the thirty-day period will start from the scheduled examination date.

(4) **When and where are the on-site examinations given?**

(a) You must pass the written exam before you can take the on-site exam.

(b) If you are required to take an on-site examination you will receive an authorization form along with the confirmation of your written test results.

(c) You and the department will schedule a mutually agreed upon time and place for the on-site exam. RCW 18.104.080 requires that examinations be held within thirty days after a completed application is filed with the department.

(d) You shall arrange for all the equipment, materials, and location for the on-site examination.

(e) The department must be present during the on-site examination.

(5) **When will I be notified of the results of my written and on-site examination?**

The department shall notify you of your test results within ten days after each examination.

(6) **If I fail an exam, may I take a retest?**

(a) If you fail the written or on-site exam, you shall not be entitled to take the examination, or any parts of the examination for a period of thirty days from the date of your original examination.

(b) If you failed to pass the written exam, you are considered a new applicant in all respects.

(c) If you fail the on-site exam, you will be required to arrange a retest after a thirty-day waiting period. You will not be required to retake the written exam.

[Statutory Authority: Chapter 18.104 RCW. 06-23-121 (Order 06-08), § 173-162-095, filed 11/21/06, effective 12/22/06. Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-095, filed 3/23/98, effective 4/23/98.]

WAC 173-162-100 Examinations—Type of examinations. The examinations shall be prepared, administered and evaluated by the department. They shall be broken down into sections including a basic general category and specialist categories including but not necessarily limited to cable tool, rotary, driven and dug well construction technology. The examination shall be prepared to test the knowledge and understanding of the following subjects:

(1) Washington ground water laws as they relate to well construction;

(2) Sanitary standards for water well drilling and construction of water wells;

(3) Types of well construction;

(4) Drilling tools and equipment;

(5) Underground geology as it relates to well construction;

(6) Rules and regulations of the department and the department of social and health services relating to well construction;

(7) Preparation of well reports;

(8) Township and range location system as it relates to location of wells; and

(9) Basic ground water hydraulics as it relates to well construction.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-100, filed 4/6/88; Order DE 73-10, § 173-162-100, filed 6/29/73.]

WAC 173-162-120 Examinations—Notification of examination results. The department shall make a determination of the applicant's qualifications for a license within ten days after the examination and notify said applicant of the results within ten days after such determination.

[Order DE 73-10, § 173-162-120, filed 6/29/73.]

WAC 173-162-130 Licenses—General. It is the intent of the department in its implementation of the licensing phase of the Washington Water Well Construction Act to effect a smooth transition of this requirement into the well construction industry without causing undue hardship on individuals and/or businesses whose livelihood is dependent upon continuing work in this field.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-130, filed 4/6/88; Order DE 73-10, § 173-162-130, filed 6/29/73.]

WAC 173-162-190 What are the responsibilities of well contractors and their agents? (1) The well contractor shall be responsible for designating an agent to represent its dealing with the department.

(2) The agent must be a Washington state licensed operator other than a trainee.

(3) The agent shall notify the department of all licensed operators and trainees who are working for the well contractor.

(4) Notification shall be made within ninety days of enactment of this regulation.

(5) After the initial notification, the agent shall notify the department of all terminations and new hires within thirty days.

(6) The well contractor shall notify the department within thirty days of making any change of agent.

[Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-190, filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-190, filed 4/6/88; Order DE 73-10, § 173-162-190, filed 6/29/73.]

WAC 173-162-200 What are the department of ecology's enforcement options? In enforcement of this chapter, the department of ecology may impose sanctions that are appropriate under authorities vested in it, including issuance of regulatory orders under RCW 43.27A.190, civil penalties under RCW 90.03.600 and 18.104.155, and criminal penalties under RCW 18.104.160.

[Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-200, filed 3/23/98, effective 4/23/98. Statu-

tory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-200, filed 4/6/88.]

WAC 173-162-210 Can I appeal enforcement actions? Yes, you can appeal the department of ecology's decision to the pollution control hearings board. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made under this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapter 18.104 RCW and RCW 43.21A.080. 98-08-031 (Order 97-08), § 173-162-210, filed 3/23/98, effective 4/23/98. Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-210, filed 4/6/88.]

WAC 173-162-220 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-220, filed 4/6/88.]

Chapter 173-166 WAC
EMERGENCY DROUGHT RELIEF

WAC

173-166-010	Purpose.
173-166-020	Authority.
173-166-030	Definitions.
173-166-040	General eligibility rule.
173-166-050	Forecast of drought conditions.
173-166-060	Orders declaring drought conditions.
173-166-070	Emergency drought permits.
173-166-080	Temporary transfers of water rights.
173-166-090	Funding assistance—General criteria.
173-166-100	Funding assistance—Agricultural criteria.
173-166-110	Funding assistance—Fisheries criteria.
173-166-120	Requests for drought relief—Contacts—Applications.
173-166-130	Appeals.
173-166-140	Regulation review.

WAC 173-166-010 Purpose. The legislature in 1989 gave permanent drought relief authority to the department of ecology and enabled ecology to issue orders declaring drought emergencies. Chapter 171, Laws of 1989 amends chapter 43.83B RCW (Water supply facilities).

(1) Chapter 171, Laws of 1989 authorizes the Washington state department of ecology (ecology) to assist in alleviating future drought conditions throughout the state, and sets forth the criteria and procedures for implementing the 1989 drought relief legislation.

(2) Ecology has authority under chapter 171, Laws of 1989 to:

(a) Issue emergency permits to withdraw public waters as an alternate source of water supply.

(b) Approve water right transfers between willing parties.

(c) Provide funding assistance for eligible drought projects and measures.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-010, filed 1/17/91, effective 2/17/91. Statutory Authority: 1977 c 339 § 75. 78-04-019 (Order 78-3), § 173-166-010, filed 3/10/78.]

WAC 173-166-020 Authority. This regulation is promulgated by the department of ecology under authorities and procedures provided in chapter 171, Laws of 1989 after notification as provided in chapter 34.05 RCW.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-020, filed 1/17/91, effective 2/17/91. Statutory Authority: 1977 c 339 § 75. 78-04-019 (Order 78-3), § 173-166-020, filed 3/10/78.]

WAC 173-166-030 Definitions. As used in this chapter:

(1) "Ecology" is the department of ecology.

(2) "Drought conditions" are water supply conditions where a geographical area or a significant part of a geographical area is receiving, or is projected to receive, less than seventy-five percent of normal water supply as the result of natural conditions and the deficiency causes, or is expected to cause, undue hardship to water users within that area.

(3) "Essential minimum" for the fisheries resource is:

(a) That amount of water or flow rate established as a regulation adopted by ecology pursuant to RCW 90.22.020 or 90.54.050;

(b) That amount of water or flow placed as a proviso on a water right permit or certificate; or

(c) That amount of water or flow established on an interim basis to assure the maintenance of fisheries requirements. Such a determination will be made by ecology, in consultation with, among others, the departments of fisheries and wildlife, any concerned federal agencies and affected Indian tribes.

(4) "Executive water emergency committee (EWEC)" is a committee, chaired by the governor's office, including members of state, local, and federal agencies which reviews water supply information provided by the water supply availability committee and determines potential effects of water shortages upon the state of Washington. Affected Indian tribes will be invited to participate.

(5) "Geographical area" is an area within the state of Washington which can be described either by natural or political boundaries and which can be specifically identified in an order declaring a drought emergency. Examples of specific geographical areas include, but are not limited to:

(a) The state of Washington.

(b) Counties.

(c) Water resource inventory areas (WRIAs) as defined in chapter 173-500 WAC.

(d) Individual watersheds which constitute only a portion of a WRIA but whose boundaries can be topographically described.

(e) Ground water management areas and subareas as defined in chapter 173-100 WAC.

(f) Designated sole source aquifers.

(g) Combinations of the above areas.

(6) "Normal water supply" is:

(a) For the purpose of the determination of drought conditions, the average amount of water available to a geographical area on an annual basis, based upon evaluation of precipitation, streamflow, snowpack and other hydrological and meteorological factors.

(b) For the purpose of eligibility for drought assistance:

(i) That amount of water put to beneficial use during the irrigation season for the irrigation of one or more crops, using reasonably efficient practices, including reasonable convey-

ance losses, under a valid water right permit or certificate, or a supported registered water right claim; or

(ii) That amount or flow of water required for normal operations of fish hatchery or fish passage facilities. Such facilities, where required by law, must be operating under a valid water right permit or certificate, or under a supported registered water right claim; or

(iii) The median amount or flow of water that is historically required to provide normal instream habitat conditions for the existing fishery population.

(7) "Previously established activities" include:

(a) The irrigation of a specified number of acres, using reasonably efficient practices, under a valid water right permit or certificate, or a supported registered water right claim.

(b) Those fish-management activities presently employed to maintain the fisheries resource. The resource itself must neither be restored nor enhanced by drought relief actions available under the provisions of this chapter.

(c) The delivery of water by public and private entities through existing supply systems to present populations, areas, and/or facilities for purposes that are nonagricultural and nonfishery related.

(8) "Reasonably efficient practices" are those practices including, but not limited to, methods of conveyance, use, and disposal of water which are reasonable and appropriate under the circumstances to bring about water use efficiency as determined by an area-specific application of criteria identified by ecology, which may include, among others:

(a) Customary practices in the area;

(b) Reasonableness of any facilities at the time of installation;

(c) Cost of improvements and impacts of the costs of upgrading facilities on the continued use of water by an appropriator;

(d) Changes in water use practices and technology; and

(e) Impact of alternative water use practices on other water uses and the environment.

(9) "Supported registered water right claim" is a registered water right claim which includes sufficient evidence to satisfy ecology that a valid water right would be confirmed should the claim be adjudicated. Applications made for emergency drought permits, water transfers, or funding assistance under this chapter must incorporate, either by reference or inclusion, necessary information to enable ecology to make an informed determination with respect to the claim. Such information may include, but is not limited to:

(a) Documentation of continuous historical exercise of the claimed right;

(b) Historical maps depicting the historical means of irrigation and the areas covered by the claimed right;

(c) Legal documentation, including any previous court or administrative board decisions, which addresses the historical nature and extent of the claimed right;

(d) "Old-timer" testimony which addresses the historical nature and extent of the claimed right.

(10) "Water supply availability committee (WSAC)" is a committee, with a core membership consisting of ecology, the National Weather Service, the Soil Conservation Service, the U.S. Geological Survey, the U.S. Bureau of Reclamation, and other federal agencies involved in water supply forecasting, which reviews pertinent hydrological and meteorological information and assesses water supply conditions for the state of Washington.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-030, filed 1/17/91, effective 2/17/91. Statutory Authority: 1977 c 339 § 75. 78-04-019 (Order 78-3), § 173-166-030, filed 3/10/78.]

WAC 173-166-040 General eligibility rule. (1) Applications for emergency drought permits, water transfers, or funding assistance made under this chapter will be processed only for previously established activities in a geographical area or part of a geographical area declared to be suffering from drought conditions. Where required by law, such activities must be conducted under a valid water right permit, certificate, or supported registered water right claim.

(2) Applications will be processed if the water user is receiving, or is projected to receive, less than seventy-five percent of normal water supply for the previously established activity and experiencing undue hardship as a result.

(3) All permits and approvals issued under this chapter will be subject to existing rights.

(4) Water obtained through the issuance of temporary permits, water right transfers, and/or funding assistance for projects or measures must be put to beneficial use in lieu of water which is unavailable because of drought conditions.

(5) All permits and approvals issued under this chapter will be of a temporary nature and will contain an expiration date.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-040, filed 1/17/91, effective 2/17/91. Statutory Authority: 1977 c 339 § 75. 78-04-019 (Order 78-3), § 173-166-040, filed 3/10/78.]

WAC 173-166-050 Forecast of drought conditions. (1) Whenever it appears to the department of ecology that drought conditions as defined in WAC 173-166-030(2) either exist or are forecast to occur, ecology will consult with the state's water supply availability committee or its successor. Other appropriate sources of water supply information, such as the Columbia River water management group and the U.S. Army Corps of Engineers, may be consulted by the WSAC as needed.

(2) Should the water supply availability committee determine that a geographical area or a part of a geographical area is receiving, or is likely to receive, seventy-five percent or less of its normal water supply, it will advise the executive water emergency committee and the Indian tribes within the area of that fact. The executive water emergency committee will then make a determination as to whether or not undue hardships will occur as a result of the shortage.

(3) Should the executive water emergency committee determine that an area will suffer undue hardship as a result of a reduced water supply, it will submit a recommendation to that effect to the governor for written approval. Affected Indian tribes will be notified at the time such a recommendation is submitted.

(4) Upon securing the written approval of the governor, ecology will then issue an order declaring a geographical area or a significant part of a geographical area to be suffering from drought conditions and publish that order in a newspaper of general circulation in the area affected by the order.

(5) The determination of drought conditions will be based upon the updated seasonal forecast as applied to the

water supply conditions within the designated geographical area or part of a designated geographical area.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-050, filed 1/17/91, effective 2/17/91. Statutory Authority: 1977 c 339 § 75. 78-04-019 (Order 78-3), § 173-166-050, filed 3/10/78.]

WAC 173-166-060 Orders declaring drought conditions. (1) If the department of ecology determines that a geographical area or part of a geographical area is suffering from drought conditions, it may, upon the advice of the water supply availability committee, with the concurrence of the executive water emergency committee, and the written approval of the governor, issue an order to that effect.

(2) The order declaring drought conditions for a geographical area or part of a geographical area must contain the following elements:

(a) A description of the geographical area or part of a geographical area which is being so designated.

(b) The facts leading to the issuance of the order.

(c) The statutory authority upon which the order is being issued.

(d) The commencement date and termination date of the order. The termination date may be no later than one calendar year from the date the order is issued.

(e) Brief descriptions of the actions which are possible under the order.

(f) Provisions for the termination of withdrawals if essential minimum flows are jeopardized.

(3) Ecology must publish the order declaring a geographical area or a part of a geographical area to be suffering from drought conditions in a newspaper of general circulation in the area affected by the order.

(4) Persons may file written protest as to the contents of the order with ecology. Ecology will have fifteen calendar days from the date of receipt of the protest in which to make a determination as to its validity, using the procedure specified in WAC 173-166-050.

(5) A person who believes that an area should be declared to be suffering from drought conditions may petition ecology for such a declaration. Upon the receipt of such a petition, ecology will have fifteen calendar days from the date of receipt of the petition in which to make a determination as to its validity, using the procedure specified in WAC 173-166-050, and provide a decision to the applicant. The petition should contain the following information:

(a) A description of the geographical area or part of a geographical area which is being requested for designation.

(b) The nature of the relief sought in requesting such a designation.

(c) The facts upon which the petition is based.

(6) Orders declaring areas to be suffering from drought conditions may, with the written approval of the governor, be amended one or more times to change the termination date, provided that the termination date of the order, as amended, is no more than two calendar years from the date the order is first issued.

(7) Orders declaring areas to be suffering from drought conditions may be issued for different areas of the state and sequentially for the same area if drought conditions persist.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-060, filed 1/17/91, effective 2/17/91. Statutory Authority: 1977 c 339 § 75. 78-04-019 (Order 78-3), § 173-166-060, filed 3/10/78.]

WAC 173-166-070 Emergency drought permits. Ecology may allow water users to obtain water from alternate sources during drought conditions. To accomplish this, ecology may issue emergency drought permits authorizing withdrawals of ground water and surface water, including dead storage in reservoirs. Permits will be processed under the following criteria:

(1) Applicants must be conducting a previously established activity within a geographical area or part of a geographical area declared to be suffering from drought conditions.

(2) An application will be processed if the water user is receiving, or is projected to receive, less than seventy-five percent of normal water supply, as the result of natural drought conditions, for the previously established activity and experiencing, or is expected to experience, undue hardship as a result.

(3) Ecology, plus all state and local agencies with authority to issue permits or other authorizations in connection with emergency actions authorized under the provisions of this chapter, will have fifteen calendar days from the date of receipt of the respective application(s) in which to provide a decision to the applicant. Agencies with authority to review applications for emergency drought permits, such as under RCW 75.20.050, and affected Indian tribes will have fifteen calendar days from the date ecology receives the application in which to provide ecology with an opinion as to any effects of the proposed withdrawal.

(4) Waters authorized to be withdrawn must be used in relation to a previously established activity as defined in this chapter. The permit must not cover irrigation of new lands, restoration or enhancement of the fisheries resource, or a water supply in addition to the normal amount used in the past by individuals, private entities, or public bodies.

(5) Waters to be withdrawn must constitute an alternate (supplemental) water supply to the user's normal source of water.

(6) The withdrawal must not reduce flows or levels below essential minimums necessary to assure the maintenance of fisheries requirements and to protect federal and state interests including, but not limited to, power generation, navigation, water quality, and existing water rights.

(7) Emergency drought permits issued under this chapter will be temporary in nature and must expire no later than the expiration date of the order declaring the area in which the permitted activity is authorized to be suffering from drought conditions.

(8) Priority will be given to domestic and irrigation uses of water for any emergency withdrawals authorized under this chapter.

(9) Emergency drought permits issued under this chapter must contain provisions for termination should the withdrawal reduce flows or levels below essential minimums as defined in this chapter.

(10) To expedite the issuance of emergency drought permits, ecology is authorized to process the applications and issue the permits without compliance with requirements for:

(a) Notice of newspaper publication.

(b) The State Environmental Policy Act.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-070, filed 1/17/91, effective 2/17/91. Statutory Authority: Chapters 43.83B and 43.27A RCW. 88-13-037 (Order 88-11), § 173-166-070, filed 6/9/88.]

WAC 173-166-080 Temporary transfers of water rights. (1) Ecology may approve emergency water right changes in order to effect a transfer of water between willing parties. Water right changes can include purpose of use, place of use, and point of diversion.

(2) Examples of possible water right transfers include, but are not limited to, the following situations:

(a) A water right holder may choose to reduce irrigated acreage and transfer the unused water to another water right holder whose normal water supply is decreased by drought conditions. The acreage irrigated with transferred water on the second parcel may not exceed the acreage reduction on the first parcel.

(b) A water right holder may transfer a water right from an out-of-stream use to an instream use.

(c) Municipalities or other public bodies may transfer water between one another.

(3) Requests for water right transfers will be processed under the following criteria:

(a) Applicants must be conducting a previously established activity within a geographical area or part of a geographical area declared to be suffering from drought conditions.

(b) An application for a water right transfer will be processed if the recipient water user is receiving, or is projected to receive, less than seventy-five percent of normal water supply, as the result of natural drought conditions, for the previously established activity and experiencing, or is expected to experience, undue hardship as a result.

(c) All approvals by ecology for water right transfers under this chapter will be temporary in nature and will be for the purpose of alleviating drought conditions. These approvals must terminate no later than the expiration date of the order which declares the area to be suffering from drought conditions.

(d) Water right transfers between willing parties may be approved when an emergency exists only if such a transfer will not affect existing rights whatsoever, or reduce flows or levels below essential minimums, or adversely affect federal and state interests including, but not limited to, power generation, navigation, and water quality.

(e) Water rights may be transferred within areas declared to be suffering from drought conditions. Water rights may also be transferred from outside an area declared to be suffering from drought conditions into an area declared to be suffering from drought conditions, provided such a transfer of water is physically possible and is consistent with the provisions of RCW 90.03.380, 90.03.390, and 90.44.100. Water rights will not be transferred from within an area declared to be suffering from drought conditions to outside that area.

(f) To expedite water transfers during drought conditions, ecology can approve temporary changes in water rights without compliance with requirements for:

(i) Notice of newspaper publication.

(ii) The State Environmental Policy Act.

(g) In those cases where temporary water transfers require court approval while general adjudication proceedings are ongoing, ecology will assist the court in coordination, maintaining communications, and providing technical assistance when requested.

(h) The temporary changing of a water right under this chapter will not be admissible as evidence in either supporting or contesting the validity of water claims in a general adjudication of water rights in the state of Washington.

(i) Ecology, plus all state and local agencies with authority to issue permits or other authorizations in connection with emergency actions authorized under the provisions of this chapter, will have fifteen calendar days from the date of receipt of the respective application(s) in which to provide a decision to the applicant. Agencies with authority to review applications for temporary water right transfers, such as under RCW 75.20.050, and affected Indian tribes will have fifteen calendar days from the date ecology receives the application in which to provide ecology with an opinion as to any effects of the proposed transfer.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-080, filed 1/17/91, effective 2/17/91.]

WAC 173-166-090 Funding assistance—General criteria. Ecology may provide funding assistance to public bodies for projects and measures designed to alleviate drought conditions relating to agricultural and fisheries survival. Funding is available from emergency agricultural water supply funds under RCW 43.83B.300. Funding assistance will be based upon the total funds available at the beginning of the current biennium. General criteria under which funds will be provided:

(1) Public bodies eligible to receive emergency funds are defined in RCW 43.83B.050 as ". . . the state of Washington, or any agency, political subdivision, taxing district, or municipal corporation thereof, an agency of the federal government, and those Indian tribes now or hereafter recognized as such by the federal government for participation in the federal land and water conservation program and which may constitutionally receive grants or loans from the state of Washington."

(2) The public body applying for emergency funds must be conducting the previously established activity for which they seek funding assistance within an area declared to be suffering from drought conditions as defined in WAC 173-166-030(2).

(3) The public body applying for emergency funds must be receiving, or be projected to receive, less than seventy-five percent of normal water supply, as the result of natural drought conditions, for the previously established activity for which they seek funding assistance and experiencing, or be expected to experience, undue hardship as a result.

(4) Funding assistance will be for planning, acquisition, construction, rehabilitation, and improvement of water supply facilities and for other appropriate measures to assure the survival of irrigated agriculture and the state's fisheries resource.

(5) Funding assistance will be available only for projects or measures undertaken in response to drought conditions

which are beyond the normal scope of operations of the public body applying for emergency funds.

(6) No more than ten percent of total available funds will be allocated for nonagricultural drought relief purposes, including the preservation of the state's fisheries during a given biennium.

(7) Funding assistance may be in the form of a loan or a grant or a combination loan and grant.

(8) Loans, grants, or combination loans and grants may be used as matching funds in cases where federal, local, or other funds are also available.

(9) Emergency loans may be approved with a payback period not to exceed fifteen years, with the interest rate to be equal to the final discount rate established for one year U.S. Treasury Bills at the first auction following the beginning of the state fiscal year in which the loan is approved.

(10) Ecology, plus all state and local agencies that are affected by the proposed project or measure, in keeping with the emergency nature of these provisions, will process the respective application(s) and provide a decision(s) to the applicant in an expeditious manner.

(11) To expedite the implementation of drought relief projects and measures, ecology can approve funding assistance without compliance with requirements for:

(a) Notice of publication.

(b) The State Environmental Policy Act.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-090, filed 1/17/91, effective 2/17/91.]

WAC 173-166-100 Funding assistance—Agricultural criteria. (1) Funding assistance to alleviate drought conditions in irrigated agriculture will be provided under the following formula:

(a) No single entity will receive more than ten percent of the total funds available for drought relief.

(b) A loan may be made for up to ninety percent of total eligible project costs.

(c) A combination loan and grant may be made for up to one hundred percent of total eligible project costs.

(d) A grant or the grant portion of a combination loan and grant may be made for twenty percent of total eligible project costs if the public body being provided funds is within a geographical area declared to be suffering from drought conditions as defined in WAC 173-166-030(2).

(e) The grant or grant portion of a combination loan and grant may be made for up to forty percent of total eligible project costs if the public body being provided funds is receiving, or is forecast to receive, fifty percent or less of normal seasonal water supplies.

(f) A grant or the grant portion of a combination loan and grant may be amended to increase the grant up to forty percent of eligible project costs if drought conditions as defined in this chapter change after a grant has been signed for twenty percent of eligible project costs, provided:

(i) That the grantee qualifies for the higher grant as defined in (e) of this subsection; and

(ii) That the original grant agreement has not been terminated or closed out.

(g) The grant or grant portion of a combination loan and grant, once signed by all parties, may not be reduced despite any subsequent improvement in water supply conditions.

(2) Eligibility conditions for each proposed agricultural project or measure are:

(a) The proposed project or measure must be within an area declared to be suffering from drought conditions as defined in WAC 173-166-030(2).

(b) The public body applying for emergency funds must be receiving, or be projected to receive, less than seventy-five percent of normal water supply and experiencing, or be expected to experience, undue hardship as a result for the previously established activity for which they seek funding assistance.

(c) The proposed project or measure must be for a beneficial use involving a previously established activity or purpose.

(d) The proposed project or measure must assist in alleviating a water shortage.

(e) The public body receiving the loan must satisfy ecology as to its ability to repay the loan and complete the project or measure.

(f) Water derived from the project or measure must be put to beneficial use as a substitute for water not available because of a drought.

(g) Water derived from the project or measure must not be used to irrigate new lands.

(h) The proposed project or measure must not adversely affect existing rights, including both instream and out-of-stream rights.

(i) All required permits and approvals for the proposed project or measure must be obtained by the applicant prior to a loan or grant agreement being signed.

(3) Eligible projects that may be funded for drought relief of irrigated agriculture include, but are not limited to:

(a) Pumps and accessories.

(b) Discharge lines.

(c) Pipelines.

(d) Canals and laterals with control structures.

(e) Liners for leaky pipes and canals.

(f) Diversion structures.

(g) Reregulating reservoirs.

(h) Measuring devices.

(i) Wells with pumps and accessories.

(4) Eligible measures that may be funded include the means for implementing water conservation procedures, acquiring alternate water sources, or transferring water rights, provided that the proposed measure represents an additional cost to the applicant as the result of drought conditions, and not as a substitute for normal water supply costs.

(a) Types of eligible measures for implementing water conservation procedures include, but are not limited to:

(i) Irrigation scheduling programs and activities, including the necessary personnel to accomplish such activities.

(ii) Education programs.

(b) Types of eligible measures for acquiring alternate water sources or transferring water rights include, but are not limited to:

(i) Water leasing fees.

(ii) Repair costs.

(iii) Power costs.

(5) Priority will be given to those proposed agricultural projects and measures which:

(a) Need additional water supplies. Need will be measured by:

(i) The short-term and long-term effects that the water shortage would have on the applicant's crops in the absence of drought relief;

(ii) The capability and reliability of the proposed project or measure to provide an emergency water supply to the applicant;

(iii) The percent of water shortage expected for each applicant.

(b) Are the most effective in achieving long-term reductions (conservation) in water requirements and/or more efficient use of available supplies.

(c) Present no, or minimal, overall environmental impacts, including any detrimental effects to wetlands. Any such impacts should be identified to the best extent possible by the applicant at the time of application.

(6) Preference will be given to those public bodies implementing water conservation plans, water system efficiency improvements, and other drought contingency actions in addition to the funding assistance applied for under this chapter.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-100, filed 1/17/91, effective 2/17/91.]

WAC 173-166-110 Funding assistance—Fisheries criteria. (1) Ecology may provide funding assistance to alleviate drought conditions affecting the state's fisheries resource provided that no other capital budget funds are available for these purposes at the date of application, as verified by the office of financial management. Funding assistance will be based upon the following formula:

(a) A loan may be made for up to ninety percent of total eligible project costs.

(b) A combination loan and grant may be made for up to one hundred percent of total eligible project costs.

(c) A grant or the grant portion of a combination loan and grant may be made for twenty percent of total eligible project costs if the public body being provided funds is within a geographical area declared to be suffering from drought conditions as defined in WAC 173-166-030(2).

(d) The grant or the grant portion of a combination loan and grant may be made for up to forty percent of total eligible project costs if the public body being provided funds is receiving, or is forecast to receive, fifty percent or less of normal seasonal water supplies.

(e) A grant or the grant portion of a combination loan and grant may be amended to increase the grant up to forty percent of eligible project costs if drought conditions as defined in this chapter change after a grant has been signed for twenty percent of eligible project costs, provided:

(i) That the grantee qualifies for the higher grant as defined in (d) of this subsection; and

(ii) That the original grant agreement has not been terminated or closed out.

(f) The grant or grant portion of a combination loan and grant, once signed by all parties, may not be reduced despite any subsequent improvement in water supply conditions.

(g) No more than ten percent of total funds available at the beginning of the current biennium will be allocated for nonagricultural drought relief purposes, including the preservation of the state's fisheries, during that biennium.

(2) Eligibility conditions for each proposed fisheries project are:

(a) The project lies within a geographic area declared to be suffering from drought conditions.

(b) The proposed project must assist in alleviating the water shortage.

(c) Water from the proposed project must be put to beneficial use as a substitute for water not available because of the drought.

(d) Water derived from projects that are provided funding assistance must not be used to restore or enhance the fisheries resource.

(3) Eligible projects that may be funded for the protection of fish culture at hatcheries from drought conditions include, but are not limited to:

(a) Purchase and installation of water-reuse pumps.

(b) Modifying hatchery outlet structures.

(c) Modifying stream channels adjacent to a hatchery to assure passage to the holding pond.

(d) Provision and maintenance of oxygen levels in offsite holding ponds by purchase and installation of bottle gas (using air stones), or oxygen generation systems, or mechanical aeration.

(4) Eligible projects that may be funded to protect instream fish habitat from drought conditions include, but are not limited to:

(a) Augmentation of instream flows through transfers of diversionary surface and ground water rights.

(b) Augmentation of instream flows through temporary withdrawals of ground waters.

(c) Stream channel modification such as trenching, sandbagging, or berming to protect spawning gravels.

(5) Eligible projects that may be funded to optimize fish survival during drought conditions include, but are not limited to:

(a) Capture and relocation of stranded fish.

(b) Stream channel modification such as trenching, sandbagging, or berming to provide migratory channels for fish passage.

(6) The departments of fisheries and wildlife, plus any potentially affected Indian tribes, will be consulted to verify eligibility, needs, and nature of all proposed fisheries projects and measures.

(7) Preference will be given to those public bodies implementing water conservation plans, water system efficiency improvements, and other drought contingency actions in addition to the funding assistance applied for under this chapter.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-110, filed 1/17/91, effective 2/17/91.]

WAC 173-166-120 Requests for drought relief—Contacts—Applications. (1) Information regarding implementation of this chapter, and applications for emergency drought permits, water right transfers, and/or funding assistance can be obtained from the ecology headquarters office, water resources program, or from any of the four ecology regional offices. Ecology regional offices are located in Redmond, Spokane, Tumwater, and Yakima.

(2) Copies of statutes and regulations cited in this chapter may be obtained from the ecology headquarters office in Olympia.

(3) Ecology actions pertaining to the determination of which areas are suffering from drought conditions, the issuance of orders declaring areas to be suffering from drought conditions, plus any actions concerning protests of such declarations or petitions for consideration for such a designation will be conducted by the ecology headquarters office, water resources program.

(4) Ecology actions pertaining to emergency drought permits and water right transfers will be conducted by the appropriate ecology regional office.

(5) The ecology headquarters office, water resources program, will administer funding assistance and manage the drought relief program in accordance with the provisions of this chapter.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-120, filed 1/17/91, effective 2/17/91.]

WAC 173-166-130 Appeals. All final written decisions of the department of ecology made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with the provisions of chapter 43.21B RCW.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-130, filed 1/17/91, effective 2/17/91.]

WAC 173-166-140 Regulation review. The department of ecology will initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: RCW 43.83B.420. 91-03-081 (Order 90-53), § 173-166-140, filed 1/17/91, effective 2/17/91.]

Chapter 173-170 WAC
AGRICULTURAL WATER SUPPLY FACILITIES

WAC

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WAC 173-170-010 Purpose and authority. The purpose of this chapter is to establish requirements for the grant and loan program covering rehabilitation, improvement, and construction of agricultural water supply facilities pursuant to Referendum 38, chapter 43.99E RCW. The department shall provide grants and loans to applicants for water supply facilities for agricultural use alone or in combination with fishery, recreational, or other beneficial uses of water. In this regard, an objective of providing state assistance to public bodies engaged in irrigation shall be to assist those entities in improving their efficiency of water use beyond current levels.

Note: All statutes, rules, or regulations cited in this chapter are available for review at Department of Ecology, P.O. Box 47600 Olympia, WA 98504-7600.

[Statutory Authority: Chapter 43.99E RCW, Referendum 38, and RCW 90.54.040. 03-07-104 (Order 02-11), § 173-170-010, filed 3/19/03, effective 4/19/03. Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-010, filed 10/2/90, effective 11/2/90.]

WAC 173-170-020 Definitions. (1) "Department" means the Washington state department of ecology.

(2) "Agreement" means a binding legal document containing all applicable terms and conditions pertaining to loans and/or grants entered into under Referendum 38 which is signed by the program manager for the department's water resources program and by the duly authorized official of the applicant.

(3) "Agricultural water supply facility" means a water supply and distribution system used for agricultural purposes and owned or operated by a public body, including but not limited to all equipment, utilities, structures, real property, and interests in and improvements on real property necessary for or incidental to the acquisition, construction, installation, or use of any such water supply or distribution system.

(4) "Applicant" means the public body making a request for financial assistance under Referendum 38.

(5) "Class A project" means a construction element associated with an agricultural water supply facility which:

(a) Results in improved water use efficiency and/or quantitative water savings as determined by the department; and

(b) Is one or more of the following: (i) Canal and lateral linings; (ii) piped conveyance and distribution system; (iii) consolidation and/or realignment of delivery systems; (iv) flow measuring devices, e.g., flow control devices; (v) entire structures/regulating structures (which are new or replace obsolete ones) including: (A) Checks, (B) checkdrops, (C) siphons, (D) turnouts, (E) flumes, (F) reregulation reservoirs; (vi) multiple use water storage dams and reservoirs; (vii) automation with central control of regulating structures including on-off control of pumping plants in canals and laterals; (viii) new booster pumps for pressurized systems; (ix) project pumping plants;

(c) In the event there are technological advances that increase water use efficiency and/or result in significant water savings that are not described in (a) of this subsection, such project element(s) will be evaluated as a Class A project by the department.

(6) "Class B project" means a construction element associated with an agricultural water supply facility which:

(a) Does not contribute to quantitative water savings as determined by the department; and

(b) Is one or more of the following: (i) In-line water withdrawal pumping plant; (ii) well drilling, well pumps; (iii) diversion dams; (iv) replacement, rehabilitation, or improvement of in-line booster pump(s); (v) rehabilitation or improvement of storage dam(s) or part(s) thereof.

(7) "Emergency project" means a capital improvement construction element to repair, due to natural causes (except

drought), water supply, diversion or conveyance facilities, which is necessary to prevent unsafe conditions or ensure the continued delivery or conveyance of water in the agricultural water supply system.

(8) "Financial assistance" means grants and loans as authorized by chapter 43.99E RCW, Referendum 38.

(9) "Fisheries facility" means a construction element associated with an agricultural water supply facility which:

(a) Is identified as an integral element of a project for the construction, rehabilitation, and/or improvement of an agricultural water supply facility; and

(b) Will provide recognized benefits to the anadromous and/or resident fish species of the state.

(10) "Implementation phase" means the acquisition, design, construction, and improvement of agricultural water supply facilities within an irrigation district or a specific area or drainage basin for storing, diverting, transporting, or distributing water to land for irrigation and for protecting and enhancing fisheries, recreational, or other beneficial uses that may be associated with such facilities.

(11) "Local clearinghouse" means the county or regional comprehensive planning agency designated to serve as a coordinating office for certain local areas. A list of clearinghouses is available from the department. The local clearinghouses review proposed projects for conformance to regional plans, ask for comments from other agencies, and relay these remarks back to the applicant. This process helps assure that policies and comprehensive plans of cities, counties, or regions will be followed.

(12) "Payment schedule" means the due dates for loan payments and any interest thereon, as included in the loan agreement.

(13) "Planning phase" means the preparation of a comprehensive water conservation plan which conforms with WAC 173-170-060, which covers the applicant's entire jurisdiction and service area.

(14) "Plans and specifications" means engineering information and calculations to support the project and construction drawings with necessary engineering detail of the project and complete material specifications and standards to support the drawings and project. These will be prepared in sufficient detail and, upon approval by the department, become part of the bid documents which allow contractors to bid on and construct agricultural water supply facilities or attendant fisheries facilities or recreational facilities or a portion thereof.

(15) "Public body" means the state of Washington or any agency, political subdivision, taxing district, or municipal or public corporation thereof; an agency of the federal government; and those Indian tribes which may constitutionally receive grants or loans from the state of Washington.

(16) "Recreational facility" means a water and/or water-associated system which:

(a) Is identified as an integral element of an agricultural water supply facility; and

(b) Will provide recognized benefits for human use and recreation through fishing, boating, water skiing, swimming, rafting, picnicking, and/or camping.

(17) "Referendum 38" means the grant and loan financial assistance program and its procedures, which pertain to agricultural water supply facilities alone or in combination with fishery, recreational, or other beneficial uses of water, as authorized in chapter 43.99E RCW.

(18) "Request for financial assistance" means the formal application packet, as described in WAC 173-170-030 and 173-170-060, submitted to the department requesting grant and/or loan funds to accomplish an eligible project.

(19) "Water use efficiency elements" means those implementation projects or portions thereof which result in reduced operational and conveyance losses and improved delivery of requisite amounts of water to farms within the limits of the pertinent water right permit or certificate.

(20) "Yakima River Basin Water Enhancement Project" (YRBWEP) is a federal, tribal, state and local cooperative program for improving water supply, habitat and stream flow conditions in the Yakima River Basin of Washington. The project was originally authorized by Congress in 1979 with subsequent implementing legislation being passed in 1984 for fish passage improvements and in 1994 for water conservation and related elements.

[Statutory Authority: Chapter 43.99E RCW, Referendum 38, and RCW 90.54.040. 03-07-104 (Order 02-11), § 173-170-020, filed 3/19/03, effective 4/19/03. Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-020, filed 10/2/90, effective 11/2/90.]

WAC 173-170-030 Application process—Planning phase. (1) Requests for financial assistance for the planning phase shall be submitted to the department between November 1 of any year and the last day of February of the following year.

(2) The applicant shall submit an application form with the following minimum information:

(a) Who shall prepare the comprehensive plan;

(b) A projected completion date for the comprehensive plan;

(c) A United States Geological Survey Quadrangle or comparable map of the area to be covered by the comprehensive plan.

(3) Requests for loan funding must be accompanied by a resolution executed by the applicant's governing body that they will follow the procedures for indebtedness in chapter 87.03 RCW and establish a reserve account into which funds will be deposited in an amount adequate to provide coverage for principal and interest payments due under the loan agreement, whenever circumstances beyond the applicant's control preclude payments from standard sources.

(4) Within ninety days of receipt of the request for financial assistance, the department will notify the applicant of its preliminary findings regarding eligibility. In all cases the department shall make its final selection of funded projects and notify the applicants no later than May 31 following the application period.

[Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-030, filed 10/2/90, effective 11/2/90.]

WAC 173-170-040 Comprehensive water conservation plan—Contents—Funding. The comprehensive water conservation plan, which is the ultimate work product due at the end of the planning phase, will address and provide information on the following topics for the geographical area indicated in the request for financial assistance:

Applicant Organization

(1) Applicant's statutory authority; history of organization management; assessment authority; and operation procedures and management policies.

Land Base and Land Use

(2) Layout map showing:

(a) Boundaries of the applicant's jurisdiction and service area;

(b) Location of: (i) The lands which are assessed by the applicant, and (ii) those lands to which water is delivered in accordance with the water rights or water right claims or otherwise;

(c) Land use information including total acres irrigated over a representative historical period and cropping patterns for each year of a recent five-year period.

Water Supply, Use, and Rights

(3) Layout map showing location of: (a) Natural features (streams, rivers, lakes, ground water aquifers) including those in the watershed(s) where the water supply originates; and (b) all of the applicant's existing water supply facilities inside and out of its service area.

(4) Information on the applicant's and/or pertinent individual's water rights and/or water right claims for irrigation water supply, including ongoing or future water rights or water rights claims, conflicts, and litigation.

(5) Hydrologic water supply data including historical records of surface water availability (natural flows and storage), and ground water pumpages and other pertinent aquifer data on availability for withdrawal for water supply purposes.

(6) Quantities of surface water diverted and/or ground water withdrawn for water supply for each year of a recent five-year period. (Annual and monthly acre-feet and maximum and minimum monthly flows in cubic feet per second (cfs) for surface water and gallons per minute (gpm) for ground water.)

(7) Identify and assess the hydrological water flow system within the applicant's service area as it pertains to the quantities of water: (a) Diverted or withdrawn, (b) conveyed and distributed, (c) delivered and applied on farm, (d) which recharge the ground water and are returned to the agricultural water supply system, and (e) which comprise return flows for further irrigation downstream within the agricultural water supply system.

(8) Identify the quality of water supply and an assessment of the water quality impacts from use of the agricultural water supply system within the applicant's jurisdiction.

Present Facilities and Operations

(9) Identify and describe the present physical system utilized for the storage, diversion, pumping, conveyance, and distribution of the water supply.

(10) Assess and evaluate the existing water supply system including system efficiencies and energy use.

Water Needs and Adequacy of Water Supply

(11) Forecast future trends of land use.

(12) Estimate irrigation water requirements for the present and anticipated land use and cropping patterns.

(13) Relate the water needs to present water supply available.

Evaluation of Opportunities for Improvements in Water Supply and Distribution System Efficiencies

(14) Identify improvements in water supply and distribution system efficiencies (structural and nonstructural).

(15) Document a system improvements and rehabilitation plan, prepare preliminary designs and cost estimates, and estimate time frame for implementation. Identify location of improvements on layout map.

(16) Quantify the reasonable net water savings that would result from the efficiency improvements.

(17) Identify and describe opportunities for improving irrigation water management.

(18) Quantify any net energy savings that would result from efficiency improvements.

(19) Evaluate the socioeconomic impacts from the efficiency improvements and rehabilitation plan and changes or modifications of the systems operations and management policies. Discuss and quantify the benefits that accrue from the implementation of the improvements and rehabilitation plan.

(20) Assess and evaluate the impacts and benefits of transferring the net water savings to other water uses and resources.

(21) Identify associated wetlands and assess the impacts on them from implementation of the physical system's improvements and rehabilitation plan.

(22) Evaluate the impacts on water quality standards from implementation of the physical system's improvements and rehabilitation plan.

(23) Evaluate other environmental impacts from the efficiency improvements and rehabilitation plan. Develop a plan regarding compliance with the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA) if applicable.

Financial

(24) Develop a financial program that addresses the implementation of the improvements and rehabilitation plan. The financial program should include, among other elements, a time schedule for completing the comprehensive water conservation plan, a summary of the applicant's current indebtedness and repayment plans, present and future operation, maintenance and energy costs (with and without implementation of the proposed project), and a schedule of assessments to cover planned indebtedness to complete implementation of the comprehensive water conservation plan.

[Statutory Authority: Chapter 43.99E RCW, Referendum 38, and RCW 90.54.040. 03-07-104 (Order 02-11), § 173-170-040, filed 3/19/03, effective 4/19/03. Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-040, filed 10/2/90, effective 11/2/90.]

WAC 173-170-050 Planning phase—Funding. (1) As available and awarded, financial assistance for the planning phase will be provided in the form of:

(a) Grants in the amount of fifty percent of the total eligible phase costs; and

(b) Concurrent loans in the amount of forty percent of the total eligible phase costs.

(2) Loans shall be for a maximum five-year period, repayable at an annual percentage rate which equals the rate for one year federal treasury bills at the first auction following July 1 of the state fiscal year in which the loan agreement is entered into, discounted by four percent.

(3) Comprehensive water conservation plans must precede the implementation phase for projects approved after the effective date of these rules.

(4) Financial assistance for the planning phase, regardless of the form it takes, may not exceed two hundred thousand dollars per applicant.

[Statutory Authority: Chapter 43.99E RCW, Referendum 38, and RCW 90.54.040. 03-07-104 (Order 02-11), § 173-170-050, filed 3/19/03, effective 4/19/03. Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-050, filed 10/2/90, effective 11/2/90.]

WAC 173-170-060 Application process—Implementation phase. (1) Requests for financial assistance for the implementation phase shall be submitted to the department between November 1 of any year and the last day of February of the following year.

(2) The applicant will submit two preapplication forms to the nearest local clearinghouse; one for the department and one for planning and community affairs. These forms are available from either the department or the clearinghouse.

(3) The applicant shall accompany the request for financial assistance with a copy of the completed comprehensive water conservation plan as approved by the department indicating which part(s) of the plan the proposed project fits under and the location of the proposed project on a United States Geological Survey Quadrangle map or any other comparable and readily available map.

(4) Within ninety days of receipt of the request for financial assistance, the department will notify the applicant of its preliminary findings regarding eligibility as to organization, type of project, purpose(s) of project, and conformance with the objectives of Referendum 38. In all cases the department shall make its final selection of funded projects and notify the applicant no later than May 31 of the year following the close of the current application period.

(5) Requests for loan funding must be accompanied by a resolution executed by the applicant's governing body that they will follow the procedures for indebtedness in chapter 87.03 RCW and establish a reserve account into which funds will be deposited in an amount adequate to provide coverage for principal and interest payments due under the loan agreement, whenever circumstances beyond the applicant's control preclude payments from standard sources.

[Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-060, filed 10/2/90, effective 11/2/90.]

WAC 173-170-070 Criteria for approval of requests for financial assistance—Implementation phase. (1) The implementation phase project(s) must be included in a comprehensive water conservation plan approved by the department.

(2) The agricultural water supply facilities must be designed to accomplish the purpose of the planned project. Accepted engineering design principles, criteria, and concepts will be used in the design of the facilities and approved by the department. Cost estimates for the proposed project must be prepared in detail. Plans and specifications must be approved by the department prior to advertising for construction bids.

(3) The State Environmental Policy Act (SEPA) requirements for any proposed actions must be met. The SEPA rules, chapter 197-11 WAC, will be followed to determine the environmental impacts of the proposed project. A copy of the final SEPA document and any needed supporting environmental analysis must be submitted to the department.

(4) Documentation showing all lands and land rights required for satisfactory construction, operation, and maintenance of the project have been or can be acquired.

(5) The project will not be in conflict with any applicable federal, state, and local laws, orders, regulations, rules, licenses, and permits.

[Statutory Authority: Chapter 43.99E RCW, Referendum 38, and RCW 90.54.040. 03-07-104 (Order 02-11), § 173-170-070, filed 3/19/03, effective 4/19/03. Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-070, filed 10/2/90, effective 11/2/90.]

WAC 173-170-080 Implementation phase—Funding. (1) Implementation phase projects will be categorized by the department as Class A projects or Class B projects in accordance with the definitions for those terms under WAC 173-170-020 (5) and (6).

(2) As funds are available and awarded, financial assistance for Class A projects subject to a completed comprehensive water conservation plan shall be provided in the form of:

(a) Grants in the amount of thirty percent of the total eligible project costs; and

(b) Concurrent loans in the amount of sixty percent of the total eligible project costs.

(c) The department may issue an additional portion of the funding in grants for projects with significant public benefit.

(3) As funds are available and awarded, financial assistance for Class B projects subject to a completed comprehensive water conservation plan will be provided in the form of:

(a) Grants in the amount of fifteen percent of the total eligible project costs; and

(b) Concurrent loans in the amount of seventy-five percent of the total eligible project costs.

(4) Financial assistance for implementation phase projects shall be limited to a total of two million five hundred thousand dollars per applicant regardless of the form, except that loans once fully repaid shall not be measured against the limit.

(5) Loans awarded shall be available on the following repayment and interest schedule:

(a) Loans for up to a maximum five-year period, repayable with interest at an annual percentage rate which equals the rate for one year federal treasury bills at the first auction following the beginning of the state fiscal year (July 1) in which the loan agreement is entered into, discounted by four percent.

(b) Loans for five years through a maximum ten-year period, repayable with interest at an annual percentage rate which equals the rate for one year federal treasury bills at the first auction following the beginning of the state fiscal year (July 1) in which the loan agreement is entered into, discounted by two percent.

(c) Loans for ten years through a maximum fifteen-year period, repayable with interest at an annual percentage rate which equals the rate for one year federal treasury bills at the first auction following the beginning of the state fiscal year (July 1) in which the loan agreement is entered into, discounted by one percent.

(d) Loans for fifteen years through a maximum twenty-five-year period, repayable with interest at an annual percentage rate which equals the rate for one year federal treasury bills at the first auction following the beginning of the state fiscal year (July 1) in which the loan agreement is entered into.

[Statutory Authority: Chapter 43.99E RCW, Referendum 38, and RCW 90.54.040. 03-07-104 (Order 02-11), § 173-170-080, filed 3/19/03, effective 4/19/03. Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-080, filed 10/2/90, effective 11/2/90.]

WAC 173-170-090 Emergency projects—Applications—Designation—Funding. (1) Applications for emergency projects may be accepted at any time throughout the year. The application shall indicate:

(a) The nature of the occurrence that caused the need for repairs;

(b) The location of needed repairs;

(c) A project description of the repairs; and

(d) A summary of how the repairs fit within the long-range improvements addressed in the comprehensive water conservation plan.

If the comprehensive water conservation plan has not been completed, a summary of how the repairs fit within proposed long-range improvements.

(2) A decision on whether to fund the emergency project will be made within fifteen days of receipt of the application. The department may agree to the applicant incurring costs prior to an agreement being signed and shall so indicate by letter to the applicant.

(3) Financial assistance for emergency projects shall be in the form of loans for up to ninety percent of the total eligible project costs.

[Statutory Authority: Chapter 43.99E RCW, Referendum 38, and RCW 90.54.040. 03-07-104 (Order 02-11), § 173-170-090, filed 3/19/03, effective 4/19/03. Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-090, filed 10/2/90, effective 11/2/90.]

WAC 173-170-100 Yakima River Basin Water Enhancement Project—Funding. (1) The Yakima River Basin Water Enhancement Project (YRBWEP) may be provided state funding by agreement with the department, to the extent that moneys are available.

(2) Funds provided under this section for YRBWEP shall be exempt from WAC 173-170-080.

[Statutory Authority: Chapter 43.99E RCW, Referendum 38, and RCW 90.54.040. 03-07-104 (Order 02-11), § 173-170-100, filed 3/19/03, effective 4/19/03. Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-100, filed 10/2/90, effective 11/2/90.]

WAC 173-170-110 Fisheries and recreational facilities—Funding. (1) A fisheries or recreational facility element is the part of an implementation project that provides public benefits through concomitant use of water within an agricultural water supply facility. Specific elements are defined in WAC 173-170-020 (9) and (16).

(2) Financial assistance for the fisheries and/or recreational element shall be available as grants in the amount of seventy-five percent of the fisheries and/or recreational element's total eligible costs.

(3) Financial assistance for a fisheries and/or recreational element may not exceed five hundred twenty-five thousand dollars for any one applicant, which sum is not part of the cap on funding for the implementation phase, contained in WAC 173-170-080(5).

[Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-110, filed 10/2/90, effective 11/2/90.]

WAC 173-170-120 Supplemental guidelines. The department will publish guidelines which will describe in greater detail the financial assistance application, application review and funding issuance processes, the terms of financial assistance, and other elements of this program. These guidelines will also describe recommended methodologies for the completion of the comprehensive water conservation plan.

[Statutory Authority: RCW 43.17.060. 90-20-109, § 173-170-120, filed 10/2/90, effective 11/2/90.]

Chapter 173-173 WAC

REQUIREMENTS FOR MEASURING AND REPORTING WATER USE

(Formerly chapter 508-64 WAC)

WAC

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WAC 173-173-010 What is the purpose of this rule? (1) This rule establishes standards of acceptability for measuring devices and methods, and requirements for recording and reporting water use data.

(2) All measuring devices or measuring methods required to be installed under this chapter must conform to requirements for measuring devices and methods described in this chapter, or other method(s) approved by the department.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-010, filed 12/21/01, effective 1/21/02.]

WAC 173-173-015 What are the goals of this rule? (1) The department seeks to ensure the reliable, accurate measurement of state water that is diverted, withdrawn, stored and used so that sound decisions may be made in administering state water laws and regulations.

(2) The department has the following specific goals for the enforcement of water measurement and the reporting of measurement data:

(a) Determining whether water is available for appropriation;

(b) Assessing and enforcing water rights compliance;

(c) Understanding the hydrology of surface and ground waters;

(d) Protecting instream resources;

(e) Managing and planning the state's watersheds;

(f) Informing water users about how much and when water is used.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-015, filed 12/21/01, effective 1/21/02.]

WAC 173-173-020 What is the authority for this rule? (1) RCW 90.03.360 directs the department of ecology to require that diversions allowed by all new surface water permits be either metered or measured by other approved methods.

(2) RCW 90.03.360 also directs the department to require metering or measurement by other approved methods as a condition for all previously existing water rights or claims if:

(a) The diversion or withdrawal is from waters in which the salmonid stock status is depressed or critical, as determined by the Washington department of fish and wildlife; or

(b) The flow rate of the surface water diversion exceeds one cubic foot per second.

(3) RCW 90.44.050, 90.44.250 and 90.44.450 give the department authority to require that ground water withdrawals are measured, and to require that information about the amount of water being withdrawn be reported to the department.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-020, filed 12/21/01, effective 1/21/02.]

WAC 173-173-040 To whom does this rule apply? The requirements of this chapter apply to the owner or owners of any source water diversion or source withdrawal and to the department.

(1) Any owner or owners of any surface water diversion are required by state law (RCW 90.03.360) to measure and regulate their water use.

(2) The department must enforce the requirement to measure water use for the following types of water use:

(a) All new surface water permits;

(b) New and existing surface water rights where the diversion of any volume of water is from waters containing depressed or critical salmonid stock;

(c) New and existing ground water rights where the department concludes that the withdrawal of any volume of water may affect surface waters containing depressed or critical salmonid stock;

(d) Existing surface water rights where the diversion volume exceeds one cubic foot per second.

(3) This chapter only applies to source diversions and withdrawals and is not intended to apply to customers of a municipality or public water supply system or members of an irrigation district or similar secondary users.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-040, filed 12/21/01, effective 1/21/02.]

WAC 173-173-045 Definitions. (1) "Approved measuring device" means an instrument or facility constructed and operated in conformance with the requirements of this chapter and that measures the volume or flow rate of water which is diverted, withdrawn, stored, or used.

(2) "Approved measuring method" means a procedure approved by the department, which, when used with an approved measuring device (if applicable), will allow for an accurate computation of flow rate.

(3) "Control" means a feature that determines the stage-discharge relation. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

(4) "Cfs" means cubic feet per second.

(5) "Controlling work" means a device or structure used for diverting, withdrawing, pumping, impounding, storing, measuring, piping, conserving, conveying, confining or using water.

(6) "Department" means the department of ecology.

(7) "Diversion" means to divert water from one course to another. Diversion, when used without qualification, includes the diversion of surface water and the withdrawal of ground water.

(8) "Flow rate" means the volume of water that passes through a specific cross section of a pipe or open channel in a specified period of time.

(9) "Gpm" means gallons per minute.

(10) "Open channel flow" means water moving though a canal, flume, ditch, or other unenclosed conduit, and may include flow in a pipe if the pipe is not full and is not under pressure.

(11) "Pipeflow" means water moving through a closed conduit under pressure.

(12) "Rated section" means a cross-section of a stream, river or ditch where a unique relationship between the stage and flow rate has been determined.

(13) "Rating curve" means the relationship between stage and flow rate in a rated stream section.

(14) "Responsible party" means an owner, owners, manager, or appropriator required by RCW 90.03.360, 90.44.050, 90.44.250 and 90.44.450, or by a permit, rule, or order issued pursuant to these laws, to use a measuring device or method approved by the department.

(15) "Stage" means the elevation of a water surface in relation to a datum or reference point.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-045, filed 12/21/01, effective 1/21/02.]

WAC 173-173-050 What water use information may the department require regarding my water use? (1) The department may require any responsible party to report data describing the volume of water diverted, withdrawn, used or stored, and other related information.

(2) If a responsible party is required to report information regarding water use, the report must be submitted on a form or in a format prescribed by the department and must include such information as requested by the department. The department may require that the information be submitted in writing or electronically. This information may include, but is not limited to, the following:

(a) The name, address and telephone number of the responsible party;

(b) The location of the point(s) of diversion or withdrawal, the place(s) of use and metering site(s);

(c) The county parcel identification number for the point(s) of diversion or withdrawal, and place(s) of use or area served by the diversion or withdrawal, except that municipalities, public water supply systems and irrigation districts shall not be required to provide parcel identification numbers for their customers, members and secondary users.

(d) The water right number(s) or claim number(s) or other information that indicates the legal basis for the diversion or withdrawal;

(e) The volume and/or flow rate of water diverted or withdrawn;

(f) The make, model and serial number of the measuring device(s) and any separable counting units;

(g) The date the device was last calibrated;

(h) Any date(s) during which the meter or measuring device was not functioning properly;

(i) For flow rate data based upon power consumption, electrical records, pump test data, or other data necessary to verify flow rate estimates;

(j) Whether the intake structure for the diversion has a screen or screens installed to prevent the entry of fish into the diversion works or pump facilities;

(k) The water source name;

(l) For public water systems, the public water system identification number and source number assigned by the department of health.

(3) All responsible parties must attest that the information provided is true and correct to the best of their knowledge.

(4) The department may accept water use information from a stream patrolman on behalf of a responsible party.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-050, filed 12/21/01, effective 1/21/02.]

WAC 173-173-060 If I must report data regarding my water use, how shall I report it? (1) The following requirements to measure and report water use, when the department so requires, shall apply to responsible parties who divert or withdraw water.

Recording and Reporting Requirements			
Average diversion rate in gallons per minute	**<10 gpm**	**10-49 gpm**	**>50 gpm**
Recording frequency	Monthly	Biweekly	Weekly
Volume or rate to report	Maximum rate of diversion	Maximum rate of diversion	Maximum rate of diversion
	Annual total volume	Annual total volume	Annual total volume
Date data must be reported to department	By Jan. 31 of the following calendar year	By Jan. 31 of the following calendar year	By Jan. 31 of the following calendar year
Monthly means calendar month			
Weekly means Monday 12:01 a.m. to Sunday 12:00 p.m.			
Biweekly means once every two weeks			
Daily means 12:01 a.m. to 12:00 p.m.			
1 gallon per minute is equivalent to .002 cubic feet per second			

(2) Where a device capable of indicating flow rate is not installed, a responsible party may determine the maximum flow rate by measuring the volume of water that is diverted over a brief time period when the system is operating under maximum demand.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-060, filed 12/21/01, effective 1/21/02.]

WAC 173-173-080 Can the department modify the reporting requirements on a case-by-case basis? (1) Yes. The department may modify the reporting requirements in WAC 173-173-060 of this chapter if it concludes that different reporting requirements are necessary to meet the water measurement and reporting goals described in WAC 173-173-015.

(2) The department will provide a written justification and notification to the responsible party.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-080, filed 12/21/01, effective 1/21/02.]

WAC 173-173-090 What are the general requirements for measuring devices? (1) No withdrawal or diversion of water shall be made unless the measuring devices and facilities are in proper operating condition, except when:

(a) A measuring device or facility is being repaired according to the requirements of subsection (2) or (3) of this section; and

(b) The responsible party uses a substitute measuring device or other method to measure the diversion or withdrawal or to provide a reasonable estimate thereof.

(2) Upon discovery of a malfunctioning measuring device or facility, the responsible party shall repair the device or facility and make them operable as soon as possible.

(3) If a responsible party does not comply with WAC 173-173-090(2), the department may order that a measuring device or facility be repaired or replaced within a specified time period.

(4) Measuring devices and facilities must register and be calibrated for the full range of discharge from the diversion or withdrawal for which they are to be used.

(5) On an open channel diversion, all flow diverted shall be measured as close to the point of diversion as possible.

(6) There shall be no turnouts or diversions between the source of water and the measuring devices and facilities, except for faucets or other small outlets that have a *de minimis* effect on the diversion or withdrawal.

(7) In those cases where wells are authorized for the purpose of supplementing surface waters with water from combined sources, both sources of water shall be metered.

(8) In the case of intermittent artesian wells, the meter shall be installed in a manner that will measure both pumped and flowing discharge.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-090, filed 12/21/01, effective 1/21/02.]

WAC 173-173-100 What are the specific requirements for meters for pressure systems? (1) At any flow rate measured by the meter, the meter itself shall be rated by the manufacturer to register not less than ninety-five percent, nor more than one hundred five percent, of the water actually passing through the meter.

(2) At any flow rate measured by the measuring system; i.e., meter plus any secondary equipment such as data recorders; the system shall register not less than ninety percent, nor more than one hundred ten percent, of the water actually passing through the system.

(3) The meter shall have a visual totalizer or the facility shall be capable of totalizing the flow. The totalizer shall contain sufficient recording digits to ensure that "roll over" to zero does not occur before the next recording period.

(4) The department may require that the measuring device be capable of indicating flow rate as well as totalized flow.

(5) For other conditions necessary to ensure accurate and precise measurement data, the selection, installation and maintenance of measuring devices by water users shall be guided by generally accepted industry standards, such as the American Water Works Association standards and information from the manufacturer. These standards also shall be used by the department in making decisions as to the appropriate selection, installation, operation and maintenance of measuring devices acceptable under this rule.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-100, filed 12/21/01, effective 1/21/02.]

WAC 173-173-110 What are the installation requirements for meters on pressure systems? Meters required under this rule shall meet the following installation requirements:

(1) The meter shall be installed in accordance with manufacturer specifications.

(2) There shall be a full pipe of water at all times when water is being withdrawn.

(3) The meter shall not be installed in a manner that creates an uneven velocity profile. Straight sections of pipe before and after the meter, straightening vanes or other flow conditioning devices shall be used to provide even flow through the meter as necessary.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-110, filed 12/21/01, effective 1/21/02.]

WAC 173-173-120 What are the operation and maintenance requirements for meters on pressure systems? (1) Meters shall be inspected and maintained as specified by the manufacturer.

(2) Meters shall be field or shop calibrated, as specified by the manufacturer. Meters also shall be field or shop calibrated and/or repaired if they are over or under registering. System diagnostics may substitute for physical calibration of nonmechanical meters.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-120, filed 12/21/01, effective 1/21/02.]

WAC 173-173-130 What are the specific requirements for measuring systems on open channels? The following requirements apply to weirs, flumes, ramps and orifices. For other devices, the department will determine specific requirements on a case-by-case basis.

(1) At any flow rate measured by the measuring system, i.e., the measuring device plus any secondary equipment such as data recorders, the system shall register not less than ninety percent, nor more than one hundred ten percent, of the water actually passing through the system.

(2) In determining a stage-discharge relation for these devices, the distribution of open channel flow measurements shall be sufficient to establish a full range of values for the entire stage-discharge relation.

(3) For other conditions necessary to ensure accurate and precise data, generally accepted industry standards, such as those in the U.S. Bureau of Reclamation *"Water Measurement Manual, Third Edition"* and information from the manufacturer or designer, shall guide the selection, installation, and maintenance of measuring devices and facilities by water users. The department also shall use these standards in eval-

uating the selection, installation, operation and maintenance of the measuring system.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-130, filed 12/21/01, effective 1/21/02.]

WAC 173-173-140 What are the installation requirements for open channel measuring systems? The measuring facility shall be installed or constructed in accordance with the manufacturer's and/or designer's specifications.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-140, filed 12/21/01, effective 1/21/02.]

WAC 173-173-150 What are the operation and maintenance requirements for open channel measuring facilities? (1) Rating curves shall be recalculated when there is a change in channel conditions that significantly alters flow across the control or once a year, whichever is more frequent.

(2) If the measuring system has no continuous stage recorder, an observer shall read the staff gage and record the reading as close in time as is practical before and after changes in regulation of flow occur.

(3) Measuring facilities shall be operated and maintained to ensure that discharge can be measured accurately.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-150, filed 12/21/01, effective 1/21/02.]

WAC 173-173-160 Under what conditions is the use of power consumption data acceptable to the department? (1) Use of power consumption data may be substituted for more direct flow measurement methods, provided:

(a) Use of the method is approved in writing by the department;

(b) Installation of a water meter would be unduly burdensome to the water user;

(c) The water system maintains a constant or near constant pumping or diversion rate;

(d) The power meter is dedicated to one diversion or withdrawal;

(e) A pump test is conducted for a minimum duration of two hours and is conducted under normal operating conditions;

(f) The diversion or withdrawal is not a flowing artesian well.

(2) The equation below shall be used when relying upon electrical power consumption to estimate volume or flow rate. This equation also may be used to estimate flow during short periods of meter repair or maintenance if the department finds that reasonable estimates of pump and motor efficiency are available:

$$V = \frac{318{,}600(kWh)(Peff)(Meff)}{TDH}$$

Where: V = volume of water pumped in gallons;

318,600 = conversion factor;

kWh = number of kilowatt-hours for the time period in question; e.g., irrigation season, year or minutes;

Peff = pump efficiency as a decimal;

Meff = motor efficiency as a decimal; and

TDH = total dynamic head of the system in feet.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-160, filed 12/21/01, effective 1/21/02.]

WAC 173-173-170 What alternative water measuring devices and methods can I use? Any responsible party may use an alternative water measuring device or method that differs from those described in this chapter, if:

(1) The method is approved in writing in advance by the department; and

(2) The device(s) and installation are certified by a registered professional engineer or other qualified person acceptable to the department to:

(a) Measure all flow diverted or withdrawn in accordance with the pipeflow or open channel accuracy requirements in WAC 173-173-100(2) and 173-173-130(1);

(b) Measure the appropriate volumes and flow rates in WAC 173-173-060;

(c) Be installed and operated according to the manufacturer's and/or designer's instructions, and other such conditions as the department may find necessary.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-170, filed 12/21/01, effective 1/21/02.]

WAC 173-173-175 May I request a variance from the technical and reporting requirements contained in this chapter? (1) Yes. Any responsible party may request in writing to the department a variance from the requirements of this chapter pertaining to the:

(a) Acceptable accuracies of measuring devices and methods;

(b) Reporting of water use data;

(c) Calculation of rating curves;

(d) Other provisions as the department may find acceptable.

(2) Provided, the department may not grant a variance from the requirements of WAC 173-173-040 or exempt a responsible party of its obligation to comply with RCW 90.03.360.

(3) No variance request shall be considered granted until the department has approved it in writing.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-175, filed 12/21/01, effective 1/21/02.]

WAC 173-173-180 What recordkeeping responsibilities do I have? All measurement notes, rating curves, calculations, and data logs should be retained as long as practicable, and copies made available to the department when requested.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-180, filed 12/21/01, effective 1/21/02.]

WAC 173-173-190 Will the department notify the Washington department of fish and wildlife about the status of my fish screens? Yes. The department will notify the department of fish and wildlife regarding the status of fish

screens associated with diversions and withdrawal facilities subject to this rule.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-190, filed 12/21/01, effective 1/21/02.]

WAC 173-173-200 Does the department have authority to enforce this rule? Yes. In enforcing this chapter the department can impose such sanctions as are appropriate under the authorities vested in it, including, but not limited to, issuing regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-200, filed 12/21/01, effective 1/21/02.]

WAC 173-173-210 Can I appeal the department's order to measure my water use? Yes. Appeals may be filed with the pollution control hearings board in accordance with RCW 43.21B.230, except that appeals of orders to measure water use issued by a court conducting a general adjudication of water rights pursuant to RCW 90.03.110 through 90.03.-245 shall be filed in accordance with the applicable Washington court rules.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-210, filed 12/21/01, effective 1/21/02.]

WAC 173-173-220 Will the department review this rule in the future to determine if changes are necessary? Yes. The department will initiate a review of the rules established in this chapter if new information, changing conditions, or statutory modifications make it prudent or necessary to consider revisions to the chapter.

[Statutory Authority: RCW 90.03.360, 90.44.050, [90.44.]250, [90.44.]450 and chapter 43.21A RCW. 02-02-017 (Order 00-01), § 173-173-220, filed 12/21/01, effective 1/21/02.]

Chapter 173-175 WAC
DAM SAFETY

WAC

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173-175-070 Effective date. [Statutory Authority: 1995 c 8. 95-22-030 (Order 94-15), § 173-175-070, filed 10/24/95, effective 11/24/95. Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-070, filed 12/16/92, effective 1/16/93; 92-12-055 (Order 91-17), § 173-175-070, filed 6/1/92, effective 7/2/92.] Repealed by 04-16-122 (Order 03-08), filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470.

173-175-700 Applicability to projects licensed or exempted by the Federal Energy Regulatory Commission (FERC). [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-700, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-710 Coordination between the department and the Federal Energy Regulatory Commission (FERC). [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-710, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-720 Construction or modification of FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-720, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-730 Construction permit fee for FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW

43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-730, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-740 Construction inspection of FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-740, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-750 Construction records reporting for FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-750, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-760 Exceptions to construction permit for FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-760, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-770 Operation of FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-770, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-780 Periodic inspection of FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-780, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-790 Emergency action plans for FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-790, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-800 Right of entry at FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-800, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-810 Enforcement at FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-810, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

173-175-820 Appeals for FERC licensed projects and FERC exempted projects. [Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-820, filed 12/16/92, effective 1/16/93.] Repealed by 95-22-030, filed 10/24/95, effective 11/24/95. Statutory Authority: 1995 c 8.

PART ONE
GENERAL

WAC 173-175-010 Purpose and authority. These regulations provide for the comprehensive regulation and supervision of dams in order to reasonably secure safety to life and property pursuant to chapters 43.21A, 43.27A, 86.16, 90.03, 90.28, and 90.54 RCW. The purposes of these regulations are to:

(1) Designate the types of dams to which these regulations are applicable;

(2) Provide for the design, construction, operation, maintenance, and supervision of dams in a manner consistent with accepted engineering practice;

(3) Establish and administer a program for permitting of construction work for new dams and for modifications of existing dams;

(4) Establish a fee schedule based on dam size that will reflect the actual cost to the department of engineering review of plans and specifications and for construction inspections;

(5) Establish the requirements and owner responsibilities for developing and executing plans for operation and maintenance, owner inspection and emergency actions; and

(6) Establish a program for the periodic inspection by the department of existing dams, and a fee schedule for these inspections based on downstream hazard classification and frequency of inspections. This fee schedule will reflect the actual cost to the department.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-010, filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-010, filed 6/1/92, effective 7/2/92.]

WAC 173-175-020 Applicability. (1) These regulations are applicable to dams which can impound a volume of ten acre-feet or more of water as measured at the dam crest elevation. The ten acre-feet threshold applies to dams which can impound water on either an intermittent or permanent basis. Only water that can be stored above natural ground level or which could be released by a failure of the dam is considered in assessing the storage volume.

The ten acre-feet threshold applies to any dam which can impound water of any quality, or which contains any substance in combination with sufficient water to exist in a liquid or slurry state at the time of initial containment.

(2) For a dam whose dam height is six feet or less and which meets the conditions of subsection (1) of this section, the department may elect to exempt the dam from these regulations.

The decision by the department to exempt a dam will be made on a case-by-case basis for those dams whose failure is not judged to pose a risk to life and minimal property damage would be expected (downstream hazard class 3).

(3) These regulations do not apply to dams that are, or will be, owned, by an agency of the federal government which has oversight on operation and maintenance and has its own dam safety program for periodic inspection and repair of safety deficiencies of completed projects. The department will continue to be the state repository for pertinent plans, reports, and other documents related to the safety of federally owned dams.

(4) These regulations do not apply to transportation facilities such as roads, highways, or rail lines which cross watercourses and exist solely for transportation purposes and which are regulated by other governmental agencies.

Those transportation facilities which cross watercourses and which have been, or will be, modified with the intention of impounding water on an intermittent or permanent basis and which meet the conditions of subsection (1) of this section shall be subject to these regulations.

(5) These regulations do not apply to dikes or levees constructed adjacent to or along a watercourse for protection from natural flooding or for purposes of flood plain management.

(6) These regulations do not apply to concrete or steel water storage tanks.

(7) These regulations do not apply to FERC licensed projects and to FERC exempted projects. The department will continue to maintain a repository for pertinent plans, reports, and other documents related to the safety of FERC licensed and FERC exempted projects.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-020, filed 8/4/04, effective 9/4/04. Statutory Authority: 1995 c 8. 95-22-030 (Order 94-15), § 173-175-020, filed 10/24/95, effective 11/24/95. Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-020, filed 12/16/92, effective 1/16/93; 92-12-055 (Order 91-17), § 173-175-020, filed 6/1/92, effective 7/2/92.]

WAC 173-175-030 Definitions. As used in this chapter:

"Acceptance" means acceptance by the department that the proposed plan(s) will satisfactorily address issues associated with proper operation, maintenance, inspection, or emergency action.

"Annual exceedance probability" means the chance that a specified magnitude of some phenomenon of interest, such as a flood or earthquake, is equaled or exceeded during a given year.

"Approval" means approval by the department that the proposed design, and plans and specifications conform to accepted engineering practice and department guidelines.

"Appurtenant works" means such structures as outlet works and associated gates and valves; water conveyance structures such as spillways, channels, fish ladders, tunnels, pipelines, or penstocks; powerhouse sections; and navigation locks, either in the dam or adjacent thereto.

"Authorization" means written acknowledgement from the department to proceed with proposed actions.

"Construction change order" means a revision to the department approved plans and specifications that is initiated during construction.

"Construction permit" means the permit which authorizes construction and that the project's plans and specifications and construction inspection plan have been reviewed and approved by the department.

"Construction permit process" means the sequence of activities specified in WAC 173-175-110 inclusive, beginning with the application for construction permit and ending with the submission of a report summarizing construction records.

"Crest length" means the total horizontal distance measured along the axis of the dam, at the elevation of the top of the dam, between abutments or ends of the dam. Where applicable, this includes the spillway, powerhouse sections, and navigation locks, where they form a continuous part of the impounding structure.

"Critical project element" means an element of a project whose failure could result in the uncontrolled release of the reservoir.

"Dam" means any artificial barrier and/or any controlling works, together with appurtenant works that can or does impound or divert water.

"Dam abutment" means that contact location at either end and beneath the flanks of a dam where the artificial barrier joins or faces against the natural earth or rock foundation material upon which the dam is constructed.

"Dam height" means the vertical distance from the natural bed of the stream or watercourse at the downstream toe of the impounding barrier to the maximum storage elevation. If the dam is not across a stream or watercourse, the height is measured from the lowest elevation of the outside limit of the impounding barrier to the maximum storage elevation.

"Department" means the department of ecology.

"Design step level" means an integer value between one and eight used to designate increasingly stringent design loadings and conditions for design of critical project elements. Design steps have a range in annual exceedance probability from one in five hundred at Step 1 to one in one million at Step 8.

"Downstream hazard classification" means a rating to describe the potential for loss of human life and/or property damage if the dam were to fail and release the reservoir onto downstream areas. Downstream hazard classifications of 3, 2 and 1C, 1B, 1A correspond to low, significant, and high downstream hazard classes respectively.

"Emergency condition" means a situation where life and property are at imminent risk and actions are needed within minutes or hours to initiate corrective actions and/or warn the public.

"Enlargement" means any modification of a project that will result in an increase in normal pool height and/or dam height.

"Exigency condition" means a situation where the dam is significantly underdesigned according to generally accepted engineering standards or is in a deteriorated condition and life and property are clearly at risk. Although present conditions do not pose an imminent threat, if adverse conditions were to occur, the situation could quickly become an emergency.

"FERC exempted project" means a project that is classified as exempt by the Federal Energy Regulatory Commission (FERC) under provisions of the Federal Power Act.

"FERC licensed project" means a project whose operation is licensed by the Federal Energy Regulatory Commission (FERC) under provisions of the Federal Power Act.

"Freeboard" means the vertical distance between the dam crest elevation and some reservoir level of interest.

"Hydrograph" means a graphical representation of discharge, stage, or other hydraulic property with respect to time for a particular location on a watercourse.

"Impounding barrier" means the structural element of the dam that has the primary purpose of impounding or diverting water. It may be constructed of natural and/or man-made materials.

"Incident" means the occurrence of any dam-related event where problems or conditions arise which may have posed a threat to the safety or integrity of the project or which may have posed a threat of loss of life or which resulted in loss of life.

"Inflow design flood (IDF)" means the reservoir inflow flood hydrograph used for sizing the spillways and for determining freeboard. It represents the largest flood that a given project is designed to safely accommodate.

"Maintenance" means those tasks generally accepted as routine in keeping the project and appurtenant works in a serviceable condition.

"Maximum storage elevation" means the maximum attainable water surface elevation of the reservoir pool that could occur during extreme operating conditions. This elevation normally corresponds to the crest elevation of the dam.

"Miscellaneous construction elements" means a variety of construction elements or activities such as, but not limited to: Reservoir linings; parapet walls or low berms for wave containment; minor reconstruction of isolated portions of the impounding barrier; internal drainage improvements; and erosion protection.

"Modification" means any structural alteration of a dam, its reservoir, spillway(s), outlet(s), or other appurtenant works that could significantly influence or affect the project safety.

"Normal pool height" means the vertical distance between the lowest point of the upstream toe of the impounding barrier and the normal storage elevation.

"Normal storage elevation" means the maximum elevation to which the reservoir may rise under normal operating conditions. Where the principal spillway is ungated, the normal storage elevation is usually established by the elevation of the spillway crest.

"100-year flood plain" means the area inundated during the passage of a flood with a peak discharge having a one percent chance of being equaled or exceeded in any given year at a specified location on a watercourse.

"Outlet" means a conduit and/or channel structure for the controlled release of the contents normally impounded by a dam and reservoir.

"Owner" means the person holding lawful title to the dam or any person who owns or proposes to construct a dam.

"Periodic inspection" means a detailed inspection of the dam and appurtenant works conducted on regular intervals and includes, as necessary, associated engineering analyses to confirm the continued safe operation of the project.

"Person" means any individual, firm, association, county, public or municipal or private corporation, agency, or other entity whatsoever.

"Plans and specifications" means the detailed engineering drawings and specifications used to describe the layout, materials, construction methods, etc., for assembling a project or project element. These do not include shop drawings or other drawings prepared by the construction contractor for temporary construction support systems.

"Population at risk" means the number of people who may be present in areas downstream of a dam and could be in danger in the event of a dam failure.

"Project" means a dam and its reservoir either proposed or existing.

"Project engineer" means a professional engineer licensed in Washington, having direct supervision, as defined in WAC 196-24-095, in managing the engineering aspects of the project as representative of the owner.

"Reservoir" means any basin that contains or will contain the water impounded by a dam.

"Reservoir routing" means the procedures used to determine the attenuating effect of reservoir storage on a flood as it passes through a reservoir.

"Rule curve" means the rules and procedures used to regulate reservoir levels and project operation for various reservoir inflows and for both normal and unusual seasonal conditions.

"Significant enlargement" means any modification of an existing dam that results in the dam height or normal pool height being increased by an amount greater than 5.0 feet, and which also represents a ten percent or greater increase in dam height or normal pool height over that which existed prior to the modification.

"Spillway" means a channel structure and/or conduit for the safe release of water or floodwater.

"Stop work order" means an administrative order issued to temporarily halt construction work until a problem can be resolved.

"Substantially complete" means that a plan, action, or project element requires only minor additions to be complete, and in its present state will perform the necessary functions for its intended use.

"Surficial inspection" means a visual inspection conducted to identify obvious defects or changed conditions.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-030, filed 8/4/04, effective 9/4/04. Statutory Authority: 1995 c 8. 95-22-030 (Order 94-15), § 173-175-030, filed 10/24/95, effective 11/24/95. Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-030, filed 12/16/92, effective 1/16/93; 92-12-055 (Order 91-17), § 173-175-030, filed 6/1/92, effective 7/2/92.]

WAC 173-175-040 Activities that require department review, approval, acceptance, authorization, or notification. (1) Activities related to the safety of dams that require review and approval by the department as detailed in this chapter include:

(a) Construction of a new dam;

(b) Modification of an existing dam;

(c) Removal or abandonment of an existing dam;

(d) Construction change orders for project elements that could have an effect on public safety.

(2) Activities related to the safety of dams that require review and acceptance by the department as detailed in this chapter include:

(a) Adoption of an operation and maintenance (O&M) plan;

(b) Adoption of an emergency action plan (EAP);

(c) Changes to existing operation and maintenance procedures or to an emergency action plan that could have an effect on public safety.

(3) Activities related to the safety of dams that require authorization from the department before proposed actions can proceed include:

(a) Startup of construction: For a new dam; modifications to an existing dam; or removal or abandonment of an existing dam.

(b) Initial controlled filling of a reservoir following new dam construction and implementation of procedures for normal reservoir operation.

(c) Resumption of normal reservoir operation following dam modifications or emergency action.

(4) Activities related to the safety of dams that require a notification to the department as detailed in this chapter include:

(a) Change of dam ownership;

(b) Advance notice of the startup of dam construction;

(c) Declaration by the project engineer of project completion in accordance with the department approved plans and specifications and construction change orders;

(d) Advance notice of periodic inspection; and

(e) The occurrence of an incident at the dam.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-040, filed 6/1/92, effective 7/2/92.]

WAC 173-175-050 Provision of guidelines. The department will develop and maintain *Dam Safety Guidelines* to aid dam owners and project engineers in complying with the department requirements in developing, producing, or conducting:

(1) Engineering design reports;

(2) Plans and specifications;

(3) Construction inspection plans;

(4) Operation and maintenance plans;

(5) Periodic inspections; and

(6) Emergency action plans.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-050, filed 6/1/92, effective 7/2/92.]

WAC 173-175-060 Change of ownership. When a change of ownership of a dam occurs, the new owner shall notify the department within ninety days following the transaction and provide:

(1) The mailing address and telephone number where the owner can be contacted.

(2) The name(s) and telephone number(s) of the individual(s) who will be responsible for operation and maintenance of the dam.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-060, filed 6/1/92, effective 7/2/92.]

PART TWO
CONSTRUCTION PERMIT PROCESS

WAC 173-175-100 Construction permit. (1) Any person intending to construct or modify any dam shall, before beginning said construction or modification, submit plans and specifications and a construction inspection plan for review and approval by the department.

(2) The approval of these documents will be indicated by the department's plan approval stamp on the cover sheet of the plans signed by the department's professional engineer who had primary responsibility for the engineering review.

(3) The return of the construction plans to the owner will be accompanied by a construction permit which authorizes construction and which must be prominently displayed at the construction site.

(4) A copy of the department approved plans and specifications shall be maintained at the construction site.

(5) Construction work shall not proceed until the plans, specifications, and construction inspection plan have been approved by the department.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-100, filed 6/1/92, effective 7/2/92.]

WAC 173-175-110 Sequence of permitting actions. The sequence of tasks to be completed by the owner or the project engineer, and the actions taken by the department in permitting dam construction are outlined below. A more complete description of the required tasks, reports, and plans are described in later sections, and additional guidance in meeting department requirements is contained in the department documents titled *Dam Safety Guidelines.* The following outline is listed to give an overview of the normal sequence of actions for construction of a new dam. Subsections (9), (10), and (11) of this section will not be required for modification of an existing dam where the department has previously accepted the project's operation and maintenance plan and emergency action plan.

(1) Submission of application for construction permit, including initial nonrefundable fee payment.

(2) Submission of engineering design report(s).

(3) Submission of plans and specifications.

(4) Payment of construction permit fee.

(5) Submission of construction inspection plan.

(6) Resolution of any outstanding engineering issues.

(7) Department approves plans and specifications and issues construction permit.

(8) Construction or modification of dam.

(9) Submission of operation and maintenance (O&M) plan.

(10) Submission of emergency action plan (EAP).

(11) Department accepts O&M plan and EAP.

(12) Declaration by project engineer that project was constructed or modified in accordance with approved plans and specifications and construction change orders.

(13) Department concurs with project engineer that project was constructed or modified in accordance with approved plans and specifications and construction change orders.

(14) Department authorizes filling of reservoir at new dam or resumption of normal operations at existing dam.

(15) Submission of a report summarizing the construction records.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-110, filed 6/1/92, effective 7/2/92.]

WAC 173-175-120 Application for construction permit. (1) The department shall supply an application form to be used to initiate the process for obtaining the construction permit.

(2) The application form shall be submitted to the department at the time that the first substantive engineering information becomes available about the proposed project.

(3) An initial, nonrefundable payment which may represent all or a portion of the construction permit fee, shall be included along with the application form. The amount of the initial construction permit fee payment is defined in WAC 173-175-390.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-120, filed 6/1/92, effective 7/2/92.]

WAC 173-175-130 Engineering design reports. (1) Engineering design reports summarizing the various engineering investigations and pertinent project information are an important element of the project design documents. All pertinent engineering design reports that have been prepared during project formulation shall be submitted for review. The

engineering design report(s) must bear the seal and signature of the project engineer.

(2) The engineering design reports shall be sufficiently complete so as to support the development of plans and specifications without substantial change or additional information.

(3) The engineering design report(s) shall be comprehensive in description of the various engineering investigations.

(a) For new project construction, the engineering design report(s) shall include, as a minimum, the items listed in subsection (4) of this section:

(b) For modifications of existing dams, the engineering design report(s) shall include, as a minimum, those items listed in subsection (4) of this section which represent changed conditions from original construction or which address items that have not been previously addressed in prior reports that were submitted to the department.

(4) Contents of engineering design report(s):

(a) A description of the basic purposes of the project, normal operational characteristics and any unique or important design considerations associated with the site or project configuration.

(b) A description of the site geology, seismicity and geotechnical considerations including: A presentation of the findings from subsurface explorations based on test pits and/or boring logs; field tests; laboratory testing and classification of samples; and an identification of the seismotectonic provinces that could generate earthquakes large enough to significantly affect the project site.

(c) A description of the climatic and hydrologic characteristics of the site and tributary watershed including the computation of the inflow design flood and, where applicable, a listing of the input and output data for the computer model used to determine the inflow design flood.

(d) A listing of all sources of inflow to the reservoir.

(e) The size classification of the proposed project as defined by Table 1.

TABLE 1. DAM SIZE CLASSIFICATION

SIZE CLASSIFICATION	DAM HEIGHT
Small Dam	Less than 15 feet
Intermediate Dam	15 feet or greater but less than 50 feet
Large Dam	50 feet or greater

(f) The reservoir operation classification of the proposed project as defined by Table 2.

TABLE 2. RESERVOIR OPERATION CLASSIFICATION

RESERVOIR OPERATION CLASSIFICATION	DETERMINING FACTOR
Permanent Pool or Seasonal Pool Operation	Steady state seepage or saturated flow conditions occur in impounding barrier and foundation at or near normal pool conditions.
Intermittent Operation	Duration of normal high pool condition is insufficient for steady state seepage or saturated flow conditions to develop in impounding barrier and foundation.

(g) An assessment of the consequences of dam failure on downstream areas, including:

(i) An estimation of the magnitude of the dam break flood hydrographs resulting from hypothetical dam failures occurring with the reservoir at normal storage elevation and maximum storage elevation;

(ii) A general description of the areas downstream of the dam that could be affected by floodwater from a dam failure;

(iii) If there is the potential for loss of life, an inundation map delineating the maximum areal extent of flooding that could be produced by a dam failure. Inundation mapping should extend to a point downstream where the inundation from the dam failure is within the 100-year flood plain for the affected watercourse;

(iv) The downstream hazard classification as defined by Table 3, which reflects the current conditions of development in downstream areas. The most serious potential consequences of failure of those listed in columns 3A, 3B, and 3C shall be used to establish the appropriate downstream hazard classification.

TABLE 3. DOWNSTREAM HAZARD CLASSIFICATION

DOWNSTREAM HAZARD POTENTIAL	DOWNSTREAM HAZARD CLASSIFICATION	COLUMN 3A POPULATION AT RISK	COLUMN 3B ECONOMIC LOSS GENERIC DESCRIPTIONS	COLUMN 3C ENVIRONMENTAL DAMAGES
Low	3	0	Minimal. No inhabited structures. Limited agricultural development.	No deleterious materials in reservoir contents
Significant	2	1 to 6	Appreciable. 1 or 2 inhabited structures. Notable agriculture or work sites. Secondary highway and/or rail lines.	Limited water quality degradation from reservoir contents and only short term consequences.
High	1C	7 to 30	Major. 3 to 10 inhabited structures. Low density suburban area with some industry and work sites. Primary highways and rail lines.	
High	1B	31-300	Extreme. 11 to 100 inhabited structures. Medium density suburban or urban area with associated industry, property and transportation features.	Severe water quality degradation potential from reservoir contents and long term effects on aquatic and human life.

DOWNSTREAM HAZARD POTENTIAL	DOWNSTREAM HAZARD CLASSIFICATION	COLUMN 3A POPULATION AT RISK	COLUMN 3B ECONOMIC LOSS GENERIC DESCRIPTIONS	COLUMN 3C ENVIRONMENTAL DAMAGES
High	1A	More than 300	Extreme. More than 100 inhabited structures. Highly developed, densely populated sub-urban or urban area with associated indus-try, property, transportation and commu-nity life line features.	

(h) Engineering calculations and data supporting the detailed design of project elements. This would include, as a minimum:

(i) The design step levels used in design of the various critical project elements, based on guidance contained in the department's *Dam Safety Guidelines*;

(ii) Stability analyses corroborating the design of the proposed embankment/barrier section under static and seismic loadings and rapid drawdown conditions;

(iii) Calculations for the design of any hydraulic structures, which are subject to high lateral earth pressures, relatively large seismic loads and/or uplift pressures;

(iv) Computations for sizing the principal and emergency spillway, including, where applicable, reservoir routing computations defining the reservoir inflow and outflow design flood hydrographs.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-130, filed 6/1/92, effective 7/2/92.]

WAC 173-175-140 Plans and specifications. (1) Two copies of the plans and specifications, bearing the seal and signature of the project engineer, shall be submitted to the department for engineering review. Upon approval, one copy will be retained by the department and the other copy will be returned to the owner or the project engineer.

(2) For large or complex projects, one copy of the preliminary or intermediate level plans, in addition to the final plans, shall be submitted to the department for review.

(3) To be approved, the plans and specifications must contain sufficient detail to describe the proposed construction work.

(a) The following items, as a minimum, shall be included as part of the construction plans:

(i) Project location and vicinity maps;

(ii) Site map of dam, reservoir area, and appurtenances;

(iii) Sectional view along longitudinal axis of dam and foundation;

(iv) Cross-sectional view of dam at location of maximum height;

(v) Cross-sectional views and profiles of spillway(s), outlet facilities, and other appurtenances;

(vi) Steel reinforcement placement and bar sizing for concrete construction must be shown in at least one section or profile; and

(vii) The plan for diversion and control of water during construction.

(b) The following items, as a minimum, shall be included as part of the construction specifications:

(i) Type, class, or description of all materials to be used;

(ii) The requirements for fill placement, moisture conditioning, and minimum level of compaction of all earthen zones;

(iii) The requirements, procedures, and minimum standards for concrete construction and/or structural details.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-140, filed 6/1/92, effective 7/2/92.]

WAC 173-175-150 Construction permit fee. There is a fee for the review of plans and specifications and for construction inspections conducted by the department. The amount of the fee and owner requirements for fee payment are contained in WAC 173-175-350 through 173-175-400.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-150, filed 6/1/92, effective 7/2/92.]

WAC 173-175-160 Review standards. The department will review engineering design reports, plans, and specifications and the construction inspection plan to ascertain that the proposed project will be designed and constructed in a manner which will reasonably secure safety to life and property.

(1) The department's review is intended to address issues of safety directly related to the structural stability and integrity of the completed project. The review is not intended to extend to more general issues of safety not directly related to the structural stability and integrity of the project which are the purview of other governmental agencies such as the Washington department of labor and industries (L&I), which administers the Washington Industrial Safety and Health Act (WISHA).

(2) In addition to the above, the department will review documents submitted pursuant to this chapter to ascertain that they conform to accepted engineering and construction practice and are in conformance with guidance contained in the department's *Dam Safety Guidelines*.

(3) Those elements of a document(s) which are found not to be in conformance with the above will be identified to the owner or the project engineer and changes may be required as appropriate to conform to accepted engineering practice.

(4) Where differences of opinion arise on the suitability of certain engineering or construction practices and cannot be readily resolved, the burden of proof will rest on the owner and the project engineer to demonstrate the suitability of the proposed plan or action.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-160, filed 6/1/92, effective 7/2/92.]

WAC 173-175-170 Construction inspection plan. (1) A detailed plan shall be submitted to the department describing how adequate and competent construction inspection will be provided.

(2) The construction inspection plan shall be prepared by a professional engineer and shall bear his/her seal and signature.

(3) The construction inspection plan shall include, as a minimum:

(a) A listing of construction activities related to critical project elements and planned inspection effort including staffing levels, responsibilities, frequency, and duration of site visits;

(b) A description of the quality assurance testing program which describes the type of test, general frequency, acceptable results, handling of deficient materials, and the individual(s) responsible for overseeing the testing;

(c) Description of construction management organization, lines of communication, and responsibilities;

(d) Description of the change order process including who is responsible for coordinating the change order review process with the department;

(e) Description of the technical records handling and the content and frequency of construction progress reports.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-170, filed 6/1/92, effective 7/2/92.]

WAC 173-175-180 Issuance of construction permit. (1) After the department has determined that the plans and specifications and construction inspection plan conform to accepted engineering practice, these documents will be approved and a construction permit will be issued which authorizes construction to commence.

Construction shall not commence until the construction permit has been issued by the department.

Preliminary work such as mobilization of equipment, stripping and grubbing and other site access and preparation work is allowed prior to receipt of the construction permit, provided no permanent features of the dam are initiated.

(2) Receipt of the construction permit does not relieve the owner of the responsibility to secure all other applicable permits and approvals before proceeding with construction work.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-180, filed 6/1/92, effective 7/2/92.]

WAC 173-175-190 Construction change orders. (1) All dam projects subject to the provisions of this regulation shall be constructed in accordance with the plans and specifications approved by the department. Any proposed changes to the department-approved plans which could have an effect on structural integrity or safe operations of the project must first be presented to the department for a determination if an approval is required.

(2) If the department determines that the proposed construction change order represents a significant modification of the approved plans or specifications that could have an effect on structural integrity or safe operations of the project, then approval of the change order will be required.

The department will review the construction change order and provide a response to the project engineer in a timely manner consistent with the complexity and safety concerns of the situation.

(3) If department approval of the proposed construction change order is required, no action can be taken by the owner to make the construction change until approval is given by the department.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-190, filed 6/1/92, effective 7/2/92.]

WAC 173-175-200 Department role in construction inspection. (1) It will be the department's role during construction to confirm that the project engineer, as representative for the owner, is properly implementing the department approved construction inspection plan.

(2) The department will periodically observe the construction work to independently confirm that conditions assumed in the design stage are valid for field conditions and that construction is proceeding in accordance with the approved plans and specifications.

(3) Changes may be required by the department to be made to the approved plans and specifications to reasonably secure safety to life and property. Reasons for changes may include, but are not limited to the following:

(a) To address unanticipated field conditions;

(b) To correct omissions or errors in the approved plans and specifications;

(c) To correct situations where the construction work clearly is not being performed in a workmanlike manner and does not, in the opinion of the department, meet the performance intent of the specifications.

(4) Where deemed necessary by the department, a stop work order may be issued to temporarily halt construction until a problem can be resolved.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-200, filed 6/1/92, effective 7/2/92.]

WAC 173-175-210 Operation and maintenance plan. (1) An operation and maintenance (O&M) plan shall be developed and submitted to the department for review and acceptance. The O&M plan shall outline and summarize how the project is to be operated and how the basic elements of monitoring, inspection and maintenance, as listed in WAC 173-175-500(1), are to be accomplished.

The department may issue an acceptance after determining the O&M plan is substantially complete.

(2) Owners are responsible for incorporating the details of the O&M plan into an O&M manual suitable for use by dam operators. Requirements associated with O&M manuals are listed in WAC 173-175-500.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-210, filed 6/1/92, effective 7/2/92.]

WAC 173-175-220 Emergency action plan. In those cases where a failure of the dam could pose a risk to life based on the current level of development in downstream areas (downstream hazard classes 1A, 1B, 1C, and 2, WAC 173-175-130), an emergency action plan (EAP) shall be developed and submitted to the department for review and acceptance. The purpose of the plan is to establish procedures for responding to unusual or emergency situations and procedures for detecting, evaluating, communicating and initiating notification or warning to individuals who may be at risk in downstream/upstream areas. Requirements associated with EAP's are listed in WAC 173-175-520.

The department may issue an acceptance after determining the EAP is substantially complete.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-220, filed 6/1/92, effective 7/2/92.]

WAC 173-175-230 Declaration of construction completion. Within sixty days following substantial completion of construction or modification of a dam, the project engineer shall submit to the department:

A declaration stating the project was constructed in accordance with the department approved plans and specifications and construction change orders.

The department will provide a declaration form which may be used or altered, as appropriate, by the project engineer.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-230, filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-230, filed 6/1/92, effective 7/2/92.]

WAC 173-175-240 Authorization to commence or resume project operation. (1) Upon receipt of the project engineer's declaration of construction completion, the department will authorize the owner or the project engineer, as appropriate, to commence or resume normal project operation, provided that:

(a) The department concurs with the project engineer that the project was constructed in accordance with the approved plans and specifications and construction change orders;

(b) The proposed O&M plan is acceptable to the department;

(c) The proposed emergency action plan, if required (see WAC 173-175-220), is acceptable to the department.

(2) If the above conditions are not met, the owner shall not commence or resume normal operation of the project until all outstanding issues or problems are resolved. When outstanding issues or problems are not resolved in a timely manner, the department may:

(a) Order the outlet works to remain fully open and not allow filling of the reservoir;

(b) Restrict reservoir water levels or reservoir operation;

(c) Order the breaching of the impounding barrier;

(d) Take other measures as appropriate to reasonably secure safety to life and property.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-240, filed 6/1/92, effective 7/2/92.]

WAC 173-175-250 Construction records summary. Within one hundred twenty days following completion of construction or modification of a dam, the project engineer, as representative of the owner, shall submit a report to the department on construction activities which includes:

(1) A summary of results from field testing of materials used in construction. The summary shall identify both representative values and the range of test values;

(2) A discussion of any notable items encountered during construction;

(3) One complete set of drawings describing the as-built condition of the dam. These drawings shall be submitted in both paper and electronic format.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-250, filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-250, filed 6/1/92, effective 7/2/92.]

WAC 173-175-260 Exceptions to construction permit process. If the department determines that emergency or exigency conditions exist at a dam and that it is in the best interests of public safety to expedite the construction or modification of a dam, the department may elect to temporarily suspend the normal construction permit process. To allow this exception, the department will issue a written conditional construction permit, which:

(1) May initially be oral;

(2) Will specify the construction activities to be allowed;

(3) May be terminated at a time deemed appropriate by the department;

(4) Shall incorporate, to the extent possible, and not inconsistent with the situation, all applicable requirements of this chapter.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-260, filed 6/1/92, effective 7/2/92.]

WAC 173-175-270 Department review response time. In reviewing the various documents required in the construction permit process, the department shall respond in a timely manner to the owner or project engineer with written review comments, approval, or acceptance as appropriate.

If the department response is anticipated to occur sixty days or more beyond the date of receipt of the document(s), the department shall notify the owner and/or project engineer in writing and advise them of the expected response date.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-270, filed 6/1/92, effective 7/2/92.]

PART THREE
CONSTRUCTION PERMIT FEES

WAC 173-175-350 Authority for construction permit fees. It is required by RCW 90.03.470(9) that fees be collected by the department for the examination of plans and specifications. The fee shall be a minimum of ten dollars or the actual cost. In addition, the department is required by RCW 43.21A.064(2) to inspect the construction of all dams. It is required by RCW 90.03.470(8) that fees be collected for the actual cost to the department for inspection including the expense incident thereto.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-350, filed 6/1/92, effective 7/2/92.]

WAC 173-175-360 Construction permit fees for new project construction. (1) Fees for the review of plans and specifications and for construction inspection for new project construction shall be the amounts shown in Table 4 as adjusted by the fiscal growth factor, and determined by the nearest values of dam height and crest length, in feet, which correspond to the project's planned dam height and crest length.

(2) The fees in Table 4 are automatically adjusted annually on July 1st by the fiscal growth factor as calculated under chapter 43.135 RCW. After July 1st of each year, the department shall publish the adjusted fees by providing notice on its internet site and by providing written notification by mail or electronic mail to permit applicants.

(3) Fees for the review of plans and specifications and for construction inspection for new dairy waste impound-

ments, and conservation dams, shall be in the amount of one thousand four hundred dollars, provided the project meets the following requirements:

(a) The facility has a low downstream hazard classification;

(b) The maximum embankment height is less than fifteen feet;

(c) The facility conforms with a set of standard plans and specifications prepared by the Natural Resource Conservation Service (NRCS) and approved by the department;

(d) The NRCS or its designee provides periodic oversight of construction to ensure that the facility conforms to the standard plans.

If the project fails to meet any of the above requirements, the standard fees as described under subsection (1) of this section shall apply.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-360, filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-360, filed 6/1/92, effective 7/2/92.]

WAC 173-175-370 Construction permit fees for modifications of existing dams. (1) Fees for the review of plans and specifications and for construction inspections for project modifications involving significant enlargements shall be the greater of one thousand four hundred dollars or the amount determined by those applicable percentages shown in Table 5A of the fees in Table 4, as adjusted by the fiscal growth factor. The appropriate Table 4 fee amount is to be determined using the nearest values of dam height and crest length, in feet, which correspond to the overall dimensions of the modified dam.

TABLE 4. CONSTRUCTION PERMIT FEES - NEW PROJECT CONSTRUCTION

Dam Height (ft)	CREST LENGTH (FEET)															
	50	**100**	**150**	**200**	**250**	**300**	**350**	**400**	**500**	**600**	**700**	**800**	**1000**	**1500**	**2000**	**4000**
400	44268	49392	51296	52444	53368	54096	54712	55244	56000	56000	56000	56000	56000	56000	56000	56000
300	38304	45416	48496	50092	51072	51800	52416	52976	53872	54600	55216	55776	56000	56000	56000	56000
250	34020	42280	45836	48132	49336	50344	50988	51520	52416	53172	53788	54320	55216	56000	56000	56000
200	28280	37128	42000	44492	46508	47964	48776	49532	50652	51380	51996	52556	53452	55076	56000	56000
180	25004	34636	39452	42700	44632	46284	47684	48384	49616	50568	51184	51716	52612	54264	55412	56000
160	21644	31892	36792	40152	42644	44212	45584	46816	48356	49336	50204	50792	51688	53340	54488	56000
150	20020	30352	35252	38640	41356	43120	44464	45668	47684	48664	49504	50260	51184	52836	53984	56000
140	18396	28224	33600	37100	39704	41972	43288	44464	46480	47936	48776	49504	50652	52276	53452	56000
130	16828	25928	31920	35336	37996	40152	42056	43204	45164	46816	47992	48720	49924	51688	52864	55664
120	15260	23520	29876	33460	36204	38304	40152	41804	43764	45388	46816	47852	49084	51072	52220	55020
110	13720	21168	27272	31500	34104	36372	38136	39704	42336	43904	45276	46480	48160	50400	51548	54348
100	12236	18872	24304	28840	31920	34076	35980	37548	40180	42308	43624	44800	46844	49364	50792	53592
95	11508	17724	22848	27328	30828	32872	34748	36428	38976	41216	42784	43932	45920	48804	50400	53200
90	10780	16604	21392	25592	29148	31696	33460	35084	37772	39928	41832	43008	44968	48244	49812	51296
85	10052	15484	19964	23884	27440	30296	32172	33740	36512	38584	40460	42084	43988	47656	48496	48496
80	9352	14392	18564	22204	25536	28448	30856	32368	35028	37240	39032	40656	42980	45696	45696	45696
75	8652	13328	17164	20552	23632	26488	28896	30968	33516	35784	37576	39144	41888	42896	42896	42896
70	7952	12264	15792	18900	21756	24360	26824	28896	31976	34132	36036	37604	40096	40096	40096	40096
65	7280	11228	14448	17304	19880	22288	24556	26684	30184	32424	34272	35924	37296	37296	37296	37296
60	6608	10192	13132	15708	18060	20244	22316	24248	27804	30660	32452	34020	34496	34496	34496	34496
55	5964	9184	11844	14168	16296	18256	20104	21840	25116	28028	30464	31696	31696	31696	31696	31696
50	5320	8204	10556	12656	14532	16296	17948	19488	22428	25116	27608	28896	28896	28896	28896	28896
46	4816	7420	9576	11452	13160	14756	16240	17668	20300	22736	25060	26656	26656	26656	26656	26656
42	4312	6664	8596	10276	11816	13244	14588	15848	18228	20412	22484	24416	24416	24416	24416	24416
38	3836	5908	7616	9128	10500	11760	12964	14084	16184	18144	19964	21728	22176	22176	22176	22176
34	3360	5208	6692	8008	9212	10332	11368	12348	14196	15904	17528	19040	19936	19936	19936	19936
30	2912	4480	5768	6916	7952	8904	9800	10668	12264	13748	15120	16436	17696	17696	17696	17696
28	2688	4144	5320	6384	7336	8232	9044	9828	11312	12684	13944	15176	16576	16576	16576	16576
26	2464	3808	4900	5852	6720	7532	8288	9016	10360	11620	12796	13916	15456	15456	15456	15456
24	2296	3444	4452	5320	6132	6860	7560	8232	9464	10584	11676	12684	14336	14336	14336	14336
22	2156	3136	4032	4816	5544	6216	6832	7448	8540	9576	10556	11452	13188	13216	13216	13216
20	1988	2800	3612	4312	4956	5572	6132	6664	7644	8596	9436	10276	11816	12096	12096	12096
18	1848	2492	3192	3836	4396	4928	5432	5908	6776	7616	8372	9100	10472	10976	10976	10976
16	1708	2240	2800	3360	3836	4312	4760	5152	5936	6636	7336	7952	9156	9856	9856	9856
15	1652	2156	2604	3108	3584	4004	4424	4788	5516	6188	6804	7392	8512	9296	9296	9296
14	1596	2044	2408	2884	3304	3696	4088	4424	5096	5712	6300	6832	7868	8736	8736	8736
13	1540	1932	2268	2660	3052	3416	3752	4088	4704	5264	5796	6300	7224	8176	8176	8176
12	1512	1820	2156	2436	2800	3108	3444	3724	4284	4816	5292	5768	6608	7616	7616	7616
11	1484	1736	2016	2268	2548	2828	3108	3388	3892	4368	4816	5236	6020	7056	7056	7056
10	1456	1652	1876	2128	2324	2548	2800	3052	3500	3920	4340	4704	5404	6496	6496	6496
9	1428	1568	1764	1960	2156	2324	2520	2716	3136	3500	3864	4200	4816	5936	5936	5936
8	1400	1512	1652	1792	1988	2128	2268	2408	2744	3080	3388	3696	4228	5376	5376	5376
7	1400	1456	1540	1680	1792	1932	2072	2184	2380	2660	2940	3192	3668	4732	4816	4816
6	1400	1428	1484	1568	1652	1764	1848	1960	2156	2296	2492	2716	3108	4004	4256	4256
5	1400	1400	1428	1484	1540	1596	1680	1736	1904	2044	2184	2296	2576	3304	3696	3696

(2) Fees for the review of plans and specifications and for construction inspection for project modifications not involving significant enlargements shall be the greater of one thousand four hundred dollars or the amount determined by those applicable percentages shown in Table 5B of the fees in Table 4, as adjusted by the fiscal growth factor. The appropriate Table 4 fee amount is to be determined using the nearest

values of dam height and crest length, in feet, which correspond to the overall dimensions of the modified dam.

(3) Fees for the review of plans and specifications and for construction inspection for repair of a dam with safety deficiencies as required by the department shall be one thousand four hundred dollars.

(4) Fees for the review of plans and specifications and for construction inspection for the removal or partial removal of a dam with safety deficiencies for the purpose of eliminating a public safety hazard shall be the minimum fee of ten dollars.

(5) Fees for the review of plans and specifications and for construction inspection for the planned abandonment and reclamation of dams and reservoir areas used in mining operations shall be the minimum fee of one thousand four hundred dollars.

TABLE 5. FEES FOR MODIFICATIONS OF DAMS

MODIFICATION FEE AS PERCENTAGE OF FEE FOR NEW DAM CONSTRUCTION

FEATURES MODIFIED	TABLE 5A MODIFICATIONS INVOLVING SIGNIFICANT ENLARGEMENTS	TABLE 5B MODIFICATIONS NOT INVOLVING SIGNIFICANT ENLARGEMENTS
Spillway(s)	35%	25%
Impounding Barrier	35%	25%
Appurtenant Works and Miscellaneous Construction Elements	10%	10%

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-370, filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-370, filed 6/1/92, effective 7/2/92.]

WAC 173-175-380 Maintenance. It will not be necessary to submit plans and specifications for review for routine maintenance, normal replacement, or repair of items to keep them in a serviceable condition, seasonal removal, or replacement of stoplogs, or other similar minor operational activities.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-380, filed 6/1/92, effective 7/2/92.]

WAC 173-175-390 Payment of construction permit fees. (1) The amount of the construction permit fee will be determined by the department based upon procedures contained in WAC 173-175-360 and 173-175-370 and information contained in the construction plans.

(a) An initial payment, which may represent all or a portion of the construction permit fee shall be paid in conjunction with the submittal of the construction permit application described in WAC 173-175-120. The amount of the initial payment shall be:

(i) Ten dollars for the removal of a dam with safety deficiencies as described in WAC 173-175-370(3); or

(ii) One thousand four hundred dollars for construction of a new dam or modification of an existing dam or project.

(b) The balance of the fee amount (less the initial payment above) is to be paid following notification by the department of the balance due.

(c) All fees collected are nonrefundable.

(2) No fee shall be required for the review of conceptual plans which describe proposed repairs or improvements to existing dams to correct safety deficiencies. The normal construction permit process will apply at the time plans and specifications are submitted to the department.

(3) No additional fees shall be required for plan and specification changes and resubmittals required by the department as part of the review process.

(4) No additional fees shall be required for review of construction change orders.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-390, filed 8/4/04, effective 9/4/04. Statutory Authority: 1995 c 8. 95-22-030 (Order 94-15), § 173-175-390, filed 10/24/95, effective 11/24/95. Statutory Authority: RCW 43.21A.064, [43.21A].080 and 86.16.061. 93-01-090 (Order 92-35), § 173-175-390, filed 12/16/92, effective 1/16/93; 92-12-055 (Order 91-17), § 173-175-390, filed 6/1/92, effective 7/2/92.]

WAC 173-175-400 Cost of expert opinion. In resolving differences of opinion on engineering issues between the department and project engineer or owner, it may be necessary for the department to employ an expert in dam design, analysis or construction.

(1) The expert who is chosen, the assigned tasks, and the estimated cost for the expert's services shall be determined by negotiation between the owner and the department.

(2) The cost associated with employing the expert shall be paid by the owner of the proposed or existing project.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-400, filed 6/1/92, effective 7/2/92.]

PART FOUR
PROJECT OPERATION

WAC 173-175-500 Operation and maintenance. (1) The owner shall develop and maintain a current operation and maintenance (O&M) manual.

The manual shall describe procedures for operation of the project under normal and extreme reservoir inflow conditions and provide technical guidance and procedures for monitoring, inspection, and long-term maintenance. Information on the development of the O&M manual is contained in the department's *Dam Safety Guidelines*. The O&M manual shall include, as a minimum, the following items:

(a) Identification of the individual(s) responsible for implementing the plan;

(b) A project data sheet describing the pertinent features of the dam and reservoir, including the spillway(s), outlet works, and appurtenant structures and their locations at the dam site;

(c) The rules and procedures (rule curve) used to regulate reservoir levels and project operation for various reservoir inflows and for both normal and unusual seasonal conditions;

(d) A description of each hydraulic element used to regulate or release water, including information on proper operation and scheduled maintenance;

(e) A listing of the items requiring periodic monitoring, the frequency of monitoring and procedures for monitoring, measurement, and recordkeeping;

(f) A listing of the items requiring periodic maintenance and procedures for conducting and documenting maintenance and recording of problems;

(g) A listing of items to be inspected or test operated, the frequency and procedures for conducting the same and for documenting the findings.

(2) It shall be the duty and responsibility of the owner to, at all times, operate and maintain the dam and all appurtenant works in a safe manner and condition and follow the method and schedule of operation of the dam as outlined in the O&M manual.

(3) Any proposed changes to the O&M manual which could have an effect on public or project safety must be submitted to the department for review and acceptance before implementation.

(4) The O&M manual must be updated within one hundred eighty days after a periodic inspection has been completed by the department.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-500, filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-500, filed 6/1/92, effective 7/2/92.]

WAC 173-175-510 Inspection by owner. Owners are required to evaluate the safety of their dam(s) and all appurtenant works and to make modifications, as become necessary, to reasonably secure safety to life and property. To accomplish this, owners are:

(1) Required to conduct annual surficial inspections and to maintain records of their findings, including records of actions taken to correct problem conditions.

The annual surficial inspections may be conducted by the owner or by agent(s) designated by the owner, or by a professional engineer.

(2) Owners are required to submit a copy of the annual inspection checklist and other documents which contain the findings resulting from the annual inspection within thirty days following the completion.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-510, filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-510, filed 6/1/92, effective 7/2/92.]

WAC 173-175-520 Emergency action plans. (1) In those cases where a failure of the dam could pose a threat to life (downstream hazard classes 1A, 1B, 1C, and 2), the owner shall develop and maintain an emergency action plan (EAP) acceptable to the department.

(a) The EAP shall describe procedures for responding to unusual or emergency situations and procedures for detecting, evaluating, communicating, and initiating notification or warning of individuals who may be at risk in downstream and upstream areas. Information on the development of an EAP is contained within the department's *Dam Safety Guidelines.*

(b) It shall be the duty and responsibility of the owner to implement the EAP when conditions warrant and to follow the method and schedule contained within the EAP.

(c) Owners are required to coordinate the development of the EAP with representatives from the local emergency services staff, state department of community development, emergency management division, and appropriate local authorities.

(d) Copies of the completed EAP must be provided to the state emergency management division, local emergency services office, and to the department.

(2) Any proposed changes to the EAP which could have an affect on public or project safety must be submitted to the department for review and acceptance before implementation.

(3) Owners are required to exercise components of the EAP as needed to confirm the viability of the plan.

(4) The department will coordinate and solicit review comments from the local emergency services office and the state emergency management division on the acceptability of proposed EAPs. Those comments will constitute the primary basis for accepting or requesting modifications to a proposed EAP.

(5) The EAP must be updated within one hundred eighty days after a periodic inspection has been completed by the department.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-520, filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-520, filed 6/1/92, effective 7/2/92.]

WAC 173-175-530 Reporting of incidents. Owners are required to notify the department when incidents occur or when problems or conditions arise which may pose a threat to life or property or a threat to the integrity of the dam.

(1) The owner shall report by telephone to the department on any condition affecting the safety of the project or when an incident has occurred. The initial oral report must be made as soon as practicable after the condition is discovered or following any incident.

(2) A written report may be required by the department within thirty days following the discovery of the condition or after the incident. The report shall describe the condition affecting the safety of the project or the incident which has occurred and shall describe the preliminary plans for correcting the condition and for preventing the recurrence of a similar incident.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-530, filed 6/1/92, effective 7/2/92.]

PART FIVE
COMPLIANCE AND ENFORCEMENT

WAC 173-175-600 Right of entry. The department or its duly appointed agent(s) shall have the right to enter at all reasonable times in or upon property, public or private, for the purpose of inspecting and investigating conditions relating to the construction, operation, maintenance or performance of dams. The department shall comply with the owner's reasonable rules for access to the project.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-600, filed 6/1/92, effective 7/2/92.]

WAC 173-175-610 Emergencies. (1) When, in the opinion of the department, an emergency condition exists which poses an imminent threat to life, the department may take such action as necessary to eliminate or mitigate the hazard and potential consequences. The dam owner or the owner's agent(s) may be directed to take actions, and if that failing, the department may take control of the project and take actions, including, but not limited to:

(a) Altering the operation of the project;

(b) Lowering the reservoir water level;

(c) Draining the reservoir;

(d) Making emergency repairs or modifications to the project;

(e) Enlisting the services of federal, state, or local authorities to make emergency repairs or modifications to the project;

(f) Breaching the dam.

(2) All costs incurred by the department as a result of taking control of the project will be charged to the owner.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-610, filed 6/1/92, effective 7/2/92.]

WAC 173-175-620 Enforcement. (1) In enforcement of this chapter, the department may impose such sanctions as appropriate under authorities vested in it, including but not limited to, the issuance of regulatory orders under RCW 86.16.081 and 43.27A.190 and civil penalties under RCW 86.16.081 and 90.03.600.

(2) Any dam which is found to be under construction or recently constructed without prior approval of the plans and specifications is in violation of RCW 90.03.350 and will be presumed to be a public nuisance. The owner will not be allowed to fill the reservoir or continue to operate the reservoir until the structural integrity and safety of the facility can be demonstrated to the satisfaction of the department. In addition:

(a) Regulatory orders may be issued to enforce the restriction of reservoir filling and fines may be levied at one hundred to five thousand dollars per day;

(b) Owners are required to submit as-built drawings and all available documentation describing the manner in which the dam or portion thereof was constructed;

(c) If the structural integrity and safety of a dam project cannot be demonstrated or confirmed to the satisfaction of the department, the owner shall not commence or resume normal operation of the project until all outstanding issues or problems are resolved to the satisfaction of the department. To accomplish the above, the department may:

(i) Order the outlet works to remain fully open and not allow filling of the reservoir;

(ii) Restrict reservoir water levels or reservoir operation;

(iii) Order the breaching of the impounding barrier;

(iv) Take other measures as appropriate to reasonably assure safety to life and property.

(d) If, in the opinion of the department, the owner is unwilling or incapable of resolving the outstanding safety issues in a timely manner, the department may take action to have the dam abated as prescribed by law under RCW 90.03.350.

(3)(a) In order to correct safety deficiencies and exigency conditions as identified by the department on existing dams, owners are required to take actions as prescribed by the department to preserve the structural stability and integrity of the project and attain levels of safety in accordance with accepted engineering practice.

(b) If the owner does not take action to correct safety issues in a timely manner, regulatory orders may be issued to require modifications, and to restrict the filling of the reservoir until all outstanding issues or problems are resolved to the satisfaction of the department.

(c) If the owner continues to be unwilling or incapable of resolving the outstanding safety issues, the department may take action to have the dam abated as prescribed by law under RCW 90.03.350.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-620, filed 8/4/04, effective 9/4/04. Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-620, filed 6/1/92, effective 7/2/92.]

WAC 173-175-630 Appeals. All final written decisions of the department pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: RCW 43.21A.064, [43.21A.]080 and 86.16.061. 92-12-055 (Order 91-17), § 173-175-630, filed 6/1/92, effective 7/2/92.]

PART SIX
PERIODIC INSPECTION PROGRAM

WAC 173-175-705 Periodic inspection by the department. (1) As authorized by RCW 43.21A.064, the department has the authority to conduct routine periodic inspections of all existing dams with high and significant downstream hazard classifications to reasonably secure safety to life and property.

• Dams with high downstream hazard classifications will be inspected every five years.

• Dams with significant downstream hazard classifications will be inspected every five years, or ten years if workload or staffing necessitates a longer cycle between inspections.

• Dams classified as low hazard are not included in the periodic inspection program.

(a) The department will give at least thirty days notice of the date of the periodic inspection and advise the owner of any requirements such as gates or valves that are to be operated during the inspection.

(b) Fees shall be charged for periodic inspections conducted by the department. The amount of the fee and owner requirements for the fee payment are described in WAC 173-175-755 through 173-175-775.

Dam classification

(2) The downstream hazard classification of existing dams shall be determined by the department in accordance with WAC 173-175-130, Table 3.

(3) The classification of each dam shall be reviewed during each periodic or other inspection and may be changed as the result of such inspection.

Components of a periodic inspection

(4) Each periodic inspection shall consist of, but not be limited to, the following:

(a) Review and analysis of available data on the design, construction, operation, and maintenance of the dam and its appurtenances;

(b) Visual inspection of the dam and its appurtenances, the downstream area, and all other areas affected by the structure;

(c) Evaluation of the safety of the dam and its appurtenances, which may include assessment of the hydrologic and hydraulic capabilities, structural stabilities, seismic stabilities, and any other condition which could constitute a hazard to the integrity of the structure;

(d) Evaluation of the downstream hazard classification;

(e) Evaluation of the operation, maintenance, and inspection procedures employed by the owner and/or operator; and

(f) Review of the emergency action plan for the dam including review and/or update of dam breach inundation maps.

(5) The department shall prepare a written safety inspection report that describes the findings from the inspection and lists remedial actions that must be taken to ensure the continued safety of the dam.

(6) The department shall provide the dam owner with a copy of the written report of the periodic inspection. The dam owner must correct any identified safety deficiencies in a timely manner.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-705, filed 8/4/04, effective 9/4/04.]

WAC 173-175-725 Nonroutine inspections by department. (1) The department may perform nonroutine inspections of dams with any downstream hazard classification, separate from the periodic inspection program. The purposes for these inspections include, but are not limited to, the following:

(a) Determining downstream hazard classification;

(b) Condition inspections during or immediately after emergencies such as floods or earthquakes;

(c) When problems or conditions arise that may pose a threat to the integrity of the dam;

(d) Obtaining routine monitoring data and information;

(e) Surficial inspections of low hazard dams.

(2) No fees shall be charged to the dam owner for nonroutine inspections.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-725, filed 8/4/04, effective 9/4/04.]

WAC 173-175-735 Inspection at public request. (1) The department may inspect a dam if a complaint from the public is received that states that a dam:

(a) Impounds ten or more acre-feet of water at the dam crest level; and

(b) Is endangering public safety or property, or has been constructed without prior department approval.

(2) The department shall provide a copy of the written report of findings to the complainant and dam owner.

(3) The dam owner shall be required to correct any identified safety deficiencies or exigency conditions in a timely manner.

(4) Dams found to be under construction or recently built without prior approval of the plans and specifications will be subject to enforcement actions as described under WAC 173-175-620(2).

(5) No fees shall be charged to the dam owner for inspections at public request.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-735, filed 8/4/04, effective 9/4/04.]

PART SEVEN
PERIODIC INSPECTION FEES

WAC 173-175-755 Periodic inspection fees. The department is required by RCW 90.03.470(8) to collect in advance a fee based on the actual cost, including the expense incident thereto, of the inspection of any dam to insure safety to life and property. Fee amounts contained in this section represent the department's true estimate of the cost of performing periodic dam safety inspections as described in WAC 173-175-705, and reflect the department's commitment to fully recover all eligible expenses.

[Statutory Authority: Chapters 43.21A and 90.03 RCW. 05-18-039 (Order 05-11), § 173-175-755, filed 8/31/05, effective 10/1/05. Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-755, filed 8/4/04, effective 9/4/04.]

WAC 173-175-765 Periodic inspection fee schedule. (1) The inspection fee amounts are based on the downstream hazard classification of the dam, as determined by the department, and incorporate the fiscal growth factor calculated under chapter 43.135 RCW. The inspection fees for each five-year inspection are prorated on an annual basis.

(a) Equation 1 below is used to calculate the annual inspection fees.

$$\text{Annual Inspection Fee} = (\text{COST}_{FGF}) \div (\text{Cycle}) \quad \textit{Equation 1}$$

Where:

(i) Cycle = number of years between inspections, with five years being the minimum.

(ii) FGF = an annual fiscal growth factor expressed as a percentage, as determined under chapter 43.135 RCW.

(iii) COST_{FGF} = cost of inspection in dollars including a fiscal growth factor. The cost is obtained by multiplying the inspection cost in the preceding year by the current year's fiscal growth factor as follows:

$$\text{COST}_{FGF} = \text{Previous year's cost x } [1 + (\text{FGF})] \quad \textit{Equation 2}$$

(b) For implementation of the fiscal growth factor, the base year for dam inspection fees will be fiscal year 2004, ending June 30, 2004. In the base year, the FGF will be zero.

(c) The cost for an inspection by the department in the base year will be as follows:

(i) $3440.00 for dams with high downstream hazard classifications, with a prorated annual fee of $688.00 for a five-year inspection cycle.

(ii) $2500.00 for dams with significant downstream hazard classifications, with a prorated annual fee of $500.00 if a five-year inspection cycle is implemented, or $250.00 if a ten-year inspection cycle is implemented.

(2) **Exceptions to periodic inspection fee schedule.**

(a) For any hydraulic works less than ten years old, that the department examined and approved the construction plans and specifications as to its safety when required under RCW 90.03.350, there shall be no fee charged; or

(b) For any hydraulic works more than ten years old, but less than twenty years old, that the department examined and approved the construction plans and specifications as to its safety when required under RCW 90.03.350, the fee charged shall equal the fee for a significant hazard dam.

(3) **Inspection fee for impoundments with multiple dams.** For reservoirs or impoundments with a main dam and one or more saddle dams, a single annual inspection fee will be charged for the facility. The dam with the highest downstream hazard rating will be used for fee computation.

(4) **Inspection fee for multicell impoundments.** For multicell impoundments, such as wastewater lagoons, where two or more cells are located side-by-side or share a common embankment, a single annual inspection fee will be charged for the facility. The cell with the highest downstream hazard classification will be used for fee computation.

(5) **Inspection fee for nonroutine inspections.** For nonroutine inspections as described in WAC 173-175-725, no fees will be charged to the dam owner.

(6) **Inspection fee for inspections at public request.** For inspections done at public request, as described in WAC 173-175-735, no fees will be charged to the dam owner.

[Statutory Authority: Chapters 43.21A and 90.03 RCW. 05-18-039 (Order 05-11), § 173-175-765, filed 8/31/05, effective 10/1/05. Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-765, filed 8/4/04, effective 9/4/04.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-175-775 Periodic inspection fee computation. (1) The department shall charge inspection fees based on the fee schedule contained in WAC 173-175-765. After July 1st of each year, the department shall publish the adjusted fees by providing notice on its internet site, and by providing written notification by mail or electronic mail to owners of high and significant hazard dams. The inspection fees must be received by the department within forty-five days after the department mails a billing statement.

(2) Inspection fee computation. Computation of fees shall begin on the first day of each fiscal year. In the case of new dams not previously covered by the inspection program, fee computation begins on the first day of each fiscal year following completion of construction.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-775, filed 8/4/04, effective 9/4/04.]

WAC 173-175-785 Periodic inspection fee payments. (1) The applicable inspection fee shall be paid by check or money order payable to the department of ecology and mailed to the following address:

Department of Ecology
Dam Safety Inspection Fee Program
P.O. Box 5128
Lacey, Washington 98509-5128.

(2) In the event a check is returned due to insufficient funds, the department shall consider the inspection fee to be unpaid.

(3) **Delinquent accounts.** Dam owners are considered delinquent in the payment of fees if the fees are not received by the first invoice billing due date. Delinquent accounts will be processed in the following manner:

(a) Municipal and government entities shall be notified by certified mail that they have one hundred eighty days to bring the delinquent account up-to-date. Regulatory orders may be issued to enforce a restriction of reservoir filling until all delinquent fees are paid on accounts that remain delinquent after ninety days.

(b) Nonmunicipal or nongovernment dam owners shall be notified by the department by certified mail that they have one hundred eighty days to bring the delinquent account up-to-date. Accounts that remain delinquent after one hundred eighty days may be turned over for collection. In addition, a surcharge totaling twenty percent of the delinquent amount owed will also be added. The surcharge is to recover the costs for collection. If the collection agency fails to recover the delinquent fees after twelve months, the department may issue regulatory orders to enforce restriction of reservoir filling until all delinquent fees are paid.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-785, filed 8/4/04, effective 9/4/04.]

WAC 173-175-795 Periodic inspection fees for transfer of ownership or control. The department shall charge inspection fees from the dam owner on record with the department. In the event that ownership or control of a dam is transferred, it shall not be the responsibility of the department to transfer funds between a new and previous dam owner, and the department shall not refund fee charges prospectively in the event of a transfer. Fees paid by a previous dam owner shall be deemed to satisfy the corresponding fee payment requirements of a new dam owner. Agreements between a new and previous dam owner are not binding on the department.

[Statutory Authority: RCW 43.21A.064, 43.21A.080, 86.16.061, 90.03.350 and [90.03].470. 04-16-122 (Order 03-08), § 173-175-795, filed 8/4/04, effective 9/4/04.]

Chapter 173-180 WAC
FACILITY OIL HANDLING STANDARDS

WAC

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PART A: GENERAL REQUIREMENTS

WAC 173-180-010 Applicability of this chapter. The requirements in this chapter apply to all classes of oil handling facilities. This includes transfer operations involving any size nonrecreational vessel.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-010, filed 9/25/06, effective 10/26/06.]

WAC 173-180-015 Purpose. This chapter establishes minimum standards for safe oil transfer operations to meet a zero spill goal established by the legislature. This chapter emphasizes:

(1) Using a scaled approach to protect people and the environment;

(2) Preventing oil spills from occurring and emphasizing that oil spill prevention is the top priority strategy for reaching the legislature's goal of zero spills;

(3) Providing improved protection of Washington waters and natural resources from the impacts of oil spills caused by operational errors, human errors, improper oil-handling equipment design and operations;

(4) Minimizing the size and impacts of those oil spills which do occur; and

(5) Facilitating coordination of local, state, regional, tribal, and other prevention and contingency plans.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-015, filed 9/25/06, effective 10/26/06.]

WAC 173-180-020 Authority. The legislature granted ecology the authority to adopt these rules under the following statutes:

(1) RCW 88.46.160 and 88.46.165 provide statutory authority for regulating the transfer of oil on or over waters of the state.

(2) RCW 90.56.220 provides statutory authority for developing operations and design standards and implementing a compliance program established by this chapter.

(3) RCW 90.56.230 provides statutory authority for operations manual preparation and review requirements established by this chapter.

(4) RCW 90.56.220 provides statutory authority for the personnel training and certification requirements established by this chapter.

(5) RCW 90.56.200, 90.56.300 and 90.56.310 provide statutory authority for the prevention plan preparation and review requirements established by this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-020, filed 9/25/06, effective 10/26/06.]

WAC 173-180-025 Definitions. (1) "Best achievable protection" means the highest level of protection that can be achieved through the use of the best achievable technology and those staffing levels, training procedures, and operational methods that provide the greatest degree of protection available. The director's determination of best achievable protection must be guided by the critical need to protect the state's natural resources and waters, while considering: The additional protection provided by the measures, the technological achievability of the measures, and the cost of the measures.

(2) "Best achievable technology" means the technology that provides the greatest degree of protection taking into consideration: Processes that are being developed, or could feasibly be developed, given overall reasonable expenditures on research and development; and processes that are currently in use. In determining what best achievable technology is, the director must consider the effectiveness, engineering feasibility, and commercial availability of the technology.

(3) "Boatyard" means a Class 4 facility which builds, repairs, or refurbishes nonrecreational vessels under three hundred gross tons, regardless of fuel capacity.

(4) "Boom" means flotation boom or other effective barrier containment material suitable for containment of oil discharged onto the surface of the water.

(5) "Bulk" means material that is stored or transported in a loose, unpackaged liquid, powder, or granular form capable of being conveyed by a pipe, bucket, chute, or belt system.

(6) "Cargo vessel" means a self-propelled ship in commerce, other than a tank vessel or a passenger vessel, three hundred or more gross tons, including but not limited to, commercial fish processing vessels and freighters.

(7) "Certification" means the documentation that a facility employee has met all requirements of an oil transfer training and certification program that meets the requirements of this chapter.

(8) "Class 1 facility" means a facility as defined in RCW 90.56.010 as:

(a) Any structure, group of structures, equipment, pipeline, or device, other than a vessel, located on or near the navigable waters of the state that transfers oil in bulk to or from a tank vessel or pipeline, that is used for producing, storing, handling, transferring, processing, or transporting oil in bulk.

(b) A Class 1 facility does not include any:

(i) Railroad car, motor vehicle, or other rolling stock while transporting oil over the highways or rail lines of this state;

(ii) Underground storage tank regulated by ecology or a local government under chapter 90.76 RCW;

(iii) Motor vehicle motor fuel outlet;

(iv) Facility that is operated as part of an exempt agricultural activity as provided in RCW 82.04.330; or

(v) Marine fuel outlet that does not dispense more than three thousand gallons of fuel to a ship that is not a covered vessel, in a single transaction.

(9) "Class 2 facility" means a railroad car, motor vehicle, portable device or other rolling stock, while not transporting oil over the highways or rail lines of the state, used to transfer oil to a nonrecreational vessel.

(10) "Class 3 facility" means a structure that:

(a) Transfers to a nonrecreational vessel with a capacity of ten thousand five hundred or more gallons of oil whether the vessel's oil capacity is used for fuel, lubrication oil, bilge waste, or slops or other waste oils;

(b) Does not transfer oil in bulk to or from a tank vessel or pipeline; and

(c) Does not include any: Boatyard, railroad car, motor vehicle, or other rolling stock while transporting oil over the highways or rail lines of this state; underground storage tank regulated by ecology or a local government under chapter 90.76 RCW; or a motor vehicle motor fuel outlet; a facility that is operated as part of an exempt agricultural activity as provided in RCW 82.04.330.

(11) "Class 4 facility" means a structure that:

(a) Is a marina, boatyard, marine fueling outlet, and other fueling installations that transfer to a nonrecreational vessel with a capacity to hold less than ten thousand five hundred gallons of oil whether the vessel's oil capacity is used for fuel, lubrication oil, bilge waste, or slops or other waste oil;

(b) Does not transfer oil in bulk to or from a tank vessel or pipeline; and

(c) Does not include any: Railroad car, motor vehicle, or other rolling stock while transporting oil over the highways or rail lines of this state; underground storage tank regulated by ecology or a local government under chapter 90.76 RCW; or a motor vehicle motor fuel outlet; or a facility that is operated as part of an exempt agricultural activity as provided in RCW 82.04.330.

(12) "Covered vessel" means a tank vessel, cargo vessel, or passenger vessel.

(13) "Director" means the director of the department of ecology.

(14) "Directly impact" means without treatment.

(15) "Discharge" means any spilling, leaking, pumping, pouring, emitting, emptying, or dumping regardless of quantity.

(16) "Ecology" means the department of ecology.

(17) "Gross ton" means a vessel's approximate volume as defined in Title 46, United States Code of Federal Regulations (CFR), Part 69.

(18) "Innage" means the difference from the surface of the liquid to the tank bottom.

(19) "Navigable waters of the state" means those waters of the state, and their adjoining shorelines, that are subject to the ebb and flow of the tide and/or are presently used, have been used in the past, or may be susceptible for use to transport intrastate, interstate, or foreign commerce.

(20) "Nonrecreational vessel" means any vessel that is not a recreational vessel as defined in this section.

(21) "Oil" or "oils" means oil of any kind that is liquid at atmospheric temperature and pressure and any fractionation thereof, including, but not limited to, crude oil, petroleum, gasoline, fuel oil, diesel oil, oil sludge, oil refuse, biological oils and blends, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under section

101(14) of the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by P.L. 99-499.

(22) "Offshore facility" means any class facility, as defined in this section, located in, on, or under any of the navigable waters of the state, but does not include a facility any part of which is located in, on, or under any land of the state, other than submerged land.

(23) "Onshore facility" means any class facility, as defined in this section, any part of which is located in, on, or under any land of the state, other than submerged land, that because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters of the state or the adjoining shorelines.

(24) "Owner or operator" means:

(a) In the case of a vessel, a person who owns, operates, or charters by demise, a vessel;

(b) In the case of an onshore or offshore facility, a person who owns or operates this type of facility;

(c) In the case of an abandoned vessel or abandoned onshore or offshore facility, the person who owned or operated the vessel or facility immediately before its abandonment; and

(d) "Operator" does not include any person who owns the land underlying a facility if the person is not involved in the operations of the facility.

(25) "Passenger vessel" means a ship of three hundred or more gross tons with a fuel capacity of at least six thousand gallons carrying passengers for compensation.

(26) "Person" means any political subdivision, government agency, municipality, industry, public or private corporation, copartnership, association, firm, individual, or any other entity whatsoever.

(27) "Personnel" means individuals employed by, or under contract with a facility or vessel.

(28) "Person in charge" or "PIC" means a person qualified and designated as required under 33 CFR 155, for vessels, 33 CFR 154 for Class 1, 2, or 3 facilities, or if not designated, the person with overall responsibility for oil transfer operations.

(29) "Process pipelines" means a pipeline used to carry oil within the oil refining/processing units of a Class 1 facility, process unit to tankage piping and tankage interconnecting piping. Process pipelines do not include pipelines used to transport oil to or from a tank vessel or transmission pipeline.

(30) "Public vessel" means a vessel that is owned, or demise chartered, and is operated by the United States government, or a government of a foreign country, and is not engaged in commercial service.

(31) "Recreational vessel" means a vessel owned and operated only for pleasure with no monetary gain involved, and if leased, rented, or chartered to another for recreational use, is not used for monetary gain. This definition applies to vessels such as house boats, ski boats, and other small craft on a rental or lease agreement.

(32) "Secondary containment" means containment systems, which prevent the discharge of oil from reaching the waters of the state.

(33) "Ship" means any boat, ship, vessel, barge, or other floating craft of any kind.

(34) "Spill" means an unauthorized discharge of oil into the waters of the state.

(35) "State" means the state of Washington.

(36) "Storage tank" means all aboveground containers connected to transfer pipelines or any aboveground containers greater than ten thousand gallons (two hundred thirty-eight barrels), including storage and surge tanks, used to store bulk quantities of oil. Storage tanks do not include those tanks regulated by chapter 90.76 RCW, rolling stock, wastewater treatment equipment, process pressurized vessels or other tanks used in the process flow through portions of the facility.

(37) "Tank vessel" means a ship that is constructed or adapted to carry, or that carries, oil in bulk as cargo or cargo residue, and that:

(a) Operates on the waters of the state; or

(b) Transfers oil in a port or place subject to the jurisdiction of this state.

(38) "Transmission pipeline" means an interstate or intrastate pipeline subject to regulation by the United States Department of Transportation under 49 CFR 195 in effect on the effective date of this section, through which oil moves in transportation, including line pipes, valves, and other appurtenances connected to line pipe, pumping units, and fabricated assemblies associated with pumping units.

(39) "Transfer" means any movement of oil in bulk to or from a nonrecreational vessel or transmission pipeline.

(40) "Transfer pipeline" is a buried or aboveground pipeline used to carry oil to or from a tank vessel or transmission pipeline, or to a vessel and the first valve inside secondary containment at the facility provided that any discharge on the facility side of that first valve will not directly impact waters of the state. A transfer pipeline includes valves, and other appurtenances connected to the pipeline, pumping units, and fabricated assemblies associated with pumping units. A transfer pipeline does not include process pipelines, pipelines carrying ballast or bilge water, transmission pipelines, tank vessel or storage tanks. Instances where the transfer pipeline is not well defined will be determined on a case-by-case basis by ecology.

(41) "Topping off" means the receipt of oil into the last ten percent of available tank capacity in any tank.

(42) "Ullage" means the depth of space above the free surface of the liquid to the reference datum of that tank.

(43) "Waters of the state" include lakes, rivers, ponds, streams, inland waters, underground water, salt waters, estuaries, tidal flats, beaches and land adjoining the seacoast of the state, sewers, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

[Statutory Authority: Chapters 90.56, 88.46, 90.48 RCW. 07-22-119 (Order 07-14), § 173-180-025, filed 11/7/07, effective 12/8/07. Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-025, filed 9/25/06, effective 10/26/06.]

WAC 173-180-030 Compliance with federal rule or law. (1) Any person with oil handling and transfer duties must comply with applicable provisions of federal law and regulation governing licensing and documentation, equipment, operations and oil transfers.

(2) The following Code of Federal Regulations (CFR) in effect on the effective date of this chapter are incorporated by reference:

(a) 33 CFR 156.120, 33 CFR 156.150, 33 CFR 156.170;

(b) 33 CFR 154.300, 154.310, 154.570, 154.710, 154.1050, 154.1055, and Subpart F;

(c) 40 CFR 112; and

(d) 49 CFR 195.

(3) All federal regulations incorporated in this chapter are available through the National Archive and Records Administration web site located here: http://www.gpoaccess.gov/cfr/index.html

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-030, filed 9/25/06, effective 10/26/06.]

WAC 173-180-035 Inspections. (1) Ecology may verify compliance with this chapter by announced and unannounced inspections in accordance with RCW 90.56.050, 90.56.410, and 88.46.167.

(2) To ensure compliance with this chapter, ecology may ask for the following during inspections and the facility is required to:

(a) Provide proof of compliance by producing all required records and documents;

(b) Provide proof of compliance of the ability to meet the spill prevention equipment and procedures of this chapter;

(c) Provide proof of compliance of the ability to meet the transfer containment and recovery standards in WAC 173-180-221 and 173-180-222; and

(d) Provide proof of training and certification, if applicable.

(3) Ecology will provide an inspection report to the facility at the conclusion of the inspection.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-035, filed 9/25/06, effective 10/26/06.]

WAC 173-180-040 Recordkeeping. (1) Records required by this chapter must be maintained and available to ecology for a minimum of three years, except for the following:

(a) Preload plans and declaration of inspection (DOI) kept for at least thirty days from date of the oil transfer operation.

(b) The design, construction, and repair records for storage tanks, pipelines, and all oil transfer equipment testing and repair records kept for the life of the equipment. Inspection, maintenance, and repair records for pumps, valves, manifolds, and other ancillary equipment used in oil transfers must be kept for ten years.

(c) Oil transfer personnel training and certification records for Class 1 and 2 facilities kept for five years from the date the persons were certified.

(2) All records required in this chapter must be available to ecology for photocopying upon request.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-040, filed 9/25/06, effective 10/26/06.]

WAC 173-180-045 Threat of a spill. (1) Ecology may determine that immediate action is necessary to suspend or delay transfer operations from a facility if there is a condition posing a substantial threat of discharge of oil on or over waters of the state, or harm to public health and safety, or both.

(2) Ecology may coordinate with the Coast Guard to:

(a) Issue an administrative order that may require immediate suspension of oil transfers;

(b) Specify each condition requiring immediate action to eliminate the condition; and

(c) Notify the PICs that oil transfers may resume once ecology is satisfied the threat is no longer substantial.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-045, filed 9/25/06, effective 10/26/06.]

WAC 173-180-050 Oil spills. (1) Facility personnel involved with the oil transfer must immediately stop an oil transfer operation whenever oil could originate from the current oil transfer operation and is:

(a) Observed or spilled into the water or on the shoreline adjoining the transfer area;

(b) Discharged into oil spill containment or on the vessel deck.

(2) The facility PIC must make notifications as required in RCW 90.56.280.

(3) The facility PIC may resume an oil transfer once the following conditions are met:

(a) The source of the spill is controlled, contained, and a proper response is underway;

(b) The PICs must agree there is no further threat of a spill.

(4) After a spill to water, the facility PIC may resume a transfer if:

(a) The conditions in subsection (3) of this section are met; and

(b) Approval is received from the state on-scene coordinator in conjunction with the federal on-scene coordinator.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-050, filed 9/25/06, effective 10/26/06.]

WAC 173-180-055 Work hours. (1) Personnel with oil transfer duties may not work more than sixteen hours in any twenty-four-hour period, nor more than forty hours in any seventy-two-hour period, except in an emergency or spill response operation. For purposes of this section, "emergency" means an unforeseen situation that poses an imminent threat to human safety, or the environment, or substantial loss of property.

(2) The owner or operator of a Class 1, 2, or 3 facility must maintain records such as maintenance records or payroll records demonstrating compliance with work hour restrictions.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-055, filed 9/25/06, effective 10/26/06.]

WAC 173-180-060 Personnel qualifications. (1) The owner or operator of a Class 1, 2, or 3 facility must designate a PIC in writing.

A designated PIC must supervise all oil transfer operations.

(2) All Class 1 and 2 facility personnel designated as a PIC must have completed a training and certification pro-

gram established by the operator and approved under Part E of this chapter.

(3) All personnel assigned responsibilities related to an oil transfer operation must be qualified to perform those duties as required by federal law or rule, or both.

(4) Each PIC must carry or have readily available evidence of designation as a PIC when engaged in an oil transfer operation.

(5) All Class 1 and 2 personnel involved in a transfer must carry or have readily available evidence of completion of the facility's training and certification program.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-060, filed 9/25/06, effective 10/26/06.]

WAC 173-180-065 Noncompliance. Any violation of this chapter may be subject to enforcement and penalty sanctions of chapters 90.56, 90.48, and 88.46 RCW.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-065, filed 9/25/06, effective 10/26/06.]

WAC 173-180-070 Equivalent compliance plan. (1) Any facility may submit a proposal for equivalent compliance for the alternative measures required in WAC 173-180-221 and 173-180-222. Any facility who submits a proposal must preboom or meet the applicable alternative measures requirements until the equivalent compliance plan is approved.

(a) Rate A deliverers may only submit an equivalent compliance plan proposal for alternative measures found in WAC 173-180-221(7).

(b) Rate B deliverers may only submit an equivalent compliance plan proposal for alternative measures found in WAC 173-180-222(2).

(2) The proposal must contain the following and in the order presented:

(a) Cover sheet with name of company seeking equivalent compliance and point of contact information;

(b) Table of contents including supporting documents and appendices;

(c) Executive summary of the equivalent proposal;

(d) A detailed description of the equivalent proposal that includes, when appropriate, the equipment, personnel, operating procedures, and maintenance systems and any other alternatives that are being proposed;

(e) A detailed analysis of how the proposal offers equivalent or greater level of protection as compared to the requirements in this chapter. This includes:

(i) Methodology of the analysis;

(ii) Detailed results with supporting data, references, graphs, tables, pictures, and other relevant information;

(iii) Technical feasibility of proposal versus current requirements.

(3) **Submission timeline of proposed equivalent compliance plan:** The facility must submit the equivalent compliance proposal to ecology at least one hundred twenty calendar days before planned operation under the section.

(a) Ecology will make the proposal available for a thirty-calendar-day public review and comment period.

(b) Ecology may request additional information regarding any aspect of the proposal such as site-specific meteorological, water current velocity, and other monitoring data to support the proposal.

(c) Ecology will respond to the facility within ninety calendar days of receipt of the equivalent compliance proposal with a letter approving, conditionally approving, or disapproving the proposal.

(d) The approval will be valid for no more than five years from the date on the approval letter.

(4) **Approval of proposed equivalent compliance plan:** Ecology may approve the equivalent compliance proposal if, based upon the documents submitted and other information available to the agency, it finds that:

(a) The equivalent compliance proposal is complete and accurate; and

(b) The equivalent compliance proposal would provide an equivalent or greater level of environmental protection as the alternative measures required in WAC 173-180-221 and 173-180-222.

(5) Ecology may reconsider an approval, or conditional approval, at any time after a response to a significant oil spill by the company.

(6) The owner or operator must submit one paper copy and one electronic copy of the proposal to ecology.

The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Equivalent Compliance Review
P.O. Box 47600
Olympia, WA 98504-7600
Or
The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Equivalent Compliance Review
300 Desmond Drive
Lacey, WA 98503

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-070, filed 9/25/06, effective 10/26/06.]

WAC 173-180-075 Severability. If any provision of this chapter is held invalid, the remainder of this chapter is not affected.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-075, filed 9/25/06, effective 10/26/06.]

PART B: OIL TRANSFER REQUIREMENTS

WAC 173-180-200 Applicability of Part B. (1) The general sections of Part B apply to Class 1, 2, 3, and 4 facilities.

(2) Requirements for Class 1, 2, and 3 facilities are found in WAC 173-180-205 and 173-180-215 through 173-180-250.

(3) Requirements for Class 4 facilities are found in WAC 173-180-205 and 173-180-210.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-200, filed 9/25/06, effective 10/26/06.]

WAC 173-180-205 Oil transfer equipment at Class 1, 2, 3, and 4 facilities. (1) All hoses or piping used in an oil transfer operation must meet the following criteria:

(a) Hoses or piping must be supported so as to avoid crushing or excessive strain. Flanges, joints, hoses, and piping must be visually checked prior to the transfer for cracks and signs of leakage.

(b) All hoses and loading arms are long enough to allow the vessel to move to the limits of its moorings without placing strain on any component of the oil transfer equipment.

(c) Each hose must have no unrepaired loose covers, kinks, bulges, soft spots, or any other defect which would permit the discharge of oil or hazardous material through the hose material and no gouges, cuts, or slashes that penetrate the first layer of hose reinforcement ("reinforcement" means the strength members of the hose, consisting of fabric, cord and/or metal).

(d) Hoses or piping must not be permitted to chafe on the dock or vessel or be in contact with any source that might affect the integrity of the hoses.

(e) Hose ends must be blanked tightly when hoses are moved into position for connection, also immediately after they are disconnected, and residue drained either into the vessel tanks or into suitable shore receptacles before they are moved away from their connections.

(2) Testing of all oil transfer equipment, including, but not limited to, pumps, valves, piping, manifolds, connections, and hoses, must be done annually, and must be conducted by using one of the following methods:

(a) In accordance with manufacturers' recommendations and industrial standards; or

(b) Procedures identified in 33 CFR 156.170.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-205, filed 9/25/06, effective 10/26/06.]

WAC 173-180-210 Requirements for Class 4 facilities only. (1) **Response and recovery equipment:** The owner or operator of each Class 4 facility must ensure that cleanup of at least a twenty-five gallon spill can occur by having all of the following:

Response and recovery equipment maintained in a standby condition and available to the receiving vessel:

(a) Sufficient and appropriate boom of no less than two hundred feet available in the standby position;

(b) Oil spill sorbent materials appropriate for use in water and on land;

(c) Nonsparking hand scoops, shovels, and buckets;

(d) Containers suitable for holding the recovered oil and oily water; and

(e) Protective clothing and other appropriate personal protective gear necessary to safely respond to oil spills.

(2) **Trained personnel:** The owner or operator of each Class 4 facility must:

(a) Provide annual training for employees involved in an oil transfer operation, that at a minimum includes:

(i) Dangers and safe practices regarding the petroleum products transferred at that location;

(ii) Safe and effective use and handling of response and recovery equipment; and

(iii) Spill notification procedures;

(b) Train all employees with oil transfer duties within ninety calendar days of the date of hire. No employee may be in charge of an oil transfer operation at the Class 4 facility without proper training;

(c) Keep a record of oil transfer training at the facility and make the record available to ecology upon request.

(3) **Spill notification information:** The owner or operator of each Class 4 facility must provide spill notification information on a wallet-sized card for each employee and posted at the dock for fueling customers. The notification information must include:

(a) Required notifications in RCW 90.56.280;

(b) A phone number for a spill response contractor; and

(c) If the Class 4 facility is not always staffed, a twenty-four-hour phone number where someone designated by the owner or operator of the facility can be reached to start the spill response. The contact phone number must be posted on the dock or transfer location in a location that is easy to see.

(4) The owner or operator of each Class 4 facility must ensure all oil transfer equipment is properly inspected and maintained in accordance with WAC 173-180-205.

(5) Class 4 facilities, also known as marine fueling outlets, that are transferring less than three thousand gallons of oil in a single transaction, are exempt from advance notice requirements for oil transfer operations as described in RCW 88.46.165.

(6) **Semiannual reporting:** Class 4 facilities must report all bulk oil transfers conducted at the facility.

(a) The report must include types of oil transferred and total volume of transfers by oil type.

(b) The facility must submit the report to ecology by January 15 and July 15 of each year.

(c) The facility must submit the report either by e-mail or by U.S. mail to the following address:

E-mail: oiltransfernotifications@ecy.wa.gov
U.S. mail:
Department of Ecology
Spill Prevention, Preparedness, and Response Program
P.O. Box 47600
Olympia, WA 98504-7600

(7) **Compliance schedule:** Class 4 facilities must implement the requirements in subsections (1) and (2) of this section within one hundred twenty calendar days from the effective date of this chapter. Class 4 facilities must implement the remaining requirements on the effective date of this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-210, filed 9/25/06, effective 10/26/06.]

WAC 173-180-215 Advance notice of transfer for Class 1, 2, and 3 facilities. (1) The delivering facility involved in an oil transfer of more than one hundred gallons must notify ecology at least twenty-four hours prior to an oil transfer operation; except: If the deliverer cannot meet the notification requirements in this section, notice must be provided as soon as possible.

(2) The notice of transfer must be submitted to ecology on the "Advanced Notice of Transfer" form provided by ecology or a facsimile, and must contain the following information in the order provided:

(a) Company name, address, contact person and telephone number of organization delivering the oil;

(b) Date of transfer operation, estimated starting time, and duration of the oil transfer operation;

(c) Name of delivering facility and receiving vessel involved in the oil transfer and the vessel's Lloyds Registry/International Maritime Organization (LR/IMO) number or official number if available;

(d) City name and either the address or location/anchorage where the oil transfer operation will occur;

(e) Oil product type and quantity in gallons or barrels; and

(f) Whether or not prebooming will take place? (yes or no).

(3) Notification may be made by the deliverer's agent or other contracted representative.

(4) The notification form may be submitted via internet web site that ecology established, by e-mail, or by facsimile. The notification form and contact information is found on ecology's web site: http://www.ecy.wa.gov/programs/spills/spills.html

(5) Compliance schedule: All Class 1, 2, and 3 facilities must begin submitting advance notice within thirty calendar days of the effective date of this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-215, filed 9/25/06, effective 10/26/06.]

WAC 173-180-220 Transfer containment and recovery requirements. (1) These standards apply to all oil transfers that involve any jet fuels, diesels, heating oils, and any other oils that are recoverable when spilled to water. These standards do not apply to facilities delivering gasoline, aviation gasoline, and other highly volatile products with similar characteristics.

(2) The deliverer must first determine the rate at which oil is to be transferred and then follow the applicable standards outlined in this chapter:

(a) Rate A means oil transfer operations at a rate over five hundred gallons per minute. Rate A requirements are found in WAC 173-180-221.

(b) Rate B means oil transfer operations at a rate of five hundred gallons per minute or less. Rate B requirements are found in WAC 173-180-222.

(3) To meet the requirements of this chapter, the deliverer must have personnel trained in the proper use and maintenance of boom and recovery equipment.

(4) All boom and associated equipment, including the equipment used to deploy the boom, must be of the appropriate size and design for the environmental conditions encountered in the transfer area(s) based on the manufacturers' specifications.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-220, filed 9/25/06, effective 10/26/06.]

WAC 173-180-221 Rate A prebooming requirements and Rate A alternative measures requirements. This section generally applies to delivering facilities; however, any Class 1 facility receiving oil from a Rate A delivering vessel must provide the safe and effective threshold values to the vessel.

(1) The Rate A deliverer must preboom oil transfers when it is safe and effective to do so. When prebooming is not safe and effective, the deliverer must meet the alternative measure requirements found in subsection (7) of this section.

(2) The determination of safe and effective must be made prior to starting a transfer or, if conditions change during a transfer. To make this determination, the deliverer must use the safe and effective threshold values found in their operations manual. Safe and effective threshold values are determined using the safe and effective threshold determination report - see WAC 173-180-224.

(3) When it is not safe and effective, or when conditions develop during a preboomed transfer that require removal of the boom, the Rate A deliverer must report this finding to ecology and meet the alternative measures found in subsection (7) of this section. The *Ecology Boom Reporting Form* must be used for this purpose, and submitted by e-mail or facsimile prior to the transfer and/or immediately when conditions have changed.

(4) If multiple oil transfers are occurring simultaneously with a single vessel, and one product transferred is not appropriate to preboom, then that portion of the transfer where it is unsuitable to preboom must use the alternative measures found in subsection (7) of this section.

(5) For the purposes of this section, the deliverer must be able to quickly disconnect all boom in the event of an emergency.

(6) **Rate A prebooming requirements.**

(a) In order to preboom transfers, the deliverer must have, prior to the transfer, access to boom four times the length of the largest vessel involved in the transfer or two thousand feet, whichever is less.

The deliverer must deploy the boom such that it completely surrounds the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the deliverer may preboom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.

(i) The boom must be deployed with a minimum stand-off of five feet away from the sides of a vessel, measured at the waterline. This stand-off may be modified for short durations needed to meet a facility or ship's operational needs.

(ii) The deliverer must periodically check the boom positioning and adjust as necessary throughout the duration of the transfer and specifically during tidal changes and significant wind or wave events.

(b) In addition to prebooming, the deliverer must have the following recovery equipment available on-site:

(i) Containers suitable for holding the recovered oil and oily water;

(ii) Nonsparking hand scoops, shovels, and buckets; and

(iii) Enough sorbent materials and storage capacity for a seven barrel oil spill appropriate for use on water or land.

(c) For preboomed transfers, within one hour of being made aware of a spill, the deliverer must be able to complete deployment of the remaining boom, should it be necessary for containment, protection, or recovery purposes.

(7) **Rate A alternative measures.** Rate A deliverers must use these alternative measures when it is not safe and effective to meet the prebooming requirements.

(a) To meet the alternative measures requirements the deliverer must have access to boom four times the length of the largest vessel involved in the transfer, or two thousand feet, whichever is less.

(b) In addition to the boom, the deliverer must have the following available on-site:

(i) Containers suitable for holding the recovered oil and oily water;

(ii) Nonsparking hand scoops, shovels, and buckets; and

(iii) Enough sorbent materials and storage capacity for a seven barrel oil spill appropriate for use on water or land.

(c) The deliverer must have the ability to safely track the spill in low visibility conditions. The tracking system must be on-scene within thirty minutes of being made aware of a spill.

(d) For alternative measures: Within one hour of being made aware of a spill, the deliverer must be able to completely surround the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the deliverer may preboom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.

(e) For alternative measures: Within two hours of being made aware of a spill, the deliverer must have the following:

(i) Additional boom four times the length of the largest vessel involved in the transfer, or two thousand feet, whichever is less, available for containment, protection, or recovery; and

(ii) A skimming system must be on-site. The skimming system must be in stand-by status and be capable of fifty barrels recovery and one hundred barrels of storage.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-221, filed 9/25/06, effective 10/26/06.]

WAC 173-180-222 Rate B prebooming requirements and Rate B alternative measures requirements. (1) **Rate B prebooming requirements.** The Rate B deliverer must choose to meet either the following prebooming requirements in this section or the alternative measures found in subsection (2) of this section. If prebooming is chosen, then:

(a) Prior to starting the oil transfer operation, the deliverer must deploy boom so that it completely surrounds the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the deliverer may preboom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.

(i) The deliverer must deploy the boom with a minimum stand-off of five feet away from the sides of a vessel, measured at the waterline. This stand-off may be modified for short durations needed to meet a facility or ship's operational needs;

(ii) The deliverer must periodically check boom positioning and adjust the boom as necessary throughout the duration of the transfer and specifically during tidal changes and significant wind or wave events;

(b) In addition, the deliverer must have the following recovery equipment available on-site:

(i) Containers suitable for holding the recovered oil and oily water;

(ii) Nonsparking hand scoops, shovels, and buckets; and

(iii) Enough sorbent materials and storage capacity for a two barrel oil spill appropriate for use on water or land.

(c) For prebooming: Within one hour of being made aware of a spill, the deliverer must be able to completely deploy an additional five hundred feet of boom. This boom may be used for containment, recovery, or protection.

(2) **Rate B alternative measures requirements.** If a Rate B chooses alternative measures, then:

(a) Prior to starting the oil transfer operation, the deliverer must have access to boom sufficient to completely surround the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the deliverer may preboom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.

(b) In addition, the deliverer must have the following recovery equipment available on-site:

(i) Containers suitable for holding the recovered oil and oily water;

(ii) Nonsparking hand scoops, shovels, and buckets; and

(iii) Enough sorbent materials and storage capacity for a two barrel oil spill appropriate for use on water or land.

(c) For alternative measures: Within one hour of being made aware of a spill, the deliverer must be able to complete deployment of an additional five hundred feet of boom for containment, protection or recovery.

(d) For alternative measures: Within two hours of being made aware of a spill, the deliverer must have an additional five hundred feet of boom available on-scene for containment, protection, or recovery.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-222, filed 9/25/06, effective 10/26/06.]

WAC 173-180-223 Compliance schedule for prebooming and alternative measures for Rate A and Rate B transfers. (1) Any class facility conducting Rate A transfers must meet all the applicable requirements in WAC 173-180-220 and 173-180-221 except WAC 173-180-221(6) within one hundred twenty calendar days of the effective date of this chapter. All Rate A transfers must meet the requirements of WAC 173-180-221(6) within three hundred sixty-five calendar days from the effective date of the chapter.

(2) Any class facility conducting Rate B transfers must meet all the requirements of WAC 173-180-220 and 173-180-222 within one hundred twenty calendar days from the effective date of this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-223, filed 9/25/06, effective 10/26/06.]

WAC 173-180-224 Safe and effective threshold determination report. (1) **Report requirements.** The report must include at a minimum the following, in the order presented:

(a) Cover sheet with name of company submitting the report and point of contact.

(b) Table of contents including supporting documents and appendices.

(c) Summary of safe and effective threshold values.

(d) The body of the report must include the following:

(i) The information used to support these values which must be based upon on-site environmental monitoring data recorded at specific times, dates, and locations.

(ii) These values and the supporting data must address, at a minimum, the following site specific information:

(A) Personnel safety;

(B) Sea state values in feet including typical wave periods;

(C) Water current velocity such as peak currents, sustained currents in hourly increments, and direction of flow, during typical oil transfer operations;

(D) Wind speed in knots, and prevailing directions;

(E) Other conditions such as vessel traffic, fishing activities, and other factors that influence the oil transfer operation.

(iii) The facility must provide a detailed analysis of the proposed threshold values for the transfer location including:

(A) Methodology of the analysis;

(B) Equipment used to measure data collected;

(C) Supporting data, references, graphs, tables, pictures, and other relevant information.

(2) **Submittal requirements.** Rate A deliverers must submit a safe and effective threshold determination report to ecology for review and approval for each location at which a Rate A transfer occurs. One paper and one electronic copy of the safe and effective threshold determination report must be delivered to:

The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Safe and Effective Threshold Determination Report
P.O. Box 47600
Olympia, WA 98504-7600
Or
The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Safe and Effective Threshold Determination Report
300 Desmond Drive
Lacey, WA 98503

(3) **Review and approval process.**

(a) When reviewing threshold determination reports, ecology must consider the following:

(i) Personnel safety;

(ii) Operating environment of the transfer location(s) such as site specific meteorological, water current velocity, and other monitoring data to support the threshold values determination;

(iii) Accepted industry standards regarding the performance of boom and associated response equipment in various operating environments;

(iv) Types of oil transfer operations including bunkering, cargo operations, transfer rates, and other factors that influence oil transfers.

(b) Ecology will make the report available for a thirty calendar day public review and comment period.

(c) Ecology will respond to the facility within ninety calendar days of receipt of the report with a letter approving, conditionally approving, or disapproving the report.

(d) The approval of this report will be valid for no more than five years from the date on the approval letter.

(e) Ecology may require a new review and approval process for this report after a spill by the facility.

(4) **Compliance and submittal schedule.**

(a) The safe and effective threshold determination report must be submitted one hundred eighty calendar days after the effective date of this chapter.

(b) For facilities starting operation after the effective date of this chapter, the report must be submitted at least one hundred twenty calendar days prior to the first oil transfer operation.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-224, filed 9/25/06, effective 10/26/06.]

WAC 173-180-225 Providing safe vessel access. A Class 1 or 3 facility must provide safe access for personnel if the vessel cannot provide the safe access.

(1) The access must be secured both top and bottom to prevent movement of the access platform.

(2) The entire ladder and the portion of the facility and ship's deck where access is provided must be illuminated during low light or low visibility situations and without glare to the persons using the access.

(3) In the event weather conditions make the access unsafe, the PICs may elect to use radio communication.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-225, filed 9/25/06, effective 10/26/06.]

WAC 173-180-230 Preloading or cargo transfer plan requirement. Prior to any oil transfer, a transfer plan must be filled out and discussed between the delivering and receiving PICs. A facility must not begin a transfer until this plan has been discussed during the pretransfer conference described in WAC 173-180-235. The plan must, at a minimum, include:

(1) Identification, location and capacity of the vessel's tanks receiving oil;

(2) Level and type of liquid in all bunker or cargo oil tanks prior to the oil transfer;

(3) Final ullage or innage, and percent of each tank to be filled;

(4) Sequence in which the tanks are to be filled; and

(5) The facility or vessel's procedures to regularly monitor all receiving tank levels and valve alignments during the transfer operation.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-230, filed 9/25/06, effective 10/26/06.]

WAC 173-180-235 Pretransfer conference. (1) Before the start of an oil transfer operation, the PICs must hold a face-to-face pretransfer conference. If the PICs determine weather conditions prevent safe access, PICs may communicate via radio.

(2) The PICs must discuss and agree upon:

(a) The preloading or cargo plan;

(b) The contents of the declaration of inspection (DOI) required under 33 CFR 156.150;

(c) Procedures for communicating soundings, changing over tanks, and beginning topping off;

(d) Shift change procedures;

(e) Emergency shutdown procedures and identify all means to shut down the oil transfer operation in an emergency; and

(f) Expected weather and/or sea conditions and threshold values for weather and sea conditions above which oil transfer operations must cease.

(3) During a pretransfer conference that involves a covered vessel, the point-of-transfer watch and deck-rover watch must be identified to PICs.

(4) An oil transfer operation will not begin unless a person proficient in both English and a language common to the vessel's officers and crew is present at the pretransfer conference.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-235, filed 9/25/06, effective 10/26/06.]

WAC 173-180-240 Communications. (1) The facility PIC must ensure continuous two-way voice communication is usable and available in all weather conditions as well as all phases of the transfer operation between the PICs.

(2) The facility PIC must ensure at least the following are available for use during the oil transfer operation:

(a) Two portable communication devices that are intrinsically safe; and

(b) An air horn for emergency signals.

(3) The PICs must ensure personnel involved in the oil transfer operation know and use English phrases and hand signals to communicate the following instructions during the oil transfer: "Stop," "hold," "wait," "fast," "slow," and "finish."

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-240, filed 9/25/06, effective 10/26/06.]

WAC 173-180-245 Oil transfer procedures. For all transfer operations involving Class 1, 2, or 3 facilities must comply with the transfer procedures in 33 CFR 156 and 154 and the following:

(1) All oil transfer operations must be conducted in accordance with the facility's approved operations manual.

(2) Ensure that transfer connections have been made according to the operations manual:

(a) Use appropriate material in joints and couplings to ensure a leak-free seal;

(b) Use either:

(i) A bolted or full threaded connection; or

(ii) A quick-connected coupling with a means of securing the coupling to prevent accidental release.

(c) Use a new compressible gasket appropriate for the product and transfer pressure;

(d) Use a bolt in every available hole;

(e) Use bolts of the correct size in each bolted connection;

(f) Ensure that each bolt is properly torqued to distribute the load to ensure a leak-free seal;

(g) Do not use any bolt that shows signs of strain or is elongated or deteriorated.

(3) Have the means to contain and recover any drips from connections within the oil transfer system.

(4) Deliverers providing oil to vessels without fixed containment must use automatic back pressure shutoff nozzles and also provide enough portable containment for each tank vent on the vessel.

(5) Conduct a pretransfer conference as defined in WAC 173-180-235.

(6) Ensure that the available capacity in the receiving tank(s) is (are) greater than the volume of oil to be transferred and all other valves which could influence the routing of the transferred oil are properly aligned.

(7) The PICs must verify at the start of the transfer that the tanks designated in the preload or cargo transfer plan are receiving oil at the expected rate.

(8) Each PIC must ensure that the means of operating the emergency shutdown system is immediately available while oil is transferred between the deliverer and receiver.

(9) A PIC must refuse to initiate or must cease transfer operations with any vessel which:

(a) Has not provided complete information as required by the DOI;

(b) Has refused to correct deficiencies identified by the PIC during the pretransfer conference; or

(c) Does not comply with the operations manual or does not respond to concerns identified by the PIC.

(10) When a PIC shift change occurs the departing PIC must:

(a) Discuss the preload plan and transfer rate with the arriving PIC;

(b) Notify the PIC at the other side of the transfer that a shift change is taking place; and

(c) Ensure the relieving PIC reads and signs the DOI.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-245, filed 9/25/06, effective 10/26/06.]

WAC 173-180-250 Emergency shutdown. (1) Class 1, 2, or 3 facilities must have an emergency shutdown capable of stopping the flow of oil from the fixed or mobile facility to a vessel.

(2) The emergency shutdown must be located at the PICs usual operating station and at the dock manifold if not the same location.

(3) For oil transfers, the emergency shutdown must stop the flow:

(a) Within sixty seconds for any facility or portion of the facility that started transferring oil on or before November 1, 1980.

(b) Within thirty seconds for any facility or portion of the facility that transfers oil after November 1, 1980.

(4) Both PICs must be capable of ordering or activating an emergency shutdown.

(5) If a PIC orders an emergency shutdown, the shutdown must be activated immediately.

(6) To meet the requirements of subsection (3) of this section, the emergency shutdown must be either of the following:

(a) An electrical, pneumatic, or mechanical linkage to the facility; or

(b) An electronic voice communications system continuously operated by a person on the facility who can stop the flow of oil.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-250, filed 9/25/06, effective 10/26/06.]

PART C: DESIGN STANDARDS FOR CLASS 1 FACILITIES

WAC 173-180-300 Applicability of Part C. Part C applies to Class 1 facilities only. Ecology has not adopted design standards for Class 2, 3, or 4 facilities.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-300, filed 9/25/06, effective 10/26/06.]

WAC 173-180-310 Transmission pipeline transfer requirements. (1) For the purposes of this section:

(a) "Appropriate person" means a person designated by the facility as being competent and trained to implement a designated function.

(b) "Pipeline operator" means the operator of a transmission pipeline.

(2) General requirements. No person may conduct an oil transfer operation to or from a transmission pipeline unless the appropriate person and the pipeline operator have conducted pretransfer communications which identify:

(a) Type of oil;

(b) Transfer volume;

(c) Flow rates;

(d) Transfer startup or arrival time.

(3) Class 1 facilities which receive oil from a transmission pipeline must:

(a) Confirm that the proper manifold and valves are open and ready to receive product;

(b) Notify the transmission pipeline operator when a storage tank has less than one foot of oil above the inlet nozzle;

(c) Coordinate arrival time of oil with the pipeline operator;

(d) Confirm the available storage capacity for transfers to a facility;

(e) Ensure that only the designated tank(s) is (are) receiving oil;

(f) Ensure that proper transfer alignment of the pipeline, valves, manifolds and storage tanks have been made;

(g) Establish adequate communication in English between the facility and pipeline operator;

(h) For the purpose of scheduling inspections, ecology may require a twenty-four-hour notification to ecology in advance of any transfer of bulk oil by a facility operator. Ecology must request notification in writing when this procedure is required;

(i) Transfer operations must be supervised by an appropriate person;

(j) Each facility operator must ensure that the means of operating or requesting emergency shutdown is immediately available while oil is being transferred between the facility and the pipeline;

(k) If startup, shutdown, and/or emergency shutdown are controlled by the pipeline operator directly using instrumentation and control devices, the accuracy of these devices must be checked at least annually; and

(l) All transfer operations must be conducted in accordance with operations manuals approved under this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-310, filed 9/25/06, effective 10/26/06.]

WAC 173-180-320 Secondary containment requirements for aboveground storage tanks. (1) Aboveground oil storage tanks must be located within secondary containment areas. Secondary containment systems must be:

(a) Designed, constructed, maintained and operated to prevent discharged oil from entering waters of the state at any time during use of the tank system;

(b) Capable of containing one hundred percent of the capacity of the largest storage tank within the secondary containment area;

(c) Constructed with materials that are compatible with stored material to be placed in the tank system;

(d) Soil may be used for the secondary containment system, provided that any spill onto the soil will be sufficiently contained, readily recoverable and will be managed in accordance with the provisions under WAC 173-303-145 spills and discharges and any other applicable regulation;

(e) Constructed with sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the fluid stored in the storage tank, climatic conditions, and the stresses of daily operations (including stresses from nearby vehicular traffic);

(f) Placed on a base or foundation capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression or uplift;

(g) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked oil and accumulated precipitation must be removed from the secondary containment system in a manner which will provide the best achievable protection of public health and the environment; and

(h) Visually inspected monthly to confirm secondary containment integrity. Items requiring attention as determined by the visual inspection must be documented. Records must be kept on-site for a minimum of three years.

(2) The secondary containment system must be maintained to prevent a breach of the dike by controlling burrowing animals and weeds.

(3) The secondary containment system must be maintained free of debris and other materials which may interfere with the effectiveness of the system, including excessive accumulated precipitation.

(4) The facility must maintain at least one hundred percent of the working capacity of the largest storage tank within the secondary containment area at all times.

(5) All secondary containment pumps, siphons and valves must be properly maintained and kept in good working order.

(6) Drainage of water accumulations from secondary containment areas that discharge directly to the land or waters of the state must be controlled by locally operated, positive shutoff valves or other positive means to prevent a discharge. Valves must be kept closed except when the discharge from the containment system is in compliance with chapter 90.48 RCW, Water pollution control. Valves must be locked closed when the facility is unattended. Necessary measures must be taken to ensure secondary containment valves are protected from inadvertent opening or vandalism. There must be some means of readily determining valve status by facility personnel such as a rising stem valve or position indicator.

(7) The owner or operator must inspect or monitor accumulated water before discharging from secondary containment to ensure that no oil will be discharged to the waters of the state. All water discharges must comply with state water

quality program regulations as described in chapter 90.48 RCW.

(8) Ecology may require oil containers less than ten thousand gallons (two hundred thirty-eight barrels) capacity to have secondary containment when the container is located less than six hundred feet from navigable waters of the state or a storm water or surface drains which may impact navigable waters of the state.

(9) A secondary containment system constructed after the adoption date of this rule must be installed as follows:

(a) In accordance with the 1993 version of the National Fire Protection Association (NFPA), Flammable and Combustible Code, No. 30, section 2-3.4.3;

(b) Secondary containment systems must be capable of containing one hundred percent of the capacity of the largest storage tank within the secondary containment area;

(c) Secondary containment systems must be designed to withstand seismic forces;

(d) Drains and other penetrations through secondary containment areas must be minimized consistent with facility operational requirements; and

(e) Secondary containment systems must be designed and constructed in accordance with sound engineering practice and in conformance with the provisions of this section.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-320, filed 9/25/06, effective 10/26/06.]

WAC 173-180-330 Storage tank requirements. (1) Storage tanks constructed after the adoption date of this section must meet or exceed the 1993 version of the National Fire Protection Association (NFPA No. 30) requirements and one of the following design and manufacturing standards:

(a) UL No. 142, Steel Aboveground Tanks for Flammable and Combustible Liquids dated April 1993;

(b) API Standard 650, Welded Steel Tanks for Oil Storage dated November 1988;

(c) API Standard 620, Design and Construction of Large Welded, Low-Pressure Tanks dated June 1990; or

(d) Another standard approved by ecology.

(2) The owner or operator must ensure that the means of preventing storage tank overfill comply with the 1993 version of the National Fire Protection Association (NFPA), Flammable and Combustible Code, No. 30, Chapter 2, Section 2-10.

(3) Storage tanks must be maintained, repaired and inspected in accordance with the requirements of API 653 dated January 1991, unless the operator proposes an equivalent inspection strategy which is approved by ecology.

(4) A record of all inspection results and corrective actions taken must be kept for the service life of the tank and must be available to ecology for inspection and copying upon request.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-330, filed 9/25/06, effective 10/26/06.]

WAC 173-180-340 Transfer pipeline requirements. (1) Pipelines replaced, relocated or constructed after the adoption date of this rule which are located in areas not controlled by the facility must be installed in accordance with 49 CFR 195.246 through 49 CFR 195.254 as amended on October 8, 1991, where feasible. Facility control is established by fencing, barriers or other method accepted by ecology which protects the pipe right of way and limits access to personnel authorized by the facility.

(2) All pipelines must be protected from third party damage in a reasonable manner and be able to withstand external forces exerted upon them. This must be done by:

(a) Registering all underground pipelines located in public right of way areas in the local one call system if available;

(b) Maintaining accurate maps for all underground piping located outside the facility. The maps must identify pipe size and location. The approximate depths of pipelines must be identified for pipelines which do not comply with 49 CFR 195.248 as amended on October 8, 1991;

(c) Marking all piping located in areas not controlled by the facility in accordance with 49 CFR 195.410 as amended on October 8, 1991;

(d) Providing easement inspections of areas identified by (b) of this subsection on a weekly basis to determine if there is any uncommon activity occurring which may affect the integrity of the pipeline;

(e) Ensuring that pipelines at each railroad, highway or road crossing are designed and installed to adequately withstand the dynamic forces exerted by anticipated traffic loads.

(3) Pipelines constructed after the adoption date of this section must be designed and constructed in accordance with the American Society of Mechanical Engineers (ASME) Standard for pressure piping ASME B31.3 or B31.4 issued March 15, 1993, in effect during the time of construction or any other standard accepted by ecology.

(4) Pipelines must be inspected in accordance with API 570, 1993, Piping Inspection Code. As an alternative to complying with API 570, the facility must comply with the following requirement: Buried pipelines constructed after the adoption date of this rule must be coated. Coatings must be designed and inspected to meet the following conditions consistent with the definition of best achievable protection:

(a) Coatings must effectively electrically isolate the external surfaces of the pipeline system from the environment.

(b) Coatings must have sufficient adhesion to effectively resist underfilm migration of moisture.

(c) Coatings must be sufficiently ductile to resist cracking.

(d) The coating must have sufficient impact and abrasion resistance or otherwise be protected to resist damage due to soil stress and normal handling (including concrete coating application, installation of river weights and anode bracelet installation, where applicable).

(e) The coating must be compatible with cathodic protection.

(f) The coating must be compatible with the operating temperature of the pipeline.

(g) Coatings must be inspected immediately before, during, or after pipe installation to detect coating faults. Faults in the coating must be repaired and reinspected.

(5) All buried coated pipelines must have properly operated cathodic protection which is maintained during the operational life of the pipeline system. Cathodic protection must be maintained on pipeline systems which are out-of-service but not abandoned unless the operator can show that the pipeline integrity has been properly monitored and secured as

approved by ecology prior to operation of the abandoned pipeline. Pipeline owners or operators may perform a corrosion study to demonstrate that cathodic protection is not required as an option to installing cathodic protection. Corrosion studies must follow the following guidelines as a minimum:

(a) Corrosion studies must be completed by a professional engineer with experience in corrosion control of buried pipelines, a NACE certified corrosion specialist or by a person knowledgeable and qualified to perform the required testing and inspection who is approved by ecology.

(b) Corrosion studies for pipelines must include at a minimum, the following:

(i) Pipeline thickness and corrosion rate for existing pipelines;

(ii) Presence of stray DC currents;

(iii) Soil resistivity/conductivity;

(iv) Soil moisture content;

(v) Soil pH;

(vi) Chloride ion concentration; and

(vii) Sulfide ion concentration.

(6) All pipelines with cathodic protection are subject to the following requirements where applicable:

(a) Cathodic protection systems must be tested to determine system adequacy on an annual basis.

(b) Impressed current cathodic protection rectifiers must be inspected every two months.

(c) Where insulating devices are installed to provide electrical isolation of pipeline systems to facilitate the application of corrosion control, they must be properly rated for temperature, pressure and electrical properties, and must be resistant to the commodity carried in the pipeline system.

(d) Buried pipeline systems must be installed so that they are not in electrical contact with any metallic structures. This requirement must not preclude the use of electrical bonding to facilitate the application of cathodic protection.

(e) Tests must be carried out to determine the presence of stray currents. Where stray currents are present, measures must be taken to mitigate detrimental effects.

(7) Buried bare pipelines must be inspected in accordance with section 7 of API 570 dated June 1993. Pipeline thickness and corrosion rates must be determined at an interval of no more than half of the remaining life of the pipeline as determined from corrosion rates or every five years whichever is more frequent. Pipeline thickness and corrosion rate must be initially established within thirty-six months after the adoption date of this section. The pipeline must be operated in accordance with American Society of Mechanical Engineers (ASME) supplement to ASME B31G-1991 entitled *Manual for Determining the Remaining Strength of Corroded Pipe* for transmission pipelines issued June 27, 1991, API 570 dated June 1993 or a standard approved by ecology.

(8) Whenever any buried pipe is exposed for any reason, the operator must provide a nondestructive examination of the pipe for evidence of external corrosion. If the operator finds that there is active corrosion, the extent of that corrosion must be determined and if necessary repaired.

(9) Each facility must maintain all pumps and valves that could affect waters of the state in the event of a failure. Transfer pipeline pumps and valves and storage tank valves must be inspected annually and maintained in accordance with the manufacturers' recommendations or an industrial standard approved by ecology to ensure that they are functioning properly. Valves must be locked when the facility is not attended. Necessary measures must be taken to ensure that valves are protected from inadvertent opening or vandalism if located outside the facility or at an unattended facility.

(10) A written record must be kept of all inspections and tests covered by this section.

(11) Facilities must have the capability of detecting a transfer pipeline leak equal to eight percent of the maximum design flow rate within fifteen minutes for transfer pipelines connected to tank vessels. Leak detection capability must be determined by the facility using best engineering judgment. Deficiencies with leak detection systems such as false alarms must be addressed and accounted for by the facility. Facilities may meet these requirements by:

(a) Visual inspection provided the entire pipeline is visible and inspected every fifteen minutes; or

(b) Instrumentation; or

(c) Completely containing the entire circumference of the pipeline provided that a leak can be detected within fifteen minutes; or

(d) Conducting an acceptable hydrotest of the pipeline immediately before the oil transfer with visual surveillance of the exposed pipeline every fifteen minutes; or

(e) A combination of the above strategies; or

(f) A method approved by ecology which meets the standard identified in this section; or

(g) Leak detection system operation and operator response must be described in the facility operations manual.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-340, filed 9/25/06, effective 10/26/06.]

PART D: OPERATIONS MANUAL REQUIREMENTS FOR CLASS 1 AND CLASS 2 FACILITIES

WAC 173-180-400 Applicability of Part D. (1) Part D applies to both Class 1 and Class 2 facilities. Ecology has not adopted operation manual requirements for Class 3 or 4 facilities.

(a) WAC 173-180-405 through 173-180-440 covers Class 1 facilities.

(b) WAC 173-180-445 through 173-180-475 covers Class 2 facilities.

(2) Class 1 and 2 facilities must prepare, submit, and implement an operations manual pursuant to the requirements in this chapter.

(3) All oil transfer operations must be conducted in accordance with the facilities operations manual. The owner or operator and PIC for Class 1 and 2 facilities transferring oil with a nonrecreational vessel must ensure that the receiving vessel's personnel comply with the facility operations manual.

(4) Class 1 and 2 facilities must maintain all equipment and perform operations in accordance with the operations manual.

(5) All operations manuals will be valid for no more than five years from the date on the approval letter. Ecology will review the facility operations manual to ensure compliance with this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-400, filed 9/25/06, effective 10/26/06.]

WAC 173-180-405 Class 1 facility—Operations manual. (1) Each facility must keep the operations manual in an immediately accessible location.

(2) Facilities must ensure that all employees involved in oil transfer operations, or storage operations, are familiar with the operations manual provisions through regular and new employee training.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-405, filed 9/25/06, effective 10/26/06.]

WAC 173-180-410 Class 1 facility—Operations manual preparation. (1) Each Class 1 facility must prepare an operations manual, which at a minimum, meets the requirements of this chapter.

(2) The operations manual must be thorough and contain enough information, analyses, supporting data, and documentation to demonstrate the manual holder's ability to meet the requirements of this chapter.

(3) The Class 1 facility may submit their Coast Guard operations manuals required under 33 CFR 154.300 to satisfy operations manual requirements under this chapter if:

(a) Ecology deems that such federal requirements equal or exceed those of ecology; or

(b) The Class 1 facility modifies or appends the operations manual to satisfy requirements under this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-410, filed 9/25/06, effective 10/26/06.]

WAC 173-180-415 Class 1 facility—Operations manual format requirements. Operations manuals must:

(1) Have a detailed table of contents based on chapter, section, and appendix numbers and titles, as well as tables and figures. Where applicable, topics identified in the table of contents may be cross referenced with other submissions required by chapter 90.56 RCW including contingency and prevention plans, or 33 CFR 154 provided that a copy of the *Coast Guard Operations Manual* has been submitted to ecology;

(2) Allow replacement of chapter and appendix pages with revisions, without requiring replacement of the entire operations manual; and

(3) Have a log sheet to record amendments to the operations manual. The log sheet must:

(a) Be placed at the front of the operations manual;

(b) Provide for a record of the section amended, the date the old section was replaced with the amended section, and the initials of the individual making the change;

(c) Include a description of the amendment; and

(d) Include a description of the amendment's purpose or filed in the form of an amendment letter immediately following the log sheet.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-415, filed 9/25/06, effective 10/26/06.]

WAC 173-180-420 Class 1 facility—Operations manual content requirements. (1) The operations manual must describe equipment and procedures involving the transfer, storage, and handling of oil that the operator employs or will employ to achieve best achievable protection for public health and the environment, and to prevent oil spills.

(2) The operations manual submitted to ecology must contain a submittal agreement which:

(a) Includes the name, address, and phone number of the submitting party;

(b) Verifies acceptance of the operations manual by the owner or operator of the Class 1 facility by either signature of the owner or operator or signature by a person with the authority to bind the corporation which owns such facility;

(c) Commits execution of the operations manual by the owner or operator of the Class 1 facility, and verifies authority for the operations manual holder to make appropriate expenditures in order to execute operations manual provisions; and

(d) Includes the name, location, and address of the facility, type of facility, and starting date of operations of the facility covered by the operations manual.

(3) Operations manuals must address at a minimum the following topics for oil transfer operations to or from Class 1 facilities:

(a) General facility information including:

(i) The geographic location of the facility shown on a topographic map;

(ii) A physical description of the facility including a plan of the facility showing mooring areas, transfer locations, control stations, oil flow patterns, and locations of safety equipment;

(iii) A statement identifying facility operation hours;

(iv) A brief summary of applicable federal, state, and local oil pollution laws and regulations;

(v) Recordkeeping procedures and sample forms which are associated with the requirements in this chapter;

(vi) Overfill prevention procedures must be described for transfers to storage tanks and tank vessels in accordance with the National Fire Protection Association (NFPA), Flammable and Combustible Code, No. 30-1993, Chapter 2, Section 2-10;

(vii) Example maintenance schedules incorporating manufacturers' recommendations or an industrial standard approved by ecology, preventative maintenance, replacement criteria for transfer pipelines, pumps and valves;

(viii) A description of all oil types transferred to or from the facility including:

(A) Generic and chemical name;

(B) A description of the appearance of the oil;

(C) The hazards involved in handling the oil; and

(D) Instructions for safe handling of oil;

(ix) The procedures to be followed if the oil spills or leaks, or if a person is exposed to the oil;

(x) A list of fire fighting procedures and extinguishing agents effective with fires involving the oil;

(xi) Instructions in the use of each communication system;

(xii) Detailed procedures for:

(A) Operating each hose system and loading arm including the limitations of each loading arm;

(B) Transferring oil, including startup, topping off, and shutdown;

(C) Completion of pumping; and

(D) Quantity, type, location, and instructions for use of all transfer monitoring devices;

(xiii) A discussion of the leak detection system and/or procedures implemented by the facility;

(xiv) The location and facilities of each personnel shelter, if any; and

(xv) Maximum relief valve settings (or maximum system pressures when relief valves are not provided) for each transfer system.

(b) Facility procedures for oil transfers to or from nonrecreational vessels including, at a minimum:

(i) Discussion of the sizes, types, and number of vessels that the facility can transfer oil to or from, including simultaneous transfers;

(ii) Discussion of equipment and procedures required for all vessels which transfer oil to or from the facility;

(iii) Procedures for verifying that vessels meet facility requirements and operations manual procedures;

(iv) Discussion of the minimum number of persons or equipment required to perform transfer operations and their duties, including transfer watchmen;

(v) A description and instructions for the use of drip and discharge collection and vessel slop reception facilities, if any;

(vi) If applicable, procedures for shielding portable lighting;

(vii) Description of the facility's requirements or actions taken regarding unexpected weather and sea conditions and the threshold values developed by the facility which may impact oil transfers to or from vessels. The supporting data for oil transfer weather and sea restrictions must be made available to ecology if requested and include at a minimum:

(A) Instrumentation or methodology for accurately measuring and recording this information in the facility's dock operations log book;

(B) Measuring current velocity, weather, and sea conditions before and during the oil transfer operation;

(C) Monitoring forecasted weather and sea;

(D) Procedures for communicating weather and sea conditions to the PICs at regular intervals;

(E) Threshold values for weather and sea conditions above which transfer operations must cease; and

(F) Procedures for communicating with the vessel and shutting down the oil transfer should weather or seas exceed threshold values.

(c) Safe and effective threshold determination. The threshold values which personnel will use to determine when a facility will not preboom under Part B of this chapter, must be in the operations manual and easily found by the PIC. The analysis, data, and supporting documents are not required to be in the operations manual but must be submitted separately in a report to ecology. See WAC 173-180-224.

(d) Facility emergency procedures, at a minimum:

(i) Procedures for reporting spills to the appropriate agencies and initial response actions taken in the event of an oil discharge;

(ii) The names and telephone numbers of facility, federal, state, local and other personnel who may be called by the employees of the facility in case of an emergency;

(iii) Emergency plans and procedures including a description of and the location of each emergency shutdown system;

(iv) Quantity, type, location, instructions for use, and time limits for gaining access to containment equipment; and

(v) Quantity, type, location, and instructions for use of fire extinguishing equipment.

(e) For facilities that transfer to or from transmission pipelines the operations manual must address, at a minimum, the following topics:

(i) The geographic location of the facility shown on a topographic map;

(ii) A physical description of the facility including a plan of the facility showing transfer locations, control stations, oil flow patterns, and locations of safety equipment;

(iii) A statement identifying facility operation hours;

(iv) A description of all oil types transferred to or from the facility including:

(A) Generic and chemical name;

(B) The name of the oil;

(C) A description of the appearance of the oil;

(D) A description of the odor of the oil;

(E) The hazards involved in handling the oil; and

(F) Instructions for safe handling of oil;

(v) The procedures to be followed if the oil spills or leaks, or if a person is exposed to the oil;

(vi) A list of fire fighting procedures and extinguishing agents effective with fires involving the oil;

(vii) A discussion of the minimum number of persons required to perform transfer operations and their duties;

(viii) The names and telephone numbers of facility, federal, state, local and other personnel who may be called by the employees of the facility in case of an emergency;

(ix) The duties of the facility operator;

(x) A description of each communication system;

(xi) The location and facilities of each personnel shelter, if any;

(xii) Emergency plans and procedures including a description of and the location of each emergency shutdown system;

(xiii) Quantity, types, locations, and instructions for use of monitoring devices;

(xiv) Quantity, type, location, instructions for use, and time limits for gaining access to containment equipment;

(xv) Quantity, type, location, and instructions for use of fire extinguishing equipment;

(xvi) Maximum relief valve settings (or maximum system pressures when relief valves are not provided) for each transfer system;

(xvii) Detailed procedures for reporting and initial containment of oil discharges;

(xviii) A brief summary of applicable federal, state, and local oil pollution laws and regulations;

(xix) A description of the training and qualification program for persons in charge;

(xx) A discussion of facility operation procedures for conducting oil transfers including transfer startups and shutdowns;

(xxi) Recordkeeping procedures and sample forms to be used;

(xxii) Example maintenance schedules incorporating manufacturers' recommendations or an industrial standard approved by ecology, preventative maintenance replacement criteria for transfer pipelines, pumps and valves; and

(xxiii) A section in accordance with the National Fire Protection Association (NFPA), Flammable and Combustible Code, No. 30-1993, Chapter 2, Section 2-10 which requires that written procedures be developed to describe overfill prevention procedures. Overfill prevention procedures must be described for transfers to storage tanks and tank vessels.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-420, filed 9/25/06, effective 10/26/06.]

WAC 173-180-425 Class 1 facility—Operations manual submittal. (1) The owner or operator of an existing facility must submit the operations manual to ecology within one hundred twenty calendar days from the effective date of this chapter.

(a) Existing Class 1 facilities that have an ecology approved operations manual, on the date this chapter becomes effective, may submit only the new changes to the operations manual instead of resubmitting the entire operations manual.

(b) For Class 1 facilities that begin operations after the effective date of this chapter, the owner or operator must submit an operations manual to ecology at least one hundred twenty calendar days prior to conducting an oil transfer operation.

(2) One paper and one electronic copy of the operations manual and appendices must be delivered to:

The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Operations Manual
P.O. Box 47600
Olympia, WA 98504-7600
Or
The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Operations Manual
300 Desmond Drive
Lacey, WA 98503

(3) The operations manual submitter may request that proprietary information be kept confidential under RCW 43.21A.160.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-425, filed 9/25/06, effective 10/26/06.]

WAC 173-180-430 Class 1 facility—Operations manual review and approval. (1) Upon receipt of an operations manual, ecology will determine whether the operations manual is complete. If ecology determines that an operations manual is incomplete, ecology must notify the facility of the deficiencies.

(2) When reviewing operations manuals ecology must consider the following:

(a) The ability of the operations manual to provide best achievable protection from damages caused by the discharge of oil into waters of the state;

(b) The volume and type of oil(s) addressed by the facility operations manual;

(c) The history and circumstances of prior spills by similar types of facilities, including spills reported to the state and federal government in Washington state;

(d) Inspection reports;

(e) The presence of operating hazards;

(f) The sensitivity and value of natural resources within the geographic area covered by the operations manual; and

(g) Any pertinent local, state, federal agency, public comments received on the operations manual.

(3) Ecology must endeavor to notify the facility owner or operator within five working days after completing the review whether ecology approves the operations manual.

(4) If the operations manual receives approval, ecology must send the Class 1 facility owner or operator an approval letter describing the terms of approval, including an expiration date.

(5) Conditional approval:

(a) Ecology may approve an operations manual conditionally by requiring a facility owner or operator to operate with specific precautionary measures until acceptable components of the operations manual are resubmitted and approved by ecology.

(b) Precautionary measures may include, but are not limited to:

(i) Reducing oil transfer rates;

(ii) Increasing personnel levels;

(iii) Restricting operations to daylight hours; or

(iv) Additional requirements to ensure availability to response equipment.

(6) After receiving notification of conditional status from ecology, a Class 1 facility must submit and implement required changes to ecology within thirty calendar days. Ecology may issue an extension at ecology's discretion. Operations manual holders who fail to meet conditional requirements or provide required changes in the time allowed must lose conditional approval status.

(7) If the operations manual approval is denied, ecology must send an explanation of the factors for disapproval and a list of deficiencies to the Class 1 facility owner or operator.

(a) The owner or operator of the facility must resubmit the operations manual within ninety calendar days of notification of reasons for noncompliance, responding to the reasons and incorporating any suggested modifications.

(b) The facility must not continue oil storage, transfer, production, or other operations until ecology approves an operations manual for that facility.

(8) Approval of a manual by ecology does not constitute an express assurance regarding the adequacy of the operations manual nor constitute a defense to liability imposed under state law.

(9) A facility may conduct operations if the facility properly submitted an operations manual to ecology and ecology has not provided the facility with a formal response.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-430, filed 9/25/06, effective 10/26/06.]

WAC 173-180-435 Class 1 facility—Operations manual updates. (1) The owner or operator must notify ecology in writing prior to any significant changes to the operations

manual that could affect implementation of the operations manual.

(2) A significant change includes, but is not limited to:

(a) A change in the owner or operator of the facility;

(b) A change in the types of oil handled at the facility;

(c) A substantial change in the facility's oil-handling capacity;

(d) Noncompliance with the federal Oil Pollution Act of 1990;

(e) A substantial change in oil spill prevention technology installed at the facility, or other substantial changes to facility technology, operations, or personnel procedures based on requirements of amended or new rules adopted by ecology; and

(f) Any other changes that would require modification of the operations manual.

(3) If a significant change will reduce the facility's ability to implement the operations manual, the operations manual holder must also provide a schedule for the return of the operations manual to full implementation capability.

(4) The facility may submit a facsimile to provide written notice for the purposes of this section.

(5) If ecology finds, because of the significant change, the operations manual no longer meets approval criteria, ecology may, at its discretion, place conditions on approval, or revoke approval. Ecology may also require the operations manual holder to amend its operations manual to incorporate the change.

(6) Within thirty calendar days of making a significant change to the operations manual, the facility owner or operator must distribute the amended page(s) of the operations manual to ecology and other operations manual holders.

(7) Ecology may review an operations manual and require changes following any spill, inspection, or drill for which the operations manual holder is responsible.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-435, filed 9/25/06, effective 10/26/06.]

WAC 173-180-440 Class 1 facility—Submitting the operations manual for reapproval. (1) Ecology must review facility manuals every five years.

(2) The Class 1 facility must submit the operations manuals for reapproval unless the operations manual holder submits a letter requesting that ecology review the operations manual already in ecology's possession.

(3) The operations manual holder must submit the operations manual or such letter at least one hundred eighty calendar days in advance of the operations manual expiration date.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-440, filed 9/25/06, effective 10/26/06.]

WAC 173-180-445 Class 2 facility—Operations manual. (1) Each facility must keep the operations manual immediately accessible at the transfer location.

(2) Facilities must ensure that all employees involved in oil transfer operations are familiar with the operations manual provisions through regular and new employee training.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-445, filed 9/25/06, effective 10/26/06.]

WAC 173-180-450 Class 2 facility—Operations manual preparation. (1) Each Class 2 facility must prepare an operations manual that meets the requirements of this chapter.

(2) The Class 2 facility may submit their Coast Guard operations manuals required under 33 CFR 154.300 to satisfy operations manual requirements under this chapter if:

(a) Ecology deems that such federal requirements equal or exceed those of ecology; or

(b) The Class 2 facility modifies or appends the operations manual to satisfy operations manual requirements under this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-450, filed 9/25/06, effective 10/26/06.]

WAC 173-180-455 Class 2 facility—Operations manual format requirements. Operations manuals must:

(1) Have a detailed table of contents based on chapter, section, and appendix numbers and titles, as well as tables and figures;

Where applicable, topics identified in the table of contents may be cross referenced with other submissions required by chapter 90.56 RCW including contingency and prevention plans, or 33 CFR 156 provided that a copy of the *Coast Guard Operations Manual* has been submitted to ecology.

(2) Allow replacement of chapter and appendix pages with revisions, without requiring replacement of the entire operations manual; and

(3) Have a log sheet to record amendments to the operations manual. The log sheet must:

(a) Be placed at the front of the operations manual;

(b) Provide for a record of the section amended, the date that the old section was replaced with the amended section, and the initials of the individual making the change;

(c) Include a description of the amendment; and

(d) Include a description of the amendment's purpose or filed in the form of an amendment letter immediately following the log sheet.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-455, filed 9/25/06, effective 10/26/06.]

WAC 173-180-460 Class 2 facility—Operations manual content requirements. (1) The operations manual must describe equipment and procedures involving the transfer, storage, and handling of oil that the operator employs or will employ to achieve best achievable protection for public health and the environment, and to prevent oil spills.

(2) Operations manuals must address at a minimum the following topics for oil transfer operations from Class 2 facilities:

(a) Each operations manual submitted to ecology must contain a submittal agreement which:

(i) Includes the name, address, and phone number of the submitting party;

(ii) Verifies acceptance of the operations manual by the owner or operator of the Class 2 facility by either signature of the owner or operator or signature by a person with the authority to bind the corporation which owns such facility;

(iii) Commits execution of the operations manual by the owner or operator of the Class 2 facility, and verifies author-

ity for the operations manual holder to make appropriate expenditures in order to execute operations manual provisions; and

(iv) Includes the name and location for the base of operations for the mobile fleet, and the name and location of the maintenance yard for rolling stock, and the starting date of operations.

(b) General information related to the facility including:

(i) A brief summary of applicable federal, state, and local oil or hazardous material pollution laws and regulations;

(ii) A physical description of the fleet of mobile vehicles or rolling stock including capabilities;

(iii) Instructions in the use of each communication system;

(iv) A description and instructions for the use of drip and release containment for all hose connections;

(v) The maximum allowable working pressure (MAWP) of each hose assembly required to be tested by 33 CFR 156.170 of this chapter, including the maximum relief valve setting (or maximum system pressure when relief valves are not provided) for each transfer system, if any;

(vi) Recordkeeping procedures and sample oil transfer forms which are associated with the requirements in this chapter;

(vii) Example maintenance schedules incorporating manufacturers' recommendations or an industrial standard approved by ecology, preventative maintenance, replacement criteria for hose assemblies, pumps and valves; and

(viii) Written procedures to describe vessel overfill prevention procedures in accordance with the National Fire Protection Association (NFPA), Flammable and Combustible Code, No. 30-1993, Chapter 2, Section 2-10.

(c) Facility procedures for oil transfers to or from nonrecreational vessels including:

(i) Detailed procedures for transferring oil which will include, at a minimum:

(A) Number of truck/trailer combinations needed;

(B) Transferring oil, including startup, topping off, and shutdown; and

(C) Shift-change procedures;

(ii) A discussion of equipment and procedures required for all vessels which receive oil from the Class 2 facility and procedures for verifying that vessels meet Class 2 facility requirements and operations manual procedures;

(iii) A discussion regarding the time/condition constraints for deliveries;

(iv) Providing a copy of the MSDS for each type of oil transferred. The MSDS must be in the driver's possession or available at the transfer;

(v) A discussion of the minimum number of persons or equipment required to perform transfer operations and their duties;

(vi) Quantity, types, locations, and instructions for use of monitoring devices;

(vii) If applicable, procedures for shielding portable lighting;

(viii) Procedures for detecting leaks during oil transfer operations; and

(ix) Discussion of the facility's requirements regarding weather and sea conditions at the facility which may impact oil transfers to or from vessels including, at a minimum:

(A) Monitoring current weather and sea conditions;

(B) Monitoring forecasted weather and sea;

(C) Procedures for communicating weather and sea conditions to the PICs at regular intervals;

(D) Threshold values for weather and sea conditions above which transfer operations must cease; and

(E) Procedures for shutting down the oil transfer should weather or seas exceed threshold values.

(d) Class 2 facility emergency information, must include at a minimum:

(i) Procedures for reporting and initial containment of oil discharges;

(ii) The name and telephone number of the driver's supervisor or dispatcher and telephone number of the Coast Guard, state, local, and other personnel who may be called by the employees of the Class 2 facility in an emergency;

(iii) Emergency plans and procedures including a description of and location of each emergency shutdown system;

(iv) Quantity, type, location, and instructions for use of fire extinguishing equipment;

(v) Means of protecting nearby surface water from impact of discharge of oil, i.e., permanent or temporary drainage structures or devices to protect water at delivery site.

(e) If a Class 2 facility conducts Rate A transfers, then the operations manual must include the safe and effective threshold values as identified in the safe and effective threshold determination report. These values must be for each location where a Rate A transfer occurs. See WAC 173-180-224 for requirements for this report.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-460, filed 9/25/06, effective 10/26/06.]

WAC 173-180-465 Class 2 facility—Operations manual submittal. (1) All existing Class 2 facilities must submit an operations manual to ecology within one hundred twenty calendar days after the effective date of this chapter.

(2) All Class 2 facilities that begin oil transfer operations after the effective date of this chapter must submit an operations manual to ecology at least ninety calendar days prior to the beginning of oil transfer operations.

(3) One paper and one electronic copy of the operations manual and appendices must be delivered to:

The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Operations Manual
P.O. Box 47600
Olympia, WA 98504-7600
Or
The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Operations Manual
300 Desmond Drive
Lacey, WA 98503

(4) The operations manual submitter may request that proprietary information be kept confidential under RCW 43.21A.160.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-465, filed 9/25/06, effective 10/26/06.]

WAC 173-180-470 Class 2 facility—Operations manual review and approval. (1) Upon receipt of an operations manual, ecology will determine whether the operations manual is complete. If ecology determines that an operations manual is incomplete, ecology must notify the Class 2 facility of the deficiencies.

(2) When reviewing operations manuals for approval ecology must consider the following criteria:

(a) The ability of the operations manual to provide best achievable protection from damages caused by the discharge of oil into waters of the state;

(b) The volume and type of oil(s);

(c) The history and circumstances of prior spills by similar types of facilities, including spills reported to the state and federal government in Washington state;

(d) Inspection reports;

(e) The presence of operating hazards; and

(f) The sensitivity and value of natural resources within the geographic area covered by the operations manual.

(3) Ecology must endeavor to notify the facility owner or operator within five working days after completing the review whether or not ecology approves the operations manual.

(4) If the operations manual receives approval, ecology must send the Class 2 facility owner or operator an approval letter describing the terms of approval, including an expiration date.

(5) Conditional approval:

(a) Ecology may approve an operations manual conditionally by requiring a facility owner or operator to operate with specific precautionary measures until acceptable components of the operations manual are resubmitted and approved.

(b) Precautionary measures may include, but are not limited to:

(i) Reducing oil transfer rates;

(ii) Increasing personnel levels;

(iii) Restricting oil transfer operations to daylight hours; or

(iv) Additional requirements to ensure availability to response equipment.

(6) After receiving notification of conditional status from ecology, a Class 2 facility must submit and implement required changes to ecology within thirty calendar days. Ecology may issue an extension at ecology's discretion. Operations manual holders who fail to meet conditional requirements or provide required changes in the time allowed must lose conditional approval status.

(7) If operations manual approval is denied, ecology must send the facility owner or operator an explanation of the factors for disapproval and a list of deficiencies.

(a) The owner or operator of the facility must resubmit the operations manual within ninety calendar days of notification of reasons for noncompliance, responding to the reasons and incorporating any suggested modifications.

(b) The facility must not continue oil transfer or other operations until an operations manual for that facility has been approved.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-470, filed 9/25/06, effective 10/26/06.]

WAC 173-180-475 Class 2 facility—Operations manual updates. (1) The owner or operator must notify ecology in writing prior to any significant changes to the operations manual that could affect implementation of the operations manual.

(2) A significant change includes, but is not limited to:

(a) A change in the owner or operator of the facility;

(b) A change in the types of oil handled at the facility;

(c) A substantial change in the facility's oil-handling capacity;

(d) Noncompliance with the federal Oil Pollution Act of 1990;

(e) A substantial change in equipment in use by the facility, or other substantial changes to facility technology, operations, or personnel procedures based on requirements of amended or new rules adopted by ecology; and

(f) Any other changes that would require that the operations manual be modified.

(3) If the significant change will reduce the facility's ability to implement the operations manual, the operations manual holder must also provide a schedule for the return of the operations manual to full implementation capability.

(4) The facility may submit a facsimile to provide written notice for the purposes of this section.

(5) If ecology finds, as a result of the significant change, the operations manual no longer meets approval criteria, ecology may, at its discretion, place conditions on approval, or revoke approval. Ecology may also require the operations manual holder to amend its operations manual to incorporate the change.

(6) Within thirty calendar days of making a change to the operations manual, the facility owner or operator must distribute the amended page(s) of the operations manual to ecology and other operations manual holders.

(7) Ecology must review operations manuals every five years.

(a) Operations manuals must be submitted for reapproval unless the operations manual holder submits a letter requesting that ecology review the operations manual already in ecology's possession.

(b) The operations manual holder must submit the operations manual or such letter at least one hundred eighty calendar days in advance of the operations manual expiration date.

(8) Ecology may review an operations manual and require changes following any spill, inspection, or drill for which the operations manual holder is responsible.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-475, filed 9/25/06, effective 10/26/06.]

PART E: TRAINING AND CERTIFICATION FOR CLASS 1 AND CLASS 2 FACILITIES

WAC 173-180-500 Applicability of Part E. (1) Part E applies to Class 1 and 2 facilities. All Class 1 and Class 2 facilities must have training and certification programs that are developed, approved, and implemented, pursuant to requirements in this chapter.

Class 1 and 2 facilities training and certification program will be valid for no more than five years from the date on the approval letter. Ecology will review Class 1 and 2 facilities

training and certification program to ensure compliance with this chapter.

(2) Class 3 facilities must meet the training requirements in 33 CFR 154.

(3) Class 4 facilities must meet the training requirements in WAC 173-180-210(2).

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-500, filed 9/25/06, effective 10/26/06.]

WAC 173-180-510 Class 1 facility—Training requirements. (1) Each Class 1 facility must develop and implement oil transfer training for key supervisory, operations, maintenance, management, and indirect operations personnel identified pursuant to subsection (3) of this section.

(a) The Class 1 facility must design a training program, to the maximum extent practicable, to promote job competency and environmental awareness for the purpose of preventing oil spills.

(b) Non-English speaking personnel subject to the facility's training requirements must be trained in a manner that allows comprehension by such personnel.

(2) Oil transfer training programs must be approved by ecology under WAC 173-180-525.

(3) The Class 1 facility must identify, in writing, the specific position titles which the facility has identified to be subject to its oil transfer training requirements. In making this determination, the facility must evaluate the functions of facility personnel positions using the following definitions:

(a) "Key" means a position with direct responsibility for performing or overseeing the transfer, storage, handling, or monitoring of oil at a facility, or a job function where typical human factors present the probability of a spill occurring.

(b) "Operations" means direct involvement in the transfer, storage, handling, or monitoring of oil at a facility in a capacity that involves the risk of an oil spill to waters of the state. This functional group includes but is not limited to the person-in-charge, storage tank operators, pipeline operators, and oil transfer monitors.

(c) "Supervisory" means involvement in directly supervising the transfer, storage, handling, or monitoring of oil at a facility by implementing operations policies and procedures that involve the risk of an oil spill to waters of the state.

(d) "Maintenance" means direct involvement in maintaining and repairing the equipment used for the transfer, storage, handling, or monitoring of oil at a facility in a capacity that involves the risk of an oil spill to waters of the state.

(e) "Indirect operations" means involvement in on-site activities, such as new construction, in a capacity that indirectly involves the risk of an oil spill to waters of the state due to potential impacts to nearby oil-handling operations (e.g., operating digging equipment next to an active transfer pipeline). For cases where certain job titles associated with indirect operations can not be identified in advance, the facility must identify the types of job orders or work sites which may involve the need for indirect operations oil transfer training.

(4) The facility must identify, in writing, the specific initial classroom and/or on-the-job oil transfer training requirements for each position, including minimum hours that are appropriate for each position given the facility's training needs and human factor risks.

For the purposes of this section, "human factors" means human conditions, such as inadequate knowledge or fatigue, which can lead to incompetency or poor judgment, and "human factor risks" means risks of causing an oil spill due to the effects of human factors on competency and judgment.

(5) Operations and supervisory personnel training: Requirements for training of operations and supervisory personnel must focus on building personnel competency in operating procedures and spill prevention systems specific to the facility. Oil transfer training requirements must incorporate the following training topics at a minimum:

(a) Overview of all oil handling, transfer, storage, and monitoring/leak detection operations at the facility;

(b) Operating procedures and checklists specific to trainee's job function;

(c) Problem assessment, including recognition of human factor risks and how they can be minimized;

(d) Awareness of preventative maintenance procedures;

(e) Awareness of local environmental sensitivity and oil spill impacts;

(f) Major components of facility's oil spill prevention plan;

(g) Major components of facility's operations manual;

(h) Major components of facility's oil spill contingency plan;

(i) Safe use and handling of response equipment including, but not limited to, containment, personal protection, and recovery equipment;

(j) Decision making for abnormal operating events and emergencies, including emergency spill prevention and safe shutdown conditions, responsibilities, and procedures;

(k) Routine and emergency communications procedures;

(l) Overview of applicable oil spill prevention and response laws and regulations; and

(m) Drug and alcohol use awareness, pursuant to WAC 173-180-630.

(6) Management personnel training: Requirements for initial oil transfer training of management personnel must incorporate the following training topics at a minimum:

(a) Overview of all oil handling, transfer, storage, and monitoring/leak detection operations at the facility;

(b) Management role in operations and oil spill prevention;

(c) Recognition of human factor risks and how they can be minimized;

(d) Awareness of local environmental sensitivity and oil spill impacts;

(e) Major components of facility's oil spill prevention plan;

(f) Major components of facility's operations manual;

(g) Major components of facility's oil spill contingency plan;

(h) Decision making for abnormal operating events and emergencies, including emergency spill prevention and safe shutdown conditions, responsibilities, and procedures;

(i) Overview of applicable oil spill prevention and response laws and regulations; and

(j) Drug and alcohol use awareness, pursuant to WAC 173-180-630.

(7) Maintenance personnel training: Requirements for initial oil transfer training of maintenance personnel must incorporate the following training topics at a minimum:

(a) Overview of all oil handling, transfer, storage, and monitoring/leak detection operations at applicable maintenance work sites within the facility;

(b) Equipment problem assessment and preventative maintenance procedures;

(c) Awareness of local environmental sensitivity and oil spill impacts;

(d) Major components of facility's oil spill prevention plan;

(e) Major components of facility's operations manual;

(f) Major components of facility's oil spill contingency plan;

(g) Emergency spill prevention and safe shutdown conditions, responsibilities, and procedures;

(h) Overview of applicable oil spill prevention and response laws and regulations; and

(i) Drug and alcohol use awareness, pursuant to WAC 173-180-630.

(8) Indirect operations personnel training: Requirements for initial oil transfer training of indirect operations personnel must incorporate the following training topics at a minimum:

(a) Overview of oil handling, transfer, storage, and monitoring/leak detection operations at specific indirect operations work site within the facility;

(b) Awareness of local environmental sensitivity and oil spill impacts;

(c) Notification procedures for emergency spill prevention actions; and

(d) For facility employees, drug and alcohol use awareness, pursuant to WAC 173-180-630.

(9) Training topics identified in subsections (5) through (8) of this section, do not prescribe fixed subject titles for class outlines or training organization. Facilities may combine or integrate these topics as appropriate, but must ensure that information on each topic is presented in the applicable personnel training program.

(10) The facility must identify, in writing, the specific oil spill prevention continuing education requirements for each affected position, including minimum hours, which are appropriate given the facility's training needs and human factor risks. Ongoing training must occur at least annually, and at a minimum address:

(a) Any changes in the core topics identified in subsections (5) through (8) of this section, unless affected personnel have already been informed about the change after its occurrence;

(b) Refresher awareness training on environmental sensitivity and oil spill impacts;

(c) Review and analysis of oil spills which have occurred during the past year;

(d) Refresher training on emergency spill prevention procedures; and

(e) For key supervisory, operations, and management personnel, a practice exercise of the facility's procedures for preventing a spill during a particular abnormal operations event.

(11) Facilities are encouraged to apply or modify existing training programs required under federal Process Safety Management requirements (29 CFR 1910), Coast Guard person-in-charge requirements (33 CFR 154.710), and other federal/state training requirements in order to meet the above oil transfer training requirements.

(12) Existing personnel that have entered their current position prior to adoption of this chapter can be regarded as having met the facility's initial oil transfer training requirements if:

(a) The facility has documented that those personnel have received the required training in the past; or

(b) The facility attests in writing and in detail, how those personnel have had on-the-job training or other experience equivalent to the facility's initial training requirements including type and frequency of past training when known.

(13) Facilities must develop follow up remedial training for personnel clearly responsible for causing an oil spill while functioning in their position, unless such personnel no longer occupy a position identified under subsection (3) of this section.

(14) Contractors hired by the facility to perform key supervisory, operations, maintenance, management, or indirect operations functions, as identified by the facility under subsection (3) of this section, are considered "personnel" for the purposes of this chapter, and must be subject to the same oil transfer training requirements as facility employees. The facility is responsible to validate that such contractors have met the facility's oil transfer training requirements before they perform a key supervisory, operations, maintenance, management, or indirect operations function.

(15) Facilities must develop minimum training and/or experience qualifications for trainers who will demonstrate facility-specific procedures, equipment use, supervise practice sessions, and provide other on-the-job training to new operations personnel.

(16) Facilities must develop and maintain written oil transfer training materials, such as training manuals or checklists.

(17) Oil transfer training must be documented, and records must be kept at the facility in a central and accessible location for at least five years from the date of training completion.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-510, filed 9/25/06, effective 10/26/06.]

WAC 173-180-515 Class 1 facility—Certification program. (1) Each Class 1 facility must develop and implement a program to certify that key supervisory and operations personnel identified pursuant to WAC 173-180-510 have met the facility's oil transfer training program requirements, and are competent to perform the operations or supervisory functions associated with their position. The facility is not required to certify personnel other than key supervisory and operations personnel. The certification program must be designed, to the maximum extent practicable, to ensure job competency and environmental awareness for the purpose of preventing oil spills.

(2) Certification programs must meet minimum criteria pursuant to WAC 173-180-520.

(3) Certification programs must be approved by ecology pursuant to WAC 173-180-525.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-515, filed 9/25/06, effective 10/26/06.]

WAC 173-180-520 Class 1 facility—Minimum criteria for certification programs. (1) The Class 1 facility oil spill prevention certification program must address all key supervisory and operations personnel identified pursuant to WAC 173-180-510.

(2) The Class 1 facility must develop and maintain written certification procedures, including:

(a) Minimum competency requirements to achieve certification;

(b) The process to develop and test competency in key supervisory and operations personnel;

(c) The process to issue and track certificates; and

(d) Policies regarding loss or lack of certified status.

(3) The Class 1 facility must maintain a written certificate or other record for supervisory and operations personnel which have met the facility's certification requirements. This record must document:

(a) The certified individual's name and position;

(b) Types and hours of training completed;

(c) Name of trainer;

(d) Results of performance tests and evaluations; and

(e) Signatures of the trainee and trainer.

(4) The Class 1 facility must keep copies of certification records at the facility in a central and accessible location for at least five years from the date of certification.

(5) The Class 1 facility certification program must incorporate methods to evaluate and confirm job competency, including:

(a) A written examination, or oral examination documented in writing, which tests general knowledge about training topics identified under WAC 173-180-510, with an appropriate passing score established by the facility;

(b) A practical evaluation of understanding and performance of routine and emergency operations specific to a position's job function, including:

(i) Observation of performance of each oil handling, transfer, storage, and monitoring duty assigned to a position prior to unsupervised performance of that duty; and

(ii) Practice exercises involving procedures to prevent a spill during abnormal operations events.

(6) The Class 1 facility's program must only provide for certification of an individual who has:

(a) Met the facility's oil spill prevention initial training requirements tied to the individual's position, as developed pursuant to WAC 173-180-510; and

(b) Passed a competency evaluation developed under subsection (5) of this section.

(7) Recertification of personnel must occur at least once every three years, based on:

(a) Successful completion of continuing education requirements; and

(b) Satisfactory performance in a reevaluation of competency as developed under subsection (5) of this section.

(8) All certified personnel must carry a proof of certification during oil transfer operations.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-520, filed 9/25/06, effective 10/26/06.]

WAC 173-180-525 Class 1 facility—Training and certification program approval. (1) Existing Class 1 facilities:

(a) Must modify their training and certification program to meet requirements in this chapter and must implement the program within ninety calendar days from the approved date of the operations manual.

(b) Must train and certify all personnel under the facility's modified training and certification program within ninety calendar days of the approved date of the operations manual.

(2) Class 1 facilities that begin operations after the effective date of this chapter:

(a) Must develop or modify their training and certification program to meet the requirements of this chapter and must implement the program within one hundred twenty calendar days prior to oil transfer operations.

(b) Must train and certify all personnel under the facility's training and certification program before any oil transfer operation occurs at the facility.

(3) All new facility employees with oil transfer duties must be trained and certified within ninety calendar days from the date of hire.

(4) Ecology must review the Class 1 facility's training and certification program after the date that facilities must meet rule criteria pursuant to subsection (1) or (2) of this section. This review must be accomplished by a general on-site inspection by ecology through evaluation of the Class 1 facility's training materials, testing records and certification records, and consultation with personnel.

(5) Ecology will notify Class 1 facilities regarding approval status within thirty calendar days from completing inspections performed under subsection (4) of this section.

(6) Class 1 facilities that do not receive approval will have ninety calendar days to address deficiencies in their training and certification program, with options for a time extension based on ecology's discretion. For those personnel that were trained or certified after the deadlines established in subsection (1) of this section but prior to program approval, retraining or recertification of such personnel due to changes required by ecology's approval process can be postponed until the next retraining or recertification cycle as established by the facility pursuant to this chapter.

(7) Training and certification program approval is valid for five years. Significant changes to the Class 1 facility's program must be documented through an update of the facility's prevention plan pursuant to chapter 173-180 WAC Part F requirements. Minor upgrades in training and certification programs, such as expansion of training hours or updates to testing materials, are not required to be submitted to ecology through a prevention plan update.

(8) Ecology may perform announced and unannounced inspections at facilities to verify compliance.

(9) A training and certification program must be approved if, in addition to meeting criteria in this section and WAC 173-180-520, the Class 1 facility demonstrates that when implemented, the facility can, to the maximum extent practicable:

(a) Provide protection from human factor oil spill risks identified in the risk analysis required by WAC 173-180-630;

(b) Minimize the likelihood that facility oil spills will occur and minimize the size and impacts of those facility oil spills which do occur;

(c) Provide effective oil transfer training to key supervisory, operations, maintenance, management, and indirect operations personnel;

(d) Ensure proper evaluation of job competency; and

(e) Provide an effective system to clearly document and track personnel training and certification.

(10) When reviewing programs, ecology must, in addition to the above criteria, consider the following at a minimum:

(a) The volume and type of oil(s) handled by the facility, and frequency of oil-handling operations;

(b) Number of facility personnel;

(c) The history and circumstances of prior spills by similar types of facilities, including spill reports by ecology on-scene coordinators;

(d) Inspection reports;

(e) The presence of hazards unique to the facility, such as seismic activity or production processes; and

(f) The sensitivity and value of natural resources that could be affected by a spill from the facility.

(11) Ecology may approve a program with an expedited review as set out in this section if that program has been approved by a federal agency or other state which ecology has deemed to apply approval criteria which equal or exceed those of ecology.

(12) If the program receives approval, the facility owner or operator must receive a certificate of approval describing the terms of approval, including expiration dates pursuant to subsection (6) of this section.

(a) Ecology may conditionally approve a program by requiring a facility owner or operator to operate with specific precautionary measures until unacceptable components of the program are resubmitted and approved.

(b) Precautionary measures may include, but are not limited to:

(i) Reducing oil transfer rates;

(ii) Increasing personnel levels;

(iii) Restricting operations to daylight hours or favorable weather conditions; or

(iv) Additional requirements to ensure availability of response equipment.

(c) A facility must have thirty calendar days after ecology gives notification of conditional status to make the required changes, with the option for an extension at ecology's discretion. Facilities which fail to meet conditional requirements or make required changes in the time allowed must lose conditional approval status.

(i) If approval is denied or revoked, the facility owner or operator must receive an explanation of the factors for disapproval and a list of deficiencies. The facility may be subject to penalties identified in chapter 90.56 RCW.

(ii) Ecology's decisions under this chapter are reviewable in superior court.

(iii) Approval of a training and certification program by ecology does not constitute an express assurance regarding the adequacy of the program nor constitute a defense to liability imposed under state law.

(13) Ecology may review a program following any spill, inspection, or drill at the facility.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-525, filed 9/25/06, effective 10/26/06.]

WAC 173-180-530 Class 2 facility—Oil transfer training requirements. (1) Each Class 2 facility must develop and implement oil transfer training for key supervisory and operations personnel identified pursuant to subsection (6) of this section.

(2) Class 2 facilities must design training, to the maximum extent practicable, to provide job competency for oil transfer operations.

(3) Class 2 facilities must train non-English speaking personnel subject to the facility's training requirements in a manner that allows comprehension by such personnel.

(4) Ecology must approve oil transfer training programs for Class 2 facilities pursuant to WAC 173-180-545.

(5) Class 2 facilities must develop and maintain written training materials, such as training manuals or checklists.

(6) The Class 2 facility must identify, in writing, the specific position titles at the facility which are subject to the facility's oil transfer training requirements. In making this determination, the facility must evaluate the functions of facility personnel positions using the following definitions:

(a) "Key" means a position with direct responsibility for performing or overseeing the transfer, storage, handling, or monitoring of oil at a facility, or a job function where typical human factors present the probability of a spill occurring.

(b) "Operations" means direct involvement in the transfer, storage, handling, or monitoring of oil at a facility in a capacity that involves the risk of an oil spill to waters of the state. This functional group includes but is not limited to the person-in-charge, truck drivers and operators, and oil transfer monitors.

(c) "Supervisory" means involvement in directly supervising personnel engaged in the transfer, storage, handling, or monitoring of oil at a facility by implementing operations policies and procedures that involve the risk of an oil spill to waters of the state.

(7) The Class 2 facility must identify, in writing, the specific initial classroom and/or on-the-job oil transfer training requirements for each position, including minimum hours, which are appropriate for each position given the facility's training needs and human factor risks as defined in WAC 173-180-510(4).

(8) Key supervisory and operations personnel training: Training of key supervisory and operations personnel must focus on building personnel competency in operating procedures specific to the facility. Training requirements must at a minimum incorporate the following training topics:

(a) Overview of all oil handling, transfer, and monitoring operations at the facility;

(b) Operating procedures and checklists specific to trainee's job function;

(c) Preventative maintenance procedures;

(d) Awareness of oil spill impacts;

(e) Major components of facility's operations manual;

(f) Major components of the facility's response plan;

(g) Safe use and handling of response equipment including, but not limited to, containment, personal protection, and recovery equipment;

(h) Decision making for abnormal operating events and emergencies, including emergency spill prevention and safe shutdown conditions, responsibilities, and procedures;

(i) Routine and emergency communications procedures;

(j) Overview of applicable oil spill response laws and regulations; and

(k) Drug and alcohol use awareness.

(9) Training topics identified in this section, do not prescribe fixed subject titles for class outlines or training organization. Class 2 facilities may combine or integrate these topics as appropriate, but must ensure that information on each topic is presented in the oil transfer training program.

(10) Key supervisory and operations personnel must also attend a certified twenty-four-hour HAZWOPER training session.

(11) Continuing education training: The Class 2 facility must have continuing education requirements for key supervisory and operations personnel. Ongoing training must occur at least annually, and at a minimum address:

(a) Review and analyze oil spills for causal factors which have occurred during the past year including lessons learned;

(b) Refresher eight-hour HAZWOPER training session;

(c) Refresher training on emergency spill prevention procedures; and

(d) Refresher training on spill cleanup and recovery operations.

(12) Existing personnel that have entered their current position prior to adoption of this chapter can be regarded as having met the facility's oil transfer training requirements if:

(a) The facility has documented that those personnel have received the required training in the past; or

(b) The facility provides documentation demonstrating how those personnel meet the requirements of this section.

(13) Class 2 facilities must provide follow-up training after any spill to all key supervisory and operations personnel. The training must address the causes of the spill and must be incorporated into the continuing education training program.

(14) Contractors hired by the facility to perform key supervisory and operations functions, as identified by the facility under subsection (6) of this section, are considered "personnel" for the purposes of this chapter, and must be subject to the same oil transfer training requirements as facility employees. The facility is responsible to validate contractors have met the facility's oil transfer training requirements before they perform a key supervisory and operations functions.

(15) Class 2 facilities must develop minimum training and/or experience qualifications for trainers who will demonstrate facility-specific procedures, equipment use, supervise practice sessions, and provide other on-the-job training to new operations personnel.

(16) Facilities must develop and maintain written oil transfer training materials, such as training manuals or checklists.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-530, filed 9/25/06, effective 10/26/06.]

WAC 173-180-535 Class 2 facility—Certification program. (1) Each Class 2 facility must develop and implement a certification program to certify key supervisory and operations personnel identified pursuant to WAC 173-180-530 to ensure they are competent to perform oil transfer duties.

(2) The certification program must be designed, to the maximum extent practicable, to ensure job competency for oil transfer operations.

(3) Certification programs must be approved by ecology pursuant to WAC 173-180-545.

(4) Certification programs must contain the minimum requirements in WAC 173-180-550.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-535, filed 9/25/06, effective 10/26/06.]

WAC 173-180-540 Class 2 facility—Certification of personnel. (1) A Class 2 facility can only certify personnel under this program who:

(a) Are in key supervisory or operations positions at the facility;

(b) Have met the facility's oil transfer training requirements tied to the individual's position, (WAC 173-180-530); and

(c) Have passed a competency evaluation (WAC 173-180-550).

(2) All new facility employees with oil transfer duties must be trained and certified within ninety days from date of hire.

(3) Recertification. Recertification of personnel must occur at least once every three years. To be recertified personnel must:

(a) Successfully complete the facility's continuing education requirements; and

(b) Repass the facility's competency evaluation (WAC 173-180-550).

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-540, filed 9/25/06, effective 10/26/06.]

WAC 173-180-545 Class 2 facility—Program approval. (1) Ecology must approve all training and certification programs.

(2) Class 2 facilities operating on the effective date of this chapter:

(a) Must develop or modify their training and certification program to meet the requirements in this chapter and implement the program within ninety calendar days of the approved date of the operations manual.

(b) Must train and certify all key supervisory and operations personnel under the facility's training and certification program within ninety calendar days from the approved date of the operations manual.

(3) Class 2 facilities that begin conducting oil transfer operations after the effective date of this chapter:

(a) Must develop and implement their training and certification program within ninety calendar days prior to the first oil transfer operation.

(b) Must train and certify all key supervisory and operations personnel within ninety calendar days prior to the first oil transfer operation.

(4) To receive approval ecology will conduct an on-site evaluation of the facility's training materials, testing and certification records, and consult with personnel.

(5) Ecology will notify Class 2 facilities regarding approval status within thirty calendar days from completing the evaluation under subsection (4) of this section.

(6) Class 2 facilities that do not receive approval will have ninety calendar days to address deficiencies in their training and certification program. Ecology may grant an extension at ecology's discretion.

(7) For those personnel trained or certified after the deadlines established in subsections (2) and (3) of this section but before ecology approval, retraining or recertification can be postponed until the next retraining or recertification cycle as established by the facility.

(8) Training and certification program approval is valid for five years.

The facility must document changes to the facility's program and make the documentation available to ecology upon request.

(9) Ecology may perform announced and unannounced inspections at facilities to verify compliance.

(10) When evaluating programs for Class 2 facilities, ecology must consider the following at a minimum:

(a) The requirements in WAC 173-180-530 and 173-180-550;

(b) The volume and type of oil(s) handled by the facility, and frequency of oil-handling operations;

(c) Number of facility personnel;

(d) The history and circumstances of prior spills by similar types of facilities, including spill reports by ecology on-scene coordinators; and

(e) Inspection reports.

(11) If approved, ecology will send a certificate of approval to the Class 2 facility. The certificate will include the terms of approval, including expiration dates pursuant to subsection (6) of this section.

(12) Ecology may conditionally approve a training and certification program by requiring a Class 2 facility owner or operator to operate with specific precautionary measures until unacceptable components of the program are resubmitted and approved.

(13) A Class 2 facility must have thirty calendar days after ecology gives notification of conditional status to make the required changes, with the option for an extension at ecology's discretion. Facilities which fail to meet conditional requirements or make required changes in the time allowed must lose conditional approval status.

(14) If approval is denied or revoked, ecology must send the Class 2 facility owner or operator an explanation of the factors for disapproval and a list of deficiencies. The facility may be subject to penalties identified in chapter 90.56 RCW.

(15) Approval of a training and certification program by ecology does not constitute an express assurance regarding the adequacy of the program nor constitute a defense to liability imposed under state law.

(16) Ecology may review the facility's training and certification program following any spill, inspection, or drill at the Class 2 facility.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-545, filed 9/25/06, effective 10/26/06.]

WAC 173-180-550 Class 2 facility—Minimum requirements for a certification program. The Class 2 facility certification program must have, at a minimum the following contents:

(1) Documentation of a training program developed to meet the requirements in this chapter.

(2) Written certification procedures, including:

(a) Minimum competency requirements to achieve certification;

(b) The process to evaluate and confirm job competency for key supervisory and operations personnel that must incorporate methods to evaluate and confirm job competency, including:

(i) Written examinations, or oral examinations documented in writing, which test general knowledge about training topics identified under WAC 173-180-530, with an appropriate passing score established by the facility;

(ii) A practical evaluation of understanding and performance of routine and emergency operations specific to a position's job function, including:

(A) Observation of performance of each oil-handling, transfer, storage, and monitoring duty assigned to a position prior to unsupervised performance of that duty; and

(B) Practice exercises involving procedures to prevent a spill during abnormal operations events;

(c) The Class 2 facility must maintain written records for key supervisory and operations personnel, which have met the facility's certification requirements. These records must document:

(i) The certified individual's name and position;

(ii) Types and hours of training completed;

(iii) Name of training course and signature of the trainer upon completion of the course;

(iv) Results of performance tests and evaluations; and

(v) Copy of certificate demonstrating the individual is certified;

(d) The process to issue and track certificates confirming certification;

(e) All certified personnel must carry proof of certification during oil transfer operations;

(f) Company policies regarding how the facility will manage key supervisory or operations personnel who lose or lack certification.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-550, filed 9/25/06, effective 10/26/06.]

PART F: PREVENTION PLANS FOR CLASS 1 FACILITIES

WAC 173-180-600 Applicability of Part F. Part F only applies to Class 1 Facilities. Ecology has not adopted prevention plan requirements for Class 2, 3, or 4 facilities.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-600, filed 9/25/06, effective 10/26/06.]

WAC 173-180-610 Plan preparation. (1) Each onshore and offshore facility must prepare a plan for prevention of oil spills from the facility into the waters of the state, and for the protection of fisheries and wildlife, other natural resources, and public or private property from oil spills.

(2) Plans must be thorough and contain enough information, analyses, supporting data, and documentation to demonstrate the plan holder's ability to meet the requirements of this chapter.

(3) Spill prevention countermeasure and control plans, operation manuals, and other prevention documents which meet federal requirements under 33 CFR 154, 33 CFR 156, 40 CFR 109, 40 CFR 112, or the Federal Oil Pollution Act of 1990 may be submitted to satisfy plan requirements under this chapter if ecology deems that such federal requirements equal or exceed those of ecology, or if the plans are modified or appended to satisfy plan requirements under this chapter.

(4) Plans which meet requirements of other states may be submitted to satisfy plan requirements under this chapter if ecology deems that such state requirements equal or exceed those of ecology, or if the plans are modified or appended to satisfy plan requirements under this chapter.

(5) Prevention plans may be combined with contingency plans required by chapter 173-182 WAC.

(6) Plans, when implemented, must be designed to be capable of providing the best achievable protection from damages caused by the discharge of oil into the waters of the state. At a minimum, plans must meet the criteria specified in this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-610, filed 9/25/06, effective 10/26/06.]

WAC 173-180-620 Plan format requirements. (1) Plans must be organized in a format which provides easy access to prevention information. Plans must be divided into a system of chapters and sections. Chapters and sections must be numbered and identified with a system of index tabs.

(2) Plans must be formatted to allow replacement of chapter and appendix pages with revisions, without requiring replacement of the entire plan.

(3) If combined with a contingency plan, the prevention plan must be clearly separated from contingency plan elements.

(4) Prevention plan content requirements specified in WAC 173-180-630 are presented in suggested but not requisite order.

(5) Computerized plans, in addition to a hard copy, may be submitted to ecology.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-620, filed 9/25/06, effective 10/26/06.]

WAC 173-180-630 Plan content requirements. (1) Each plan must contain a submittal agreement which:

(a) Includes the name, address, and phone number of submitting party;

(b) Verifies acceptance of the plan by the owner or operator of the facility by either signature of the owner or operator or signature by a person with authority to bind the corporation which owns or operates the facility;

(c) Commits the owner or operator of the facility to execution of the plan, and verifies that the plan holder is authorized to make appropriate expenditures in order to execute plan provisions; and

(d) Includes the name, location, and address of the facility, type of facility, starting date of operations, types of oil(s) handled, and oil volume capacity.

(2) Each plan must include a log sheet to record amendments to the plan. The log sheet must be placed at the front of the plan. The log sheet must provide for a record of the section amended, the date that the old section was replaced with the amended section, verification that ecology was notified of the amendment pursuant to WAC 173-180-670, and the initials of the individual making the change. A description of the amendment and its purpose must also be included in the log sheet, or filed in the form of an amendment letter immediately after the log sheet.

(3) Each plan must include a detailed table of contents based on chapter, section, and appendix numbers and titles, as well as tables and figures.

(4) Each plan must describe its purpose and scope, including, but not limited to:

(a) The onshore facility or offshore facility operations covered by the plan;

(b) The relationship of the prevention plan to other oil spill plans and operation manuals held by the facility;

(c) The relationship of the plan to all applicable local, state, regional, tribal, and federal government prevention plans, including the Washington statewide master oil and hazardous substance spill contingency plan; and

(d) Information required under facility oil spill contingency plan standards in chapter 173-182 WAC; spill prevention, countermeasure, and control plan standards in 40 CFR 112.4(a); or facility operations manual standards in 33 CFR 154.310 (1-4) may be used to address (a) of this subsection.

(5) Each plan must describe the procedures and time periods for updating the plan and distributing the plan and updates to appropriate parties.

(6) Each plan must establish that the facility is in compliance with the Federal Oil Pollution Act of 1990. Within thirty calendar days after federal deadlines for facility requirements under that act, the plan must be updated to include any applicable evidence of compliance.

(7) Within thirty calendar days after evidence of financial responsibility is required by rules adopted by ecology pursuant to chapter 88.46 RCW, the plan must be updated to include any applicable evidence of compliance.

(8) Each plan must describe the types and frequency of spill prevention training provided to personnel.

(9) Each plan must provide evidence that the facility has an approved oil spill contingency plan or has submitted a contingency plan to ecology in accordance with standards and deadlines established by chapter 173-182 WAC.

(10) Each plan must address the facility's alcohol and drug use awareness and treatment program for all facility personnel.

(a) The plan must include at a minimum:

(i) Documentation of an alcohol and drug awareness program. The awareness program must provide training and information materials to all employees on recognition of alcohol and drug abuse; treatment opportunities, including opportunities under the Alcohol and Drug Addiction Treatment and Support Act pursuant to chapter 388-800 WAC; and applicable company policies;

(ii) A description of the facility's existing drug and alcohol treatment programs; and

(iii) A description of existing provisions for the screening of supervisory and key employees for alcohol and drug abuse and related work impairment.

(b) Evidence of conformance with applicable federal "Drug-Free Workplace" guidelines or other federal or state requirements may be used to address (a) of this subsection.

(11) Each plan must describe the facility's existing maintenance and inspection program.

(a) The description must summarize:

(i) Frequency and type of all regularly scheduled inspection and preventive maintenance procedures for tanks; pipelines; other key storage, transfer, or production equipment, including associated pumps, valves, and flanges; and overpressure safety devices and other spill prevention equipment;

(ii) Integrity testing of storage tanks and pipelines, including but not limited to frequency; pressures used (including ratio of test pressure to maximum operating pressure, and duration of pressurization); means of identifying that a leak has occurred; and measures to reduce spill risk if test material is product;

(iii) External and internal corrosion detection and repair;

(iv) Damage criteria for equipment repair or replacement; and

(v) Any other aspect of the maintenance and inspection program.

(b) The plan must include a current index of maintenance and inspection records of the storage and transfer facilities and related equipment.

(c) Documentation required under 40 CFR 112.7(e) or 33 CFR 154 Subparts C and D may be used to address elements of this subsection.

(d) Existing copies of the facility's maintenance and inspection records for the five-year period prior to plan submittal must be maintained and must be available for inspection if requested by ecology. The plan must document the use of a system to maintain such records over a five-year period for subsequent activity.

(12) Each plan must describe spill prevention technology currently installed and in use, including:

(a) Tank and pipeline materials and design;

(b) Storage tank overflow alarms, low level alarms; tank overflow cut-off switches; automatic transfer shutdown systems; methods to alert operators; system accuracy; and tank fill margin remaining at time of alarm activation in terms of vertical distance, quantity of liquid, and time before overflow would occur at maximum pumping rate; documentation required under 40 CFR 112.7 (e)(2)(viii) or 33 CFR 154.310 (a)(12-13) may be used to address some or all of these elements;

(c) Leak detection systems for both active and nonactive pipeline conditions, including detection thresholds in terms of duration and percentage of pipeline flow; limitations on system performance due to normal pipeline events; and procedures for operator response to leak alarms;

(d) Documentation required under 40 CFR 112.7 (e)(3) may be used to address some or all of these elements;

(e) Rapid pump and valve shutdown procedures, including means of ensuring that surge and over-pressure conditions do not occur; rates of valve closure; sequence and time duration (average and maximum) for entire procedure; automatic and remote control capabilities; and displays of system status for operator use;

(f) Documentation required under 40 CFR 112.7 (e)(3) may be used to address some or all of these elements;

(g) Methods to minimize post-shutdown residual drain-out from pipes, including criteria for locating valves; identification of all valves (including types and means of operation) that may be open during a transfer process; and any other techniques for reducing drain-out;

(h) Means of relieving pressure due to thermal expansion of liquid in pipes during quiescent periods;

(i) Secondary containment, including capacity, permeability, and material design;

(j) Documentation required under 40 CFR 112.7 (e)(1) and (2)(iii-iv) may be used to address some or all of these elements;

(k) Internal and external corrosion control coatings and monitoring;

(l) Storm water and other drainage retention, treatment, and discharge systems, including maximum storage capacities and identification of any applicable discharge permits;

(m) Documentation required under 40 CFR 112.7 (e)(1) and (2)(iii and ix) may be used to address some or all of these elements; and

(n) Criteria for suspension of operations while leak detection or other spill control systems are inoperative.

(13) Each plan must describe measures taken to ensure facility site security, including:

(a) Procedures to control and monitor facility access;

(b) Facility lighting (documentation required under 33 CFR 154.570 may be used to address some or all of this element);

(c) Signage; and

(d) Right of way identification or other measures to prevent third-party damage (documentation required under 40 CFR 112.7 (e)(3)(v) and (9) may be used to address some or all of this element).

(14) Each plan must list any discharges of oil in excess of twenty-five barrels (one thousand fifty gallons) to the land or waters of the state which occurred during the five-year period prior to the plan submittal date. For each discharge, the plan must describe:

(a) Quantity;

(b) Type of oil;

(c) Geographic location;

(d) Analysis of cause, including source(s) of discharged oil and contributing factors (e.g., third party human error, adverse weather, etc.); and

(e) Measures taken to remedy the cause and prevent a reoccurrence.

The period between July 1, 1987, and January 1, 1993, the facility must provide existing information regarding (a) through (e) of this subsection for such discharges, and must document the use of a system to record complete information for subsequent discharges.

(15) Each plan must include a detailed and comprehensive analysis of facility spill risks based on the information required in subsections (11) through (14) of this section, and other relevant information.

(a) The risk analysis must:

(i) Evaluate the construction, age, corrosion, inspection and maintenance, operation, and oil spill risk of the transfer, production, and storage systems in the facility, including piping, tanks, pumps, valves, and associated equipment;

(ii) Evaluate spill minimization and containment systems within the facility;

(iii) Be prepared under the supervision of (and bear the seal of) a licensed professional engineer or another individual which ecology has deemed to have an acceptable level of expertise.

(b) Documentation required under 40 CFR 112.7 (b) and (e) may be used to address some or all of the elements of this subsection.

(16) Each plan must describe how the facility will incorporate those measures that will provide best achievable protection to address the spill risks identified in the risk analysis required in subsection (15) of this section.

Information documented pursuant to 40 CFR 112.7(e) and 33 CFR 154.310 (a)(1-4) may be used to address some or all of these elements of this subsection.

(17) If the prevention plan is combined with a contingency plan, the prevention plan may incorporate information required in this section by reference if that information is provided in the contingency plan.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-630, filed 9/25/06, effective 10/26/06.]

WAC 173-180-640 Plan submittal. (1) Any onshore or offshore facility that first begins operating after the deadlines stated in this subsection must submit a plan to ecology at least sixty-five calendar days prior to the beginning of operations.

(2) Three copies of the plan and appendices must be delivered to:

The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Prevention Plan Review
P.O. Box 47600
Olympia, WA 98504-7600
Or
The Department of Ecology
Spill Prevention, Preparedness, and Response Program
300 Desmond Drive
Lacey, WA 98503

(3) Onshore and offshore facility plans may be submitted by:

(a) The facility owner or operator; or

(b) A primary response contractor approved by ecology pursuant to chapter 173-182 WAC in conformance with signature requirements under WAC 173-180-630(1).

(4) A single plan may be submitted for more than one facility, provided that the plan meets the requirements in this chapter for each facility listed.

(5) The plan submitter may request that proprietary information be kept confidential under RCW 43.21A.160.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-640, filed 9/25/06, effective 10/26/06.]

WAC 173-180-650 Plan review and approval. (1) Ecology must endeavor to review each plan in sixty-five calendar days. If the plan is submitted in conjunction with a contingency plan required under chapter 173-182 WAC, ecology may extend the prevention plan review period an additional sixty-five calendar days. Upon receipt of a plan, ecology must evaluate promptly whether the plan is incomplete. If ecology determines that a plan is incomplete, the submitter must be notified of deficiencies. The review period will not begin until ecology receives a complete plan.

All prevention plans will be valid for no more than five years from the date on the approval letter. Ecology will review prevention plans to ensure compliance with this chapter.

(2) Ecology must regularly notify interested parties of any prevention plans, which are under review by ecology, and make plans available for review by all ecology programs, other state, local, tribal, and federal agencies, and the public. Ecology must accept comments on the plan from any interested party during the first thirty calendar days of review by ecology.

(3) A plan must be approved if, in addition to meeting criteria in WAC 173-180-530, it demonstrates that when implemented, it can:

(a) Provide best achievable protection from damages caused by the discharge of oil into the waters of the state;

(b) Minimize the likelihood that facility oil spills will occur;

(c) Minimize the size and impacts of those facility oil spills which do occur; and

(d) After the adoption of facility operation standards by rule by ecology pursuant to RCW 90.56.220:

(i) Provide for compliance with prevention standards and deadlines established by facility operations standards adopted by rule by ecology pursuant to RCW 90.56.220; and

(ii) Provide, to the maximum extent practicable, protection from oil spill risk factors identified in the risk analysis required by WAC 173-180-630, for those risk factors not addressed by facility operations standards adopted by rule by ecology pursuant to RCW 90.56.220.

(4) When reviewing plans, ecology must, in addition to the above criteria, consider the following at a minimum:

(a) The volume and type of oil(s) addressed by the plan;

(b) The history and circumstances of prior spills by similar types of facilities, including spill reports by ecology on-scene coordinators;

(c) Inspection reports;

(d) The presence of hazards unique to the facility, such as seismic activity or production processes;

(e) The sensitivity and value of natural resources within the geographic area covered by the plan; and

(f) Any pertinent local, state, tribal, federal agency, or public comments received on the plan.

(5) Ecology may approve a plan based upon an expedited review pursuant to criteria set out in this chapter, if that plan has been approved by a federal agency or other state which ecology has deemed to apply approval criteria which equal or exceed those of ecology.

(6) Ecology must endeavor to notify the facility owner or operator within five working days after the review is completed whether the plan has been approved.

(a) If the plan receives approval, the facility owner or operator must receive a certificate of approval describing the terms of approval, including an expiration date.

(b) Ecology may conditionally approve a plan by requiring a facility owner or operator to operate with specific precautionary measures until unacceptable components of the plan are resubmitted and approved.

(i) Precautionary measures may include, but are not limited to, reducing oil transfer rates, increasing personnel levels, or restricting operations to daylight hours or favorable weather conditions. Precautionary measures may also include additional requirements to ensure availability of response equipment.

(ii) A plan holder must have thirty calendar days after ecology gives notification of conditional status to submit to ecology and implement required changes, with the option for an extension at ecology's discretion. Plan holders who fail to meet conditional requirements or provide required changes in the time allowed must lose conditional approval status.

(c) If plan approval is denied or revoked, the facility owner or operator must receive an explanation of the factors for disapproval and a list of deficiencies. The facility must not continue oil storage, transfer, production, or other operations until a plan for that facility has been approved.

(d) Ecology's decisions under this chapter are reviewable in superior court.

(e) If a plan holder demonstrates an inability to comply with an approved prevention plan or otherwise fails to comply with requirements of this chapter, ecology may, at its discretion:

(i) Place conditions on approval pursuant to (b) of this subsection; or

(ii) Revoke its approval pursuant to (c) of this subsection.

(f) Approval of a plan by ecology does not constitute an express assurance regarding the adequacy of the plan nor constitute a defense to liability imposed under state law.

(7) Ecology must prepare a manual to aid ecology staff responsible for plan review. This manual must be made available to plan preparers. While the manual will be used as a tool to conduct review of a plan, ecology will not be bound by the contents of the manual.

(8) Ecology must work with the office of marine safety to ensure that no duplication of regulatory responsibilities occurs in the review of prevention plans from marine facilities.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-650, filed 9/25/06, effective 10/26/06.]

WAC 173-180-660 Plan maintenance and use. (1) Each facility covered by the plan must conspicuously locate copies of the plan within the facility to ensure that a copy of the plan is immediately accessible to all facility personnel involved in supervising or implementing oil handling operations.

(2) Facilities must ensure that all employees involved in oil transfer, production, or storage operations are familiar with the plan provisions through regular training. Orientation materials for new employees involved in oil transfer, production, or storage operations must contain a copy of the plan.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-660, filed 9/25/06, effective 10/26/06.]

WAC 173-180-670 Plan update timeline. (1) Ecology must be notified in writing as soon as possible and prior to completion of any significant change which could affect the plan. If the change will reduce the facility's ability to implement the plan, the plan holder must also provide a schedule for the return of the plan to full implementation capability.

(a) A significant change includes, but is not limited to:

(i) A change in the owner or operator of the facility;

(ii) A change in the types of oil handled at the facility;

(iii) A five percent or greater change in the facility's oil handling capacity;

(iv) Noncompliance with the Federal Oil Pollution Act of 1990;

(v) Noncompliance with state financial responsibility requirements developed under chapter 88.40 RCW; and

(vi) A substantial change in oil spill prevention technology installed at the facility, or other substantial changes to facility equipment, operations, personnel procedures, or any other change, including compliance with amended or new rules adopted by ecology, which substantially affects the level of risk described pursuant to WAC 173-180-630.

(b) Changes which are not considered significant include, but are not limited to, minor variations (less than five percent) in oil handling capacity, maintenance schedules, and operating procedures, provided that none of these changes will increase the risk of a spill.

(c) The facility must update the plan's list of discharges, as required by WAC 173-180-630, within thirty calendar days after an oil discharge by the facility in excess of twenty-five barrels (one thousand fifty gallons).

(d) A facsimile will be considered written notice for the purposes of this subsection.

(e) Failure to notify ecology of significant changes must be considered noncompliance with this chapter and subject to enforcement provisions of chapter 90.56 RCW.

(2) If ecology finds that, as a result of the change, the plan no longer meets approval criteria pursuant to WAC 173-180-650, ecology may, at its discretion, place conditions on approval or revoke approval in accordance with WAC 173-180-650. Ecology may also require the plan holder to amend its plan to incorporate the change.

(3) Within thirty calendar days of making a change to the prevention plan, the facility owner or operator must distribute the amended page(s) of the plan to ecology and other plan holders.

(4) Plans must be reviewed by ecology at least every five years pursuant to WAC 173-180-650. Plans must be submitted for reapproval unless the plan holder submits a letter requesting that ecology review the plan already in ecology's possession. The plan holder must submit the plan or such a letter at least sixty-five calendar days in advance of the plan expiration date.

(5) Ecology may require a new review and approval process for a prevention plan following any spill at the facility.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-670, filed 9/25/06, effective 10/26/06.]

PART G: OIL TRANSFER RESPONSE PLANS

WAC 173-180-700 Applicability of Part G. Part G applies to Class 1 and 2 facilities. Ecology has not adopted oil transfer response plan requirements for Class 3 and 4 facilities.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-700, filed 9/25/06, effective 10/26/06.]

WAC 173-180-710 Class 1 facility—Contingency plans. Class 1 facilities must have an approved contingency plan as required in chapter 173-182 WAC contingency plan, drill program, and response contractor standards.

The Class 1 facility may request that performance under applicable sections of this chapter be credited for portions of the contingency plan drill requirements.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-710, filed 9/25/06, effective 10/26/06.]

WAC 173-180-720 Class 2 facility—Oil transfer response plans. Class 2 facilities must have an approved oil transfer response plan (response plan) as required in Part G of this chapter.

The Class 2 facility may request that performance under applicable sections of this chapter be credited for portions of the contingency plan drill requirements.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-720, filed 9/25/06, effective 10/26/06.]

WAC 173-180-730 Class 2 facility—Contents of the oil transfer response plan (response plan). (1) All Class 2 facilities that transfer oil to a nonrecreational vessel must prepare and submit to ecology an oil transfer response plan (response plan) that meets the requirements of 33 CFR Part 154, Subpart F.

(2) In addition to the requirements in subsection (1) of this section, all Class 2 facilities response plans must include all of the following:

(a) A description of how the Class 2 facility meets the requirements in WAC 173-180-220;

(b) The spill response contractor the facility lists in the response plan must also be a state approved primary response contractor under WAC 173-182-800;

(c) A statement that the facility will participate in unannounced drills as described in Part H of this chapter;

(d) A description of how the facility will meet the training exercise program in 33 CFR 154.1050 and 154.1055 as well as the drill requirements in WAC 173-180-810; and

(e) A form the Class 2 facility must use to provide initial and follow-up spill notification as required in 33 CFR 154.1035 and includes notification information for state agencies as required in RCW 90.56.280.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-730, filed 9/25/06, effective 10/26/06.]

WAC 173-180-740 Class 2 facility—Response plan submittal. (1) For a Class 2 facility that begins operations after the effective date of this chapter, the Class 2 facility must submit a response plan at least ninety calendar days prior to conducting the first oil transfer operation to a nonrecreational vessel for that facility.

(2) For a Class 2 facility operating on the effective date of this chapter, must submit the response plan at least ninety calendar days of the effective date of this chapter.

(3) The Class 2 facility owner or operator must deliver two paper copies and one electronic copy of the response plan to:

The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Response Plan Review
P.O. Box 47600
Olympia, WA 98504-7600
Or
The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Response Plan Review
300 Desmond Drive
Lacey, WA 98503

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-740, filed 9/25/06, effective 10/26/06.]

WAC 173-180-750 Class 2 facility—Response plan review and approval. (1) Upon receipt of the complete response plan ecology must review the response plan and then ecology will notify the Class 2 facility if ecology:

(a) Approved the response plan.

(b) Found deficiencies in the response plan.

(2) If ecology approves a response plan, ecology will send a letter indicating approval and will include an expiration date for the response plan.

(3) If ecology finds deficiencies in the response plan, ecology may grant conditional approval of a response plan by requiring the facility to operate with specific precautionary measures until the facility submits acceptable provisions of the response plan and ecology approves the response plan.

(4) If ecology grants conditional approval, ecology will:

(a) Send notice to the facility describing the deficiencies;

(b) Provide the facility with a due date by which the facility must address the deficiencies; and

(c) Provide precautionary measures the facility must implement until ecology grants full approval of the response plan.

(5) If a facility receives conditional approval, the Class 2 facility must submit and implement required changes to ecology within the due date, with the option for an extension at ecology's discretion. Plan holders who fail to meet conditional requirements or provide required changes in the time allowed must lose conditional approval status.

(6) Upon receiving the information required by conditional approval, ecology will complete the review.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-750, filed 9/25/06, effective 10/26/06.]

WAC 173-180-760 Class 2 facility—Response plan update and timeline. (1) The facility is required to keep the response plan up-to-date with accurate information.

(2) Whenever changes are made to the response plan, two paper copies and one electronic of the changed sections

must be submitted to ecology to be placed in the facility's plan on file at ecology.

(3) Ecology must review the facility's oil transfer response plan every five years.

(a) The facility must submit two paper copies or one electronic copy of the response plan for reapproval; or

(b) The facility may submit a letter to ask ecology to review the response plan that is currently on file at the agency.

(4) The facility must submit the response plan or letter at least ninety calendar days in advance of the expiration date of the response plan.

(5) Ecology may review and request changes to your response plan following any oil spill, inspection, or drill.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-760, filed 9/25/06, effective 10/26/06.]

WAC 173-180-770 Class 2 facility—Response plan maintenance and use. The Class 2 facility must keep the response plan at each transfer location as well as the primary place of business.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-770, filed 9/25/06, effective 10/26/06.]

PART H: DRILL PROGRAM

WAC 173-180-800 Applicability of Part H. (1) Part H applies to Class 2 facilities only.

(2) Drill requirements for Class 1 facilities are in chapter 173-182 WAC.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-800, filed 9/25/06, effective 10/26/06.]

WAC 173-180-810 Type of drills. In addition to the National Preparedness for Response Exercise Program, ecology may conduct the following unannounced drills at Class 2 facilities:

Type of Drill	Drill Expectations and Duration
Deployment drills	These drills may involve testing whether or not the facility can deploy personnel, boom, recovery, and storage equipment as described in WAC 173-180-222.
Notification and emergency shutdown procedure drills	These drills may involve testing the facility's ability to follow the notification in the response plan and emergency shutdown procedures described in the operations manual.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-810, filed 9/25/06, effective 10/26/06.]

WAC 173-180-820 Unannounced drills for Class 2 facilities. (1) Ecology will evaluate these drills.

(2) At the start of the unannounced drill, ecology will notify the Class 2 facility of the drill objectives, expectations and scenario.

(3) The Class 2 facility may request to be excused from an unannounced deployment drill if conducting the drill poses an unreasonable safety or environmental risk, or significant economic hardship. If ecology approves the request, ecology will call the drill on another date.

(4) Ecology will provide the facility with a drill evaluation. If deficiencies are found during the drill, ecology may require a redrill after the facility corrects the deficiencies.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-180-820, filed 9/25/06, effective 10/26/06.]

Chapter 173-182 WAC
OIL SPILL CONTINGENCY PLAN

WAC

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PART I: PURPOSE, AUTHORITY, APPLICABILITY AND DEFINITIONS

WAC 173-182-010 Purpose. The purpose of this chapter is to establish covered vessel and facility oil spill contingency plan (Part II) and drill and equipment verification requirements (Part III), primary response contractor standards (Part IV) and recordkeeping and compliance information (Part V). The provisions of this chapter, when followed, should be implemented and construed so that they will:

(1) Maximize the effectiveness and timeliness of oil spill response by plan holders and response contractors;

(2) Ensure continual readiness, maintenance of equipment and training of personnel;

(3) Support coordination with state, federal, and other contingency planning efforts; and

(4) Provide for the protection of Washington waters, natural, cultural and significant economic resources by minimizing the impact of oil spills.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-010, filed 9/25/06, effective 10/26/06.]

WAC 173-182-015 Applicability. (1) This chapter applies to owners and operators of onshore and offshore facilities and covered vessels required to submit oil spill contingency plans under chapters 90.56 and 88.46 RCW.

(2) This chapter applies to Washington nonprofit corporations, their enrolled members, and agents that submit plans on behalf of onshore and offshore facilities and covered vessels.

(3) This chapter applies to response contractors that must be approved by ecology before they may serve as primary response contractors for a contingency plan.

(4) This chapter does not apply to public vessels as defined by this chapter, mobile facilities or to spill response vessels that are exclusively dedicated to spill response activities when operating on the waters of this state.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-015, filed 9/25/06, effective 10/26/06.]

WAC 173-182-020 Authority. RCW 88.46.060, 88.46.070, 88.46.080, 88.46.090, 88.46.100, 88.46.120, 88.46.160, 90.48.080, 90.56.050, 90.56.060, 90.56.210, 90.56.240, 90.56.270, 90.56.280, 90.56.310, 90.56.320, 90.56.340, and chapter 316, Laws of 2006, provide statutory authority for the contingency plan preparation and review requirements, drill and response contractor standards established by this chapter for onshore and offshore facilities and covered vessels.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-020, filed 9/25/06, effective 10/26/06.]

WAC 173-182-030 Definitions. (1) "Boom" means flotation boom or other effective barrier containment material suitable for containment, protection or recovery of oil that is discharged onto the surface of the water. Boom also includes the associated support equipment necessary for rapid deployment and anchoring appropriate for the operating environment. Boom will be classified using criteria found in the 2000 ASTM International F 1523-94 (2001) and ASTM International F 625-94 (Reapproved 2000), and the *Resource Typing Guidelines* found in chapter 13 of the 2000 Oil spill field operations guide.

(2) "Bulk" means material that is stored or transported in a loose, unpackaged liquid, powder, or granular form capable of being conveyed by a pipe, bucket, chute, or belt system.

(3) "Cargo vessel" means a self-propelled ship in commerce, other than a tank vessel or a passenger vessel, three hundred or more gross tons, including but not limited to commercial fish processing vessels and freighters.

(4) "Cascade" means to bring in equipment and personnel to the spill location in a succession of stages, processes, operations, or units.

(5) "Contract or letter summarizing contract terms" means:

(a) A written contract between a plan holder and a primary response contractor or proof of cooperative membership that identifies and ensures the availability of specified personnel and equipment within stipulated planning standard times; or

(b) A letter that identifies personnel, equipment and services capable of being provided by the primary response contractor within stipulated planning standard times; acknowledges that the primary response contractor intends to commit the identified resources in the event of an oil spill.

(6) "Covered vessel" means a tank vessel, cargo vessel (including fishing and freight vessels), or passenger vessel required to participate in this chapter.

(7) "Dedicated" means equipment and personnel committed to oil spill response, containment, and cleanup that are not used for any other activity that would make it difficult or impossible for that equipment and personnel to provide oil spill response services in the time frames specified in this chapter.

(8) "Demise charter" means that the owner gives possession of the ship to the charterer and the charterer hires its own master and crew.

(9) "Director" means the director of the state of Washington department of ecology.

(10) "Discharge" means any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

(11) "Dispersant" means those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

(12) "Effective daily recovery capacity" (EDRC) means the calculated capacity of oil recovery devices that accounts for limiting factors such as daylight, weather, sea state, and emulsified oil in the recovered material.

(13) "Ecology" means the state of Washington department of ecology.

(14) "Facility" means:

(a) Any structure, group of structures, equipment, pipeline, or device, other than a vessel, located on or near the navigable waters of the state that:

(i) Transfers oil in bulk to or from a tank vessel or pipeline; and

(ii) Is used for producing, storing, handling, transferring, processing, or transporting oil in bulk.

(b) A facility does not include any:

(i) Railroad car, motor vehicle, or other rolling stock while transporting oil over the highways or rail lines of this state;

(ii) Underground storage tank regulated by ecology or a local government under chapter 90.76 RCW;

(iii) Motor vehicle motor fuel outlet;

(iv) Facility that is operated as part of an exempt agricultural activity as provided in RCW 82.04.330; or

(v) Marine fuel outlet that does not dispense more than three thousand gallons of fuel to a ship that is not a covered vessel, in a single transaction.

(15) "Geographic Response Plans (GRP)" means response strategies published in the *Northwest Area Contingency Plan.*

(16) "Gross tons" means a vessel's approximate volume as defined under Title 46, United States Code of Federal Regulations, Part 69.

(17) "Incident command system (ICS)" means a standardized on-scene emergency management system specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.

(18) "In situ burn" means a spill response tactic involving controlled on-site burning, with the aid of a specially designed fire containment boom and igniters.

(19) "Interim storage" means a site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site.

(20) "Maximum extent practicable" means the highest level of effectiveness that can be achieved through staffing levels, training procedures, deployment and tabletop drills incorporating lessons learned, use of enhanced skimming techniques and other best achievable technology. In determining what the maximum extent practicable is, the director shall consider the effectiveness, engineering feasibility, commercial availability, safety, and the cost of the measures.

(21) "Mobilization" means the time it takes to get response resources readied for operation and ready to travel to the spill site or staging area.

(22) "Navigable waters of the state" means those waters of the state, and their adjoining shorelines, that are subject to the ebb and flow of the tide and/or are presently used, have been used in the past, or may be susceptible for use to transport intrastate, interstate, or foreign commerce.

(23) "Nondedicated" means those response resources listed by a primary response contractor for oil spill response activities that are not dedicated response resources.

(24) "Nonpersistent or group 1 oil" means a petroleum-based oil, such as gasoline, diesel or jet fuel, which evaporates relatively quickly. Such oil, at the time of shipment, consists of hydrocarbon fractions of which:

(a) At least fifty percent, by volume, distills at a temperature of 340°C (645°F); and

(b) At least ninety-five percent, by volume, distills at a temperature of 370°C (700°F).

(25) "*Northwest Area Contingency Plan (NWACP)*" means the regional emergency response plan developed in accordance with federal requirements. In Washington state, the NWACP serves as the statewide master oil and hazardous substance contingency plan required by RCW 90.56.060.

(26) "Offshore facility" means any facility located in, on, or under any of the navigable waters of the state, but does not include a facility, any part of which is located in, on, or under any land of the state, other than submerged land.

(27) "Oil" or "oils" means oil of any kind that is liquid at atmospheric temperature and pressure and any fractionation thereof, including, but not limited to, crude oil, petroleum, gasoline, fuel oil, diesel oil, oil sludge, oil refuse, biological oils and blends, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 C.F.R. Part 302 adopted August 14, 1989, under section 101(14) of the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by P.L. 99-499.

(28) "Oily waste" means oil contaminated waste resulting from an oil spill or oil spill response operations.

(29) "Onshore facility" means any facility, as defined in subsection (14) of this section, any part of which is located in, on, or under any land of the state, other than submerged land, that because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters of the state or the adjoining shorelines.

(30) "Operating environments" means the conditions in which response equipment is designed to function. Water body classifications will be determined using criteria found in the ASTM Standard Practice for Classifying Water Bodies for Spill Control Systems.

(31) "Owner" or "operator" means:

(a) In the case of a vessel, any person owning, operating, or chartering by demise, the vessel;

(b) In the case of an onshore or offshore facility, any person owning or operating the facility; and

(c) In the case of an abandoned vessel or onshore or offshore facility, the person who owned or operated the vessel or facility immediately before its abandonment.

Operator does not include any person who owns the land underlying a facility if the person is not involved in the operations of the facility.

(32) "Passenger vessel" means a ship of greater than three hundred gross tons with a fuel capacity of at least six thousand gallons carrying passengers for compensation.

(33) "Persistent oil" means petroleum-based oil that does not meet the distillation criteria for a nonpersistent oil. Persistent oils are further classified based on both specific and American Petroleum Institute (API) observed gravities corrected to 60°F, as follows:

(a) Group 2 - specific gravity greater than or equal to 0.8000 and less than 0.8500. API gravity less than or equal to 45.00 and greater than 35.0;

(b) Group 3 - specific gravity greater than or equal to 0.8500, and less than 0.9490. API gravity less than or equal to 35.0 and greater than 17.5;

(c) Group 4 - specific gravity greater than or equal to 0.9490 and up to and including 1.0. API gravity less than or equal to 17.5 and greater than 10.00; and

(d) Group 5 - specific gravity greater than 1.0000. API gravity equal to or less than 10.0.

(34) "Person" means any political subdivision, government agency, municipality, industry, public or private corporation, co-partnership, association, firm, individual, or any other entity whatsoever.

(35) "Pipeline" means a pipeline connected to a facility, and not owned or operated by the facility referred to in subsection (14) of this section.

(36) "Pipeline tank farm" means a facility that is linked to a pipeline but not linked to a vessel terminal.

(37) "Plan" means oil spill response, cleanup, and disposal contingency plan for the containment and cleanup of oil spills into the waters of the state and for the protection of fisheries and wildlife, shellfish beds, natural resources, and public and private property from such spills as required by RCW 90.56.210 and 88.46.060.

(38) "Planning standards" means goals and criteria that ecology will use to assess whether a plan holder is prepared to respond to the maximum extent practicable to a worst case spill. Ecology will use planning standards for reviewing oil spill contingency plans and evaluating drills.

(39) "Primary response contractor (PRC)" means a response contractor that has been approved by ecology and is directly responsible to a contingency plan holder, either by a contract or other approved written agreement.

(40) "Public vessel" means a vessel that is owned, or demise chartered, and is operated by the United States government, or a government of a foreign country, and is not engaged in commercial service.

(41) "Regional response list" means a regional equipment list established and maintained by spill response equipment owners in the northwest area.

(42) "Resident" means the spill response resources are staged at a location within the described planning area.

(43) "Responsible party" means a person liable under RCW 90.56.370.

(44) "Ship" means any boat, ship, vessel, barge, or other floating craft of any kind.

(45) "Spill" means an unauthorized discharge of oil which enters waters of the state.

(46) "Spill assessment" means determining product type, potential spill volume, environmental conditions including tides, currents, weather, river speed and initial trajectory as well as a safety assessment including air monitoring.

(47) "Tank vessel" means a ship that is constructed or adapted to carry, or that carries, oil in bulk as cargo or cargo residue, and that:

(a) Operates on the waters of the state; or

(b) Transfers oil in a port or place subject to the jurisdiction of this state.

(48) "Transmission pipeline" means a pipeline whether interstate or intrastate, subject to regulation by the United States Department of Transportation under 49 C.F.R. 195, as amended through December 5, 1991, through which oil moves in transportation, including line pipes, valves, and other appurtenances connected to line pipe, pumping units, and fabricated assemblies associated with pumping units.

(49) "Transfer site" means a location where oil is moved in bulk on or over waters of the state to or from a covered vessel by means of pumping, gravitation, or displacement.

(50) "Recovery system" means a skimming device, storage work boats, boom, and associated material needed such as pumps, hoses, sorbents, etc., used collectively to maximize oil recovery.

(51) "Umbrella plan" means a single plan that covers multiple vessels or facilities.

(52) "Vessel terminal" means a facility that is located on marine or river waters and transfers oil to or from a tank vessel.

(53) "Waters of the state" means all lakes, rivers, ponds, streams, inland waters, underground water, salt waters, estuaries, tidal flats, beaches and lands adjoining the seacoast of the state, sewers, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

(54) "Worst case spill" means:

(a) For an offshore facility, the largest possible spill considering storage, production, and transfer capacity complicated by adverse weather conditions; or

(b) For an onshore facility, the entire volume of the largest above ground storage tank on the facility site complicated by adverse weather conditions, unless ecology determines that a larger or smaller volume is more appropriate given a particular facility's site characteristics and storage, production, and transfer capacity; or

(c) For a vessel, a spill of the vessel's entire cargo and fuel complicated by adverse weather conditions; or

(d) For pipelines, the size of the worst case spill is dependent on the location of pump stations, key block valves, geographic considerations, or volume of the largest breakout tank. The largest volume determined from three different methods, complicated by adverse weather conditions:

(i) The pipeline's maximum time to detect the release, plus the maximum shutdown response time multiplied by the maximum flow rate per hour, plus the largest line drainage volume after shutdown;

(ii) The maximum historic discharge from the pipeline; and

(iii) The largest single breakout tank or battery of breakout tanks without a single secondary containment system. Each operator shall determine the worst case discharge and provide the methodology, including calculations, used to arrive at the volume.

(55) "WRIA" means a water resource inventory area as defined in chapter 173-500 WAC.

[Statutory Authority: Chapters 90.56, 88.46, 90.48 RCW. 07-22-119 (Order 07-14), § 173-182-030, filed 11/7/07, effective 12/8/07; 06-20-035 (Order 00-03), § 173-182-030, filed 9/25/06, effective 10/26/06.]

PART II: COVERED VESSEL AND FACILITY OIL SPILL CONTINGENCY PLANS

Section A—General Planning, Information and Timing

WAC 173-182-110 Authority to submit contingency plan. (1) For tank vessels, a plan may be submitted by any of the following:

(a) The owner or operator of the tank vessel; or

(b) The owner or operator of the facilities at which the tank vessel will be unloading its cargo; or

(c) A Washington state nonprofit corporation established for the purpose of oil spill response and contingency plan coverage and of which the tank vessel owner or operator is a member; or

(d) A PRC contractually obligated to provide containment and cleanup services to the tank vessel company.

(2) For covered vessels other than tank vessels, a plan may be submitted by any of the following:

(a) The owner or operator of the covered vessel; or

(b) The agent for the covered vessel provided that the agent resides in this state; or

(c) A Washington state nonprofit corporation established for the purpose of oil spill response and contingency plan coverage and of which the covered vessel owner or operator is a member; or

(d) A PRC contractually obligated to provide containment and cleanup services to the covered vessel company.

(3) For facilities, a plan may be submitted by any of the following:

(a) The owner or operator of the facility; or

(b) A PRC contractually obligated to provide containment and cleanup services to the facility.

(4) One plan, or one umbrella plan, may be submitted for multiple covered vessels, and/or for multiple facilities, provided that the plan contents meet the requirements in this chapter for each covered vessel or facility.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-110, filed 9/25/06, effective 10/26/06.]

WAC 173-182-120 Submitting a contingency plan. (1) Plan holders shall submit a plan to ecology no less than sixty-five days prior to the beginning of operations in Washington.

(2) The plan holder shall submit two copies of the plan and all appendices. However, if the plan and appendices are submitted with an acceptable use of electronic copy, the plan holder shall submit at least one paper copy.

(3) Once approved, plan holders shall resubmit their plans to ecology every five years for review and approval.

(4) The plans shall be delivered to:

Department of Ecology
Spill Prevention, Preparedness, and Response Program
Preparedness Section, Contingency Plan Review
Mailing address:
P.O. Box 47600
Olympia, WA 98504-7600
Physical Address:
300 Desmond Drive
Lacey, WA 98503

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-120, filed 9/25/06, effective 10/26/06.]

WAC 173-182-130 Phase in language. (1) This section applies to those plan holders who, on the effective date of this chapter, have approved or conditionally approved plans, and response contractors with approved applications.

(2) For existing approved facility plan holders:

(a) Plans holders for onshore facilities capable of storing one million gallons or more of oil shall submit a revised contingency plan to ecology six months after the effective date of this chapter; except, plan holders that received plan approval six months prior to the effective date of this chapter must submit a revised plan within twelve months of the effective date of this chapter. In submitting the revised plan, plan holders must include a compliance schedule describing how they will meet the requirements in WAC 173-182-310 through 173-182-440. Plan holders shall have eighteen months from the effective date of this chapter to reach compliance.

(b) All other onshore facilities shall submit revised plans to ecology within twelve months after the effective date of this chapter; except plan holders that received plan approval six months prior to the effective date of this chapter must submit a revised plan within eighteen months of the effective date of this chapter. In the revised plan, plan holders must include a compliance schedule describing how they will meet the requirements in WAC 173-182-310 through 173-182-440. Plan holders shall have twenty-four months from the effective date of this chapter to reach compliance.

(3) For existing approved vessel plan holders:

(a) Plan holders for tank vessels submit a revised contingency plan to ecology six months after the effective date of this chapter; except plan holders that received plan approval six months prior to the effective date of this chapter must submit a revised plan within twelve months of the effective date of this chapter. In the revised plan, plan holders must include a compliance schedule describing how they will meet the requirements in WAC 173-182-310 through 173-182-440. Plan holders shall have eighteen months from the effective date of this chapter to reach compliance.

(b) All other covered vessels shall submit revised plans to ecology within twelve months after the effective date of this chapter; except plan holders that received plan approval six months prior to the effective date of this chapter must submit a revised plan within eighteen months of the effective date of this chapter. In the revised plan, plan holders must include a compliance schedule describing how they will meet the requirements in WAC 173-182-310 through 173-182-440. Plan holders shall have twenty-four months from the effective date of this chapter to reach compliance.

(4) PRCs shall submit new applications to ecology within twelve months.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-130, filed 9/25/06, effective 10/26/06.]

WAC 173-182-140 Plan maintenance and reporting obligations. (1) At least once annually, plan holders shall review the plan for accuracy and either:

(a) Update and distribute the amended page(s) of the plan to ecology for review and approval; or

(b) If no plan changes are needed, send a letter to ecology confirming that the existing plan is still accurate.

(2) If there is a temporary, significant change to response readiness, the plan holder shall notify ecology in writing within twenty-four hours and provide a schedule for the prompt return of the plan to full operational status. Changes which are considered significant include loss of equipment that affects the planning standards provided in the plan, or permanent loss of initial response personnel listed in command and general staff ICS positions provided in the plan or changes in normal operating procedures. A facsimile or electronic mail will be considered sufficient written notice.

(3) Failure to notify ecology of significant changes shall be considered noncompliance with this chapter.

(4) If the change to the plan is permanent, the plan holder then shall have thirty calendar days to distribute the amended page(s) of the plan to ecology for review.

(5) If ecology finds that, as a result of a change, the plan no longer meets approval criteria; ecology may place conditions on approval or revoke approval of the plan.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-140, filed 9/25/06, effective 10/26/06.]

WAC 173-182-145 Plan implementation procedures. (1) Every plan holder, including each person whose vessel or facility enrolls in coverage under an umbrella plan, is required to implement the Washington approved plan throughout the response to a spill and drill. A decision to use a different plan must first be approved by the state and federal on-scene coordinators.

(2) Approval from ecology must be received before any significant aspect of the spill response is conducted in a manner contrary to the plan unless:

(a) Such actions are necessary to protect human health and safety; or

(b) Such actions must be performed immediately in response to unforeseen conditions to avoid additional environmental damage; or

(c) State and federal on-scene coordinators have directed such actions.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-145, filed 9/25/06, effective 10/26/06.]

WAC 173-182-150 Post-spill review and documentation procedures. Plan holders are required to conduct post-spill review procedures to review both the effectiveness of the plan and make plan improvements. Debriefs with ecology and other participating agencies and organizations may be appropriate if: Unified command has been established during a spill; and are required when significant plan updates are identified or significant lessons can be recorded and implemented.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-150, filed 9/25/06, effective 10/26/06.]

Section B—Contingency Plan Format and Content

WAC 173-182-210 Contingency plan format requirements. (1) Plan holders shall format and maintain plans to maximize their usefulness during a spill. Information shall be readily accessible and plans will contain job aids, diagrams and checklists for maximum utility.

(2) Plans shall be divided into a system of numbered, tabbed chapters, sections and annexes/appendices. Each plan shall include a detailed table of contents based on chapter, section, and annex/appendix numbers and titles, as well as tables and figures.

(3) Plans shall be formatted to allow replacement of pages with revisions without requiring replacement of the entire plan.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-210, filed 9/25/06, effective 10/26/06.]

WAC 173-182-220 Binding agreement. (1) Each plan shall contain a written statement binding the plan holder to its use. Form number ECY 070-217 may be used. The binding agreement shall be signed by the owner or operator, or a designee with authority to bind the owners and operators of the facility or vessel covered by the plan. The agreement is submitted with the plan and will include the name, address, phone number, and if appropriate the e-mail address, and web site of the submitting party.

(2) In the statement, the signator will:

(a) Verify acceptance of the plan and commit to a safe and immediate response to spills in Washington;

(b) Commit to having an incident commander in the state within six hours after notification of a spill;

(c) Commit to the implementation and use of the plan during a spill, and to the training of personnel to implement the plan; and

(d) Verify authority and capability of the plan holder to make necessary and appropriate expenditures in order to implement plan provisions.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-220, filed 9/25/06, effective 10/26/06.]

WAC 173-182-230 Contingency plan general content. (1) Contingency plans must include all of the content in this section.

(2) In Washington state, the NWACP serves as the statewide master oil and hazardous substance contingency plan required by RCW 90.56.060. Plan holders shall write plans that refer to and are consistent with the NWACP.

(3) All contingency plans must include the following:

(a) Each plan shall state the federal or state requirements intended to be met by the plan.

(b) Each plan shall state the size of the worst case spill.

(i) For transmission pipelines, more than one worst case spill volume for different line sections on the entire pipeline may be submitted to ecology for consideration.

(ii) For vessel umbrella plans, a worst case volume for each port of operation may be submitted to ecology for consideration, if the operations of enrolled vessels differ by port.

(iii) For multiple facilities using a single umbrella plan, separate worst case spill volumes are required for each facility.

(c) Each plan shall have a log sheet to record revisions and updates to the plan. The log sheet shall identify each section amended, including the date of the amendment, verification that ecology was notified and the name of the authorized person making the change. A description of the amendment and its purpose shall also be included in the log sheet, or filed as an amendment letter to be inserted in the plan immediately after the log sheet.

(d) Each plan shall have a cross-reference table reflecting the locations in the plan of each component required by this chapter.

(e) Each plan shall have the PRC's name, address, phone number, or other means of contact at any time of the day.

(i) A contract or letter summarizing the terms of the contract signed by the PRC, shall be included in the plan.

(ii) If the contract is not submitted, that document shall be available for inspection, if requested by the department.

(iii) For mutual aid agreements that a plan holder relies on to meet the planning standards, the plan shall include a copy of the agreement and describe the terms of that document in the plan.

(iv) If a plan holder relies on a PRC or other contractor to staff ICS positions for the spill management team, then the commitment must be specified in writing.

(f) Each plan must contain the procedures to track and account for the entire volume of oil recovered and oily wastes generated and disposed of during spills. The responsible party must provide these records to ecology upon request.

(4) Additional facility plan content.

Facility plans shall include:

(a) The name, location, type and address of the facility;

(b) Starting date of operations;

(c) Description of the operations covered by the plan:

(i) List the oil handling operations that occur at the facility location.

(ii) List by group and amount the oil handled.

(iii) Include a written description and map indicating site topography, storm water and other drainage systems, mooring areas, pipelines, tanks, and other oil processing, storage, and transfer sites and operations.

(iv) A description of the geographic area that could be impacted from a spill at the location based on a forty-eight hour worst case spill trajectory analysis.

(5) Additional vessel plan content:

(a) Name of each vessel covered under the plan;

(b) The name, location, and address of the owner or operator;

(c) Official identification code or call sign;

(d) Country of registry;

(e) All ports of call or areas of expected operation in Washington waters;

(f) Type of oil(s) handled (group);

(g) Oil volume capacity by group;

(h) Description of the operations covered by the plan.

Include a written description and diagram indicating cargo, fuel, and ballast tanks and piping, power plants, and other oil storage and transfer sites and operations.

(6) Special exemptions for vessel umbrella plans shall, at a minimum, include the following:

(a) In lieu of providing vessels names, call signs and country of registry, vessel umbrella plan holders shall maintain accurate enrollment or member lists with vessel specific information provided by covered vessels and shall make the information available to ecology upon request.

(b) Umbrella plans for vessels shall include a list of the types of vessels and the typical oil types by group and volumes. In addition, vessel diagrams indicating cargo, fuel, and ballast tanks and piping, power plants, and other oil storage and transfer sites and operations shall be available for inspection by ecology. The procedure for the plan holder to acquire vessel diagrams needs to be documented in the plan.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-230, filed 9/25/06, effective 10/26/06.]

WAC 173-182-240 Field document. (1) Each plan shall contain a field document which lists time critical information for the initial emergency phase of a spill. The owner or operator of the covered vessel or facility shall make the field document available to personnel who participate in oil handling operations and shall keep the field document in key locations at facilities, docks, on vessels and in the plan. The locations where field documents are kept must be listed in the plan, provided that vessel umbrella plan holders shall not be subject to enforcement if the owner or operator of an enrolled vessel fails to keep the field documents in the location specified in the plan.

Umbrella vessel plans shall include procedures to ensure each vessel covered by the plan is provided the field document prior to entering Washington waters. This can include by electronic means.

(2) At a minimum, the field document shall contain:

(a) A list of the procedures to detect, assess and document the presence and size of a spill;

(b) Spill notification procedures and a call out list that meets the requirements in WAC 173-182-260; and

(c) A checklist that identifies significant steps used to respond to a spill, listed in a logical progression of response activities.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-240, filed 9/25/06, effective 10/26/06.]

WAC 173-182-250 Initial response actions. (1) Plan holders and responsible parties are required to document their initial spill actions and the plan shall include the forms that will be used for such documentation.

(2) The plan shall describe what equipment will be used to conduct initial spill assessment, including equipment effective during darkness and low visibility conditions, such as visual methods, tracking buoys, trajectory modeling, aerial overflights, thermal or infrared imagery.

(3) The plan must state how safety assessment including initial air monitoring will be conducted for all types of spills, including spills to groundwater.

(4) The plan must list procedures that will be used to confirm the occurrence, and estimate the quantity and nature of the spill. An updated report is required if the initially reported estimated quantity or the area extent of the contamination changes significantly.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-250, filed 9/25/06, effective 10/26/06.]

WAC 173-182-260 Notification and call-out procedures. (1) Each plan shall include procedures which will be taken to immediately notify appropriate parties that a spill has occurred. The plan shall identify the central reporting office or individuals responsible for implementing the notification process.

(2) Each plan shall include a list of the names and phone numbers of required notifications to government agencies, response contractors and spill management team members, except that the portion of the list containing internal call down information need not be included in the plan, but shall be available for review by ecology upon request and verified during spills and drills.

(3) The procedure shall establish a clear order of priority for immediate notification.

(4) In addition, facility plans shall also address how notifications will be made to required government agencies for spills to ground or into permeable secondary containment, and threatened or confirmed spills to ground water.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-260, filed 9/25/06, effective 10/26/06.]

WAC 173-182-270 Maintenance records for response equipment. (1) Plan holders and PRCs are required to maintain response equipment in a state of constant readiness, and in accordance with manufacturer specifications.

(2) Plan holders and PRCs that own equipment shall develop schedules, methods, and procedures for equipment maintenance. Maintenance records shall be kept for at least five years and made available if requested by ecology.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-270, filed 9/25/06, effective 10/26/06.]

WAC 173-182-280 Spill management teams. (1) Each plan shall contain information on the personnel (including contract personnel) who will be available to manage an oil spill response. To meet the requirement, the plan shall include:

(a) An organizational diagram depicting the chain of command for the spill management team for a worst case spill.

(b) For the purpose of ensuring depth of the spill management team, an organization list of one primary and one alternate person to lead each ICS spill management position down to the section chief and command staff level as depicted in the NWACP standard ICS organizational chart. In lieu of being placed in the plan, this list may be maintained at the plan holder's office and be made available to ecology upon request. If a response contractor is used to fill positions, they must agree in writing to staff the positions. The capacity and depth of spill management teams will be evaluated in drills and spills.

(c) A job description for each spill management position; except if the plan holder follows without deviation the job descriptions contained in the NWACP. If the job descriptions are consistent with the NWACP, then the plan holder may reference the NWACP rather than repeat the information.

(d) A detailed description of the planning process which will be used to manage a spill. If the process is consistent with the NWACP then the plan holder may reference the NWACP rather than repeat the information.

(2) The plan shall address the type and frequency of training that each individual listed in subsection (1)(b) of this section receives. The training program at a minimum shall include as applicable ICS, NWACP policies, use and location of GRPs, the contents of the plan and worker health and safety. The training program shall include participation in periodic announced and unannounced exercises and participation should approximate the actual roles and responsibilities of the individual specified in the plan. New employees shall complete the training program prior to being assigned job responsibilities which require participation in emergency response situations.

(3) Covered vessel plan holders shall identify a primary and alternate incident commander's representative that can form unified command at the initial command post, and if located out-of-state, a primary and alternate incident commander that could arrive at the initial command post within six hours. The plan shall include estimated time frames for arrival of the remainder of the spill management team to the spill site, or at the incident command post as appropriate.

(4) The plan shall list a process for orderly transitions of initial response staff to incoming local, regional or away team personnel, including transitions between shift changes.

(5) Covered vessel umbrella plans must describe the transition from umbrella plan personnel to the vessel owner or operator's team.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-280, filed 9/25/06, effective 10/26/06.]

Section C—Planning Standards

WAC 173-182-310 Planning standards. (1) Ecology shall apply a planning standard when determining the ability of a plan holder to meet the purposes of these regulations. Each planning standard is subject to being verified at scheduled or unannounced drills. In an actual spill event, initial deployment shall be guided by safety considerations. The responsible party must address the entire volume of an actual spill regardless of the planning standards.

(2) The planning standards described in this chapter do not constitute cleanup standards that must be met by the holder of a contingency plan. Failure to remove a discharge within the time periods set out in this section does not constitute failure to comply with a contingency plan for purposes of this section or for the purpose of imposing administrative, civil, or criminal penalties under any other law.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-310, filed 9/25/06, effective 10/26/06.]

WAC 173-182-315 Planning standards for nondedicated work boats and operators. Each plan holder shall plan to obtain nondedicated work boats and operators that will be available to deploy GRPs, enhance skimming, to provide platforms as vessel of opportunity skimming systems, logistical support or other uses during a spill. At a minimum, the plan shall describe a plan that will support the worst case

spill response with work boats and operators that could have arrived on scene beginning at forty-eight hours.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-315, filed 9/25/06, effective 10/26/06.]

WAC 173-182-320 Planning standards for aerial surveillance. Each plan shall provide for aerial oil tracking resources capable of being on-scene within six hours of spill awareness. At a minimum, these resources must be capable of supporting oil spill removal operations for three, ten-hour operational periods during the initial seventy-two hours of the discharge.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-320, filed 9/25/06, effective 10/26/06.]

WAC 173-182-325 Planning standards for dispersants. (1) Plan holders with vessels carrying group II or III persistent oil as a primary cargo that transit in any area where preapproval or case-by-case use of dispersants is available as per the NWACP, must plan for the use of dispersants.

(2) The plan holder must identify the locations of dispersant stockpiles capable of dispersing the lesser of five percent of the worst case spill volume or twelve thousand barrels per day, using a dispersant to oil ratio of one to twenty.

(3) The plan holder must describe the methods of transporting equipment and supplies to a staging area, and appropriate aircraft or vessels to apply the dispersant and monitor its effectiveness.

(4) These resources must be capable of being on scene within twelve hours of spill awareness.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-325, filed 9/25/06, effective 10/26/06.]

WAC 173-182-330 Planning standards for in situ burning. (1) Based on the NWACP, plan holders operating in areas where in situ burning has an expedited approval process must plan for the use of in situ burning.

(2) The plan holder must identify the locations of two fire booms, air monitoring equipment, igniters and aircraft or vessels to be used to deploy the igniters.

(3) The fire booms must be five hundred feet in length each and have an additional one thousand feet of conventional boom, tow bridles and work boats capable of towing the boom for burning operations.

(4) The plan holder must describe the methods of transporting the equipment to a staging area, and appropriate aircraft or vessels to monitor its effectiveness at the scene of an oil discharge.

(5) These resources must be capable of being on scene within twelve hours of spill awareness.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-330, filed 9/25/06, effective 10/26/06.]

WAC 173-182-335 Planning standards for storage. Plan holders shall identify both on-water devices and shoreside interim storage locations. For marine waters, shoreside storage can be identified to meet fifty percent of storage requirements in the tables below, if the plan holders can demonstrate that recovered oil can be transported to the shoreside storage. For freshwater environments, shoreside storage can be identified to meet sixty-five percent of the storage requirements in the tables below, if the plan holders can demonstrate that recovered oil can be transported to the shoreside storage.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-335, filed 9/25/06, effective 10/26/06.]

WAC 173-182-345 Determining effectiveness of recovery systems. Plan holders and PRCs that own equipment shall provide information for ecology to determine the effectiveness of the recovery systems and how the equipment meets the planning standards. To avoid duplication, plan holders relying upon a PRC to meet the necessary planning standards may reference the information submitted in the PRC's application, as approved by the department. Ecology will use the criteria in ASTM International F 1780-97 (Reapproved 2002).

Determination of efficiency of recovery systems in varied operating environments and product types:

(1) For all skimmers, describe how the device is intended to be transported and deployed. List the boom and work boats associated with each water based skimming system. Identify the pumps and pumping capacity that will be used to transfer product to storage devices.

(2) For all oil recovery systems that rely on a vessel of opportunity or nondedicated transport asset, include a statement on how the asset would be located and secured. Include in the plan the mobilization time needed to ensure the assets are available, as well as the time needed to set up the oil recovery system, and the personnel that will be used in the operations. This may require longer mobilization time than those found in this chapter.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-345, filed 9/25/06, effective 10/26/06.]

WAC 173-182-348 Determining effective daily recovery capacity. (1) Plan holders and PRCs that own recovery equipment shall request an EDRC using the following procedures and the criteria in Title 33 CFR 155, Appendix B, Section 6, "Determining Effective Daily Recovery Capacity for Oil Recovery Devices."

(2) When calculating the EDRC, the formula R = T x 24 hours x E will be used.

R = Effective daily recovery capacity

T = Throughput rate in barrels per hour (nameplate capacity)

E = 20 percent (efficiency factor).

(3) Equipment owners may request an alternative EDRC by providing all of the following information:

(a) A description of the recovery system which includes skimmer, boom, pump, work boats, and storage associated with the device;

(b) Description of deployment methods that will be used to enhance the recovery system to maximize oil encounter rate during spills;

(c) Documented performance during verified spill incidents; and

(d) Documentation of laboratory testing using ASTM standard methods (ASTM F 631-80) or equivalent test approved by the U.S. Coast Guard.

(4) The following formula will be used to calculate the effective daily recovery capacity for this alternative approach:

R = D x U

R = Effective daily recovery capacity

D = Average oil recovery throughput rate in barrels per hour

U = 10 (hours of operation). 10 hours is used for potential limitations due to available daylight, weather, sea state, and percentage of emulsified oil in the recovered material.

EDRC is limited to the storage capacity of the proposed recovery system.

For each skimming system identify the oil storage associated with each recovery system. State the storage capacity integral to the oil recovery system, if applicable. Describe how recovered oil is to be transported to/from interim storage.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-348, filed 9/25/06, effective 10/26/06.]

WAC 173-182-350 Documenting compliance with the planning standards. The plan holder shall describe how the planning standards found in this chapter are met.

(1) Each plan shall provide a spreadsheet on the resources intended to meet the planning standards as described in this chapter. This spreadsheet shall account for boom, recovery systems, storage, and personnel by type, quantity, home base and provider.

(2) Ecology will analyze the planning standard spreadsheet provided to determine whether the plan holder has access to equipment and personnel necessary to meet the planning standards.

(3) For purposes of determining plan adequacy, plan holders will include time for notification and mobilization of equipment and personnel. The time needed for a resource to move to the spill site is the sum of the notification, mobilization, and travel times. For dedicated resources owned by the plan holder, the mobilization planning factor to be used by the plan holder, PRC and ecology is thirty minutes. For all other dedicated response equipment the mobilization planning factor is one hour. Nondedicated resources shall have a mobilization planning factor of three hours.

(4) Equipment travel speeds shall be computed using a speed of thirty-five miles per hour for land and five knots for water. Ecology will use standard nautical charts and street maps and available on-line mapping programs to determine the length of time it will take equipment to cover a given distance.

(5) Plan holders may request approval for alternative notification, mobilization, and travel time by providing documentation to justify the request, such as actual performance during spills or unannounced drills.

(a) The request shall include date and time of performance or test, weather/sea state conditions and transportation information.

(b) If ecology accepts these alternative response times then these response times will be tested in unannounced drills to verify alternative calculations.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-350, filed 9/25/06, effective 10/26/06.]

WAC 173-182-355 Transfer sites for covered vessels at locations where transfers occur, and for facilities with a vessel terminal.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage
6	Additional 10,000 feet of boom to be used for containment, recovery or protection could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived	2 times the EDRC
12	Additional 20,000 feet of boom to be used for containment, recovery or protection could have arrived	Capacity to recover the lesser of 15% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived	2 times the EDRC
24	Additional 20,000 feet of boom to be used for containment, recovery or protection could have arrived	Capacity to recover the lesser of 20% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	3 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-355, filed 9/25/06, effective 10/26/06.]

WAC 173-182-360 General planning standards for covered vessel transit locations for all of Puget Sound.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
3	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
6	Additional 10,000 feet of boom appropriate for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived	1 times the EDRC

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
12	Additional 20,000 feet combination of appropriate types of boom to be used for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived	1.5 times the EDRC
24	Additional 20,000 feet combination of appropriate types of boom to be used for containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-360, filed 9/25/06, effective 10/26/06.]

WAC 173-182-365 Transmission pipelines and pipeline tank farms. (1) To determine the amount of boom necessary for the two hour standard the plan holder must identify by WRIA, surface waters of the state with the potential to be impacted by a spill from the pipeline.

(a) To determine the two-hour booming requirements, select the widest river within the WRIA.

(b) Determine the average river speed at this location.

(i) For rivers with a current of two knots boom in the amount of three times the widest point in the river that the pipeline could affect.

(ii) For rivers with a current of three knots the requirement would be for five times the widest point in the river that the pipeline could affect.

(iii) For rivers with a current of five knots the requirement would be for seven times the widest point in the river that the pipeline could affect.

(2) Or alternatively, the two hour standard will be two thousand feet of boom.

(3) Boom required for the two hour standard shall be dedicated to spill response and should be staged in various locations along the pipeline.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage in Barrels
1	A safety assessment of the spill by trained crew and appropriate air monitoring could have arrived		
2	Boom available at the spill source or downstream of the source could have arrived		
6	Additional 5,000 feet of boom available for containment, recovery or protection could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived	1 times the EDRC
12	Additional 20,000 feet of boom to be used for containment, protection or recovery could have arrived	Capacity to recover the lesser of 15% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived	2 times the EDRC
24	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 20% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	3 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-365, filed 9/25/06, effective 10/26/06.]

WAC 173-182-370 San Juan County planning standard. Those covered vessel and facility plan holders that transit or operate within San Juan County must meet this standard. The resources to meet the two and three hour standards must be resident.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage in Barrels
2	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage in Barrels
3	Additional 2,000 feet of boom, or 4 times the length of the largest vessel whichever is less, to be used for containment, protection or recovery could have arrived		
6	Additional 10,000 feet combination of appropriate types of boom to be used for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived	1 times the EDRC
12	Additional 20,000 feet combination of appropriate types of boom to be used for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived	1.5 times the EDRC
24	Additional 20,000 feet combination of appropriate types of boom to be used for containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-370, filed 9/25/06, effective 10/26/06.]

WAC 173-182-375 Padilla Bay planning standard. Those covered vessel and facility plan holders that transit or operate north of State Highway 20, east of a line drawn from Shannon Point on Fidalgo Island to Kelly's Point on Guemes Island, south of a line drawn from Clark Point on Guemes Island and William Point on Sammish Island must meet the following standards. Some of the GRPs may be deployed by land.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage in Barrels
1.5	A safety assessment of the spill by trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
2	Additional 2,000 feet of boom, or 4 times the length of the largest vessel whichever is less, to be used for containment, protection or recovery could have arrived		
6	Additional 10,000 feet of appropriate types of boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived. 50% must be able to work in shallow water environments - depth of 10 feet or less	1 times the EDRC
12	Additional 20,000 feet of appropriate types of boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived on scene. At least 20% of the skimming capability must be able to work in shallow water environments - depth of 10 feet or less	1.5 times the EDRC
24	Additional 20,000 feet of boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-375, filed 9/25/06, effective 10/26/06.]

WAC 173-182-380 Commencement Bay—Quartermaster Harbor planning standard. Those covered vessel and facility plan holders that transit or operate within a five nautical mile radius of a point at Lat. 47°19'29"N Long. 122°27'23"W (WGS 1984) must meet the following standards.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
1.5	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
2	Additional 2,000 feet of boom, or 4 times the length of the largest vessel whichever is less, to be used for containment, protection or recovery could have arrived		
6	Additional 10,000 feet of appropriate types of boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived	1 times the EDRC
12	Additional 20,000 feet of appropriate types of boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived	1.5 times the EDRC
24	Additional 20,000 feet of boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-380, filed 9/25/06, effective 10/26/06.]

WAC 173-182-385 Nisqually planning standard. Those covered vessel and facility plan holders that transit or operate within a five nautical mile radius of a point at Lat. 47°06'43"N Long. 122°41'53"W (WGS 1984) must meet the following standards.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
2	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
3	Additional 2,000 feet of boom, or 4 times the length of the largest vessel whichever is less, to be used for containment, protection or recovery could have arrived		
6	Additional 12,000 feet of boom with at least 2,400 feet of boom being calm water - current capable appropriate for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived. 50% must be able to work in shallow water environments - depth of 10 feet or less	1 times the EDRC
12	Additional 20,000 feet of boom with at least 1,000 feet of boom calm water - current capable, for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived. At least 50% of the skimming capability must be able to work in shallow water environments - depth of 10 feet or less	1.5 times the EDRC
24	Additional 20,000 feet of boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-385, filed 9/25/06, effective 10/26/06.]

WAC 173-182-390 Dungeness planning standard. Those covered vessel and facility plan holders that transit or operate within a five nautical mile radius of a point at Lat. 48°10'56"N Long. 123°06'38"W (WGS 1984) must meet the following standards.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
2	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
3	Additional 2,000 feet of boom, or 4 times the length of the largest vessel whichever is less, to be used for containment, protection or recovery could have arrived on scene		
6	Additional 7,000 feet of boom with at least 3,000 feet of open water boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived. At least 50% must be capable of working in open water environments	1 times the EDRC
12	Additional 20,000 feet of boom appropriate for all potential areas of impact for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived. At least 50% must be capable of working in open water environments	1.5 times the EDRC
24	Additional 20,000 feet combination of appropriate types of boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-390, filed 9/25/06, effective 10/26/06.]

WAC 173-182-395 Neah Bay staging area. Those covered vessel and facility plan holders that transit or operate within a five nautical mile radius of a point at Lat. 48°23'06"N Long. 124°35'59"W (WGS 1984) must meet the following standards. This area is very rugged, in order to accomplish deployment of resources logistical considerations will need to be planned for. Access to GRP locations may need to be done by helicopter or by land access, plans must identify all of the equipment that could be used to deploy GRPs. The boom and recovery resources to meet the two, three and six hour standards must be resident.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
2	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
3	Additional 2,000 feet or 4 times the length of the largest vessel of open water boom whichever is less, to be used for containment, protection or recovery could have arrived		
6	Additional 6,000 feet of boom with at least 4,000 feet of open water boom for containment, protection and recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived. 100% of the recovery devices must be able to work in open water environments	1 times the EDRC
12	Additional 20,000 feet of boom combination of types appropriate for containment, protection and recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived. At least 60% of the skimming capability must be able to work open water environments	1.5 times the EDRC

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
24	Additional 20,000 feet combination of appropriate types of boom for containment, protection and recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-395, filed 9/25/06, effective 10/26/06.]

WAC 173-182-400 Copalis, Flattery Rocks and Quillayute Needles planning standard. Those covered vessel and facility plan holders that transit or operate within the jurisdictional waters of Washington state east of the Three Nautical Mile Line and north of latitude 47°06'00"N, and south of latitude 48°09'00"N (WGS 1984) must meet the following standards. This area is very rugged, in order to accomplish deployment of resources logistical considerations will need to be planned for. Access to GRP locations may need to be done by helicopter or by land access, plans must identify all of the equipment that could be used to deploy GRPs.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
2	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
3	Additional 2,000 feet or 4 times the length of the largest vessel of open water boom whichever is less, to be used for containment, protection or recovery could have arrived on scene		
6	Additional 12,000 feet of boom with at least 6,000 feet of open water boom for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived. 100% of the recovery devices must be able to work in open water environments	1 times the EDRC
12	Additional 20,000 feet of boom combination of types appropriate for containment, protection and recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived. At least 60% of the skimming capability must be able to work open water environments	1.5 times the EDRC
24	Additional 20,000 feet combination of types appropriate for containment, protection and recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-400, filed 9/25/06, effective 10/26/06.]

WAC 173-182-405 Grays Harbor planning standard. Those covered vessel and facility plan holders that transit or operate within Washington waters in a five nautical mile radius of a point at Lat. 46°54'52.25"N Long. 124°10'26.45"W (WGS 1984) outside the entrance to Grays Harbor must meet these standards.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
2	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
3	Additional 2,000 feet of boom or 4 times the length of the largest vessel of boom to be used for containment, protection or recovery could have arrived on scene		

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
6	Additional 6,000 feet of boom with at least 2,000 feet of open water boom and 3,000 feet of calm water - current capable appropriate for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived. 25% must be able to work in shallow water environments - depth of 10 feet or less	1 times the EDRC
12	Additional 20,000 feet of boom with at least 1,000 feet of calm water - current capable, for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived. At least 50% must be able to work in open water, 25% of the skimming capability must be able to work in shallow water environments - depth of 10 feet or less	1.5 times the EDRC
24	Additional 20,000 feet of boom for boom containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-405, filed 9/25/06, effective 10/26/06.]

WAC 173-182-410 Willapa planning standard. Those covered vessel and facility plan holders that transit or operate within Washington waters in a five nautical mile radius of a point at Lat. 46°44'00"N Long. 124°11'00"W (WGS 1984) outside the entrance to Willapa Bay must meet these standards.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
2	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
3	Additional 2,000 feet of boom, or 4 times the length of the largest vessel whichever is less, to be used for containment, protection or recovery could have arrived		
6	Additional 10,000 feet of boom with at least 6,000 feet of boom being calm water - current capable for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,500 barrels within 24-hour period could have arrived. 10% must be able to work in shallow water environments - depth of 10 feet or less	1 times the EDRC
12	Additional 20,000 feet of boom with at least 1,000 feet of calm water - current capable, for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived. At least 50% must be able to work in open water, 25% of the skimming capability must be able to work in shallow water environments - depth of 10 feet or less	1.5 times the EDRC

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
24	Additional 20,000 feet of boom for boom containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-410, filed 9/25/06, effective 10/26/06.]

WAC 173-182-415 Cathlamet staging area. Those covered vessel and facility plan holders that transit or operate on the Columbia River between statute mile 36 and statute mile 42 must meet the following standards. The resources to meet the two and three must be resident

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
2	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
3	Additional 2,000 feet of boom, or 4 times the length of the largest vessel whichever is less, to be used for containment, protection or recovery could have arrived		
6	Additional 7,000 feet of boom with at least 4,200 feet of boom being calm water - current capable for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,000 barrels within 24-hour period could have arrived. 10% must be able to work in shallow water environments - depth of 10 feet or less	1 times the EDRC
12	Additional 20,000 feet of boom with at least 5,000 feet of calm water - current capable, for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived. At least 25% of the skimming capability must be able to work in shallow water environments - depth of 10 feet or less and 25% must be open water capable	1.5 times the EDRC
24	Additional 20,000 feet of boom with at least 10,000 feet of boom being calm water - current capable for boom containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived. At least 25% must be open water capable	2 times the EDRC

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-415, filed 9/25/06, effective 10/26/06.]

WAC 173-182-420 Vancouver planning standard. Those covered vessel and facility plan holders that transit or operate on the Columbia River between statute mile 99 and statute mile 107 must meet the following standards.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
2	A safety assessment of the spill by work boat with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
3	Additional 2,000 feet of boom, or 4 times the length of the largest vessel whichever is less, to be used for containment, protection or recovery could have arrived		
6	Additional 6,000 feet of boom with at least 3,000 feet of boom being calm water - current capable containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,000 barrels within 24-hour period could have arrived. 10% must be able to work in shallow water environments - depth of 10 feet or less	1 times the EDRC
12	Additional 20,000 feet of boom with at least 5,000 feet of boom being calm water - current capable, for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived. At least 25% of the skimming capability must be able to work in shallow water environments - depth of 10 feet or less	1.5 times the EDRC
24	Additional 20,000 feet of boom with at least 10,000 feet of boom being calm water - current capable for boom containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-420, filed 9/25/06, effective 10/26/06.]

WAC 173-182-430 Tri-cities planning standard. Those covered vessel and facility plan holders that transit or operate on the Columbia River between statute mile 316 and statute mile 322 must meet the following standards.

Time (hours)	Boom/Assessment	Minimum Oil Recovery Rate % of WCS volume per 24 hours	Minimum Storage Volume
2	A safety assessment of the spill with trained crew and appropriate air monitoring, with 1,000 feet of boom could have arrived		
3	Additional 2,000 feet of boom, or 4 times the length of the largest vessel whichever is less, to be used for containment, protection or recovery could have arrived		
6	Additional 8,000 feet of boom with at least 4,800 feet of boom being calm water - current capable for containment, protection or recovery could have arrived	Capacity to recover the lesser of 3% of worst case spill volume or 12,000 barrels within 24-hour period could have arrived. 10% must be able to work in shallow water environments - depth of 10 feet or less	1 times the EDRC
12	Additional 20,000 feet of boom with at least 5,000 feet of boom being calm water - current capable, for containment, protection or recovery could have arrived	Capacity to recover the lesser of 10% of worst case spill volume or 36,000 barrels within 24-hour period could have arrived. At least 25% of the skimming capability must be able to work in shallow water environments - depth of 10 feet or less	1.5 times the EDRC
24	Additional 20,000 feet of boom with at least 10,000 feet of boom being calm water - current capable for boom containment, protection or recovery could have arrived	Capacity to recover the lesser of 14% of worst case spill volume or 48,000 barrels within 24-hour period could have arrived	2 times the EDRC
48	More boom as necessary for containment, recovery or protection	Capacity to recover the lesser of 25% of worst case spill volume or 60,000 barrels within 24-hour period could have arrived	More as necessary to not slow the response

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-430, filed 9/25/06, effective 10/26/06.]

WAC 173-182-450 Planning standards for the Washington coast. These standards apply to covered vessels that enter Washington waters at the Columbia River, Grays Harbor or the Strait of Juan de Fuca, and offshore facilities.

Plan holders shall be capable of sustaining a worst case spill response and shall develop an addendum specific to Washington's coast, including:

(1) The capability, if applicable, for in situ burning, dispersant, and mechanical recovery;

(2) Surveillance equipment (including fixed wing, helicopters and low visibility equipment) to provide for aerial assessment of spill within six hours of spill awareness;

(3) Time frames and mechanisms to cascade in equipment and other resources for up to seventy-two hours;

(4) Ten thousand feet of boom appropriate for shoreline protection, containment and/or ten thousand feet of open water boom for enhanced skimming, containment or other use to arrive within twelve hours; and

(5) Twenty thousand feet of boom appropriate for containment, protection or recovery to arrive within twenty-four hours.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-450, filed 9/25/06, effective 10/26/06.]

Section D—Response and Protection Strategies for Sensitive Areas

WAC 173-182-510 Requirements for response and protection strategies. (1) Plan holders shall have methods to track and contain spilled oil and enhance the recovery and removal operations that are described in the plan.

(2) Each plan shall include a description of how environmental protection will be achieved, including:

(a) Protection of sensitive shoreline and island habitat by diverting or blocking oil movement;

(b) The plan shall include a description of the sensitive areas and develop strategies to protect the resources, including information on natural resources, coastal and aquatic habitat types and sensitivity by season, breeding sites, presence of state or federally listed endangered or threatened species, and presence of commercial and recreational species, physical geographic features, including relative isolation of coastal regions, beach types, and other geological characteristics;

(c) Identification of public resources, including public beaches, water intakes, drinking water supplies, and marinas;

(d) Identification of shellfish resources and methods to protect those resources;

(e) Identification of significant economic resources to be protected in the geographic area covered by the plan; and

(f) Each facility with the potential to impact a "sole source" aquifer or public drinking water source must identify the types of substrate and geographical extent of sensitive sites.

(3) The GRPs have been developed to meet these requirements and plans may refer to the NWACP to meet these requirements. If approved GRPs do not exist in the NWACP, plan holders will work with ecology to determine alternative sensitive areas to protect.

(4) Each plan shall identify potential initial command post locations.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-510, filed 9/25/06, effective 10/26/06.]

WAC 173-182-520 Planning standards for shoreline cleanup. Each plan holder shall identify and ensure the availability of response resources necessary to perform shoreline cleanup operations. This standard will be evaluated using the criteria found in 33 CFR Part 155 Appendix B and 33 CFR 154 Appendix C.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-520, filed 9/25/06, effective 10/26/06.]

WAC 173-182-530 Planning standards for ground water spills. (1) Each facility plan shall include a description of the methods to be used to immediately assess ground water spills.

(2) Facility plan holders shall include contact information in the plan for resources typically used to investigate, contain and remediate/recover spills to ground water.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-530, filed 9/25/06, effective 10/26/06.]

WAC 173-182-540 Planning standards for wildlife rescue and rehabilitation. The plan shall identify applicable federal, state and NWACP requirements for wildlife rescue and rehabilitation, and describe the equipment, personnel, resource and strategies for compliance with the requirements. These resources shall have the capability to arrive on scene within twenty-four hours of spill awareness.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-540, filed 9/25/06, effective 10/26/06.]

Section E—Plan Evaluation

WAC 173-182-610 Plan evaluation criteria. Plan holders shall prepare a plan that demonstrates capability, to the maximum extent practicable, of promptly and properly removing oil and minimizing environmental damage from a variety of spill sizes, up to and including worst case spills. Ecology will evaluate plans based on these conditions:

(1) Only ecology approved PRC resources, plan holder owned resources and resources guaranteed through written mutual aid agreements or letters of intent or agreement shall be counted when calculating the planning standards. In the case of nondedicated storage devices, these will be derated by fifty percent of maximum storage volume (counted at a one to two ratio) and acquisition of these resources will be tested in unannounced drills.

(2) If a plan holder operates in an area where more than one planning standard designation applies, ecology will determine the more stringent of planning standards.

(3) Ecology will count equipment if it is appropriate for the operating environment within the geographic area defined in the plan. Ecology will use criteria from sources such as the ASTM International documents, World Catalogue, manufacturer's recommendations, the Regional Response list, the federal Oil Spill Removal Organization guidelines, the *Field Operations Guide* resource typing guidelines and drills and spills to make approval and verification determinations on operating environments.

(4) Ecology will count boom if it is appropriate to the operating environment and support equipment is identified. Support equipment for boom means transportation devices, cranes, anchors, boom tackle, connectors, work boats and operators.

(5) Ecology will only count dedicated response resources towards the two hour standards.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-610, filed 9/25/06, effective 10/26/06.]

WAC 173-182-620 Alternative method of evaluating planning standards. (1) A plan holder may request that ecology review and approve a plan based on alternative planning standards. Such requests should be submitted with the plan and shall be subject to a thirty day public review period.

(2) The proposal must include, at a minimum:

(a) A reference to which planning standard(s) in this chapter the proposal will be substituted for;

(b) A detailed description of the alternative proposal including equipment, personnel, response procedures, and maintenance systems that are being proposed; and

(c) An analysis of how the proposal offers equal or greater protection or prevention measures as compared to the requirement in this chapter.

(3) Ecology may approve the alternative compliance proposal if, based upon the documents submitted and other information available to the agency, it finds that:

(a) The alternative compliance proposal is complete and accurate; and

(b) The alternative compliance proposal provides an equivalent or higher level of protection in terms of spill preparedness and response when compared with the planning standards found in this chapter.

(4) Ecology may reconsider an approval at any time, in response to significant plan changes.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-620, filed 9/25/06, effective 10/26/06.]

WAC 173-182-630 Process for plan approval. (1) Upon receipt of a plan, ecology shall evaluate whether the plan is complete, and if not, the plan holder shall be notified of deficiencies within five days. The public review period does not begin until a complete plan is received.

(2) Once a plan is complete, ecology shall notify interested parties and make plans available for public review. Comments will be accepted during the first thirty calendar days of the review period.

(3) If the plan is approved, the plan holder receives a certificate describing the terms of approval, including plan expiration dates.

(a) Ecology may approve a plan conditionally and require a plan holder to operate under specific restrictions until unacceptable components of the plan are revised, resubmitted and approved. Such notice will include specific reference to the regulatory standard in question.

(i) Precautionary measures may include, but are not limited to, additional information for the plan, reducing oil transfer rates, increasing personnel levels, or restricting operations to daylight hours. Precautionary measures may also include additional requirements to ensure availability of response equipment.

(ii) Plan holders who fail to meet conditional requirements or provide required changes in the time allowed will forfeit conditional approval status.

(b) If plan approval is denied, the plan holder shall receive an explanation of the factors for denial and a list of actions necessary to gain approval. The plan holder shall not engage in oil storage, transport, transfer, or other operations without an approved plan.

(4) Ecology may review a plan following an actual spill or drill of a plan and may require revisions as appropriate.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-630, filed 9/25/06, effective 10/26/06.]

PART III: DRILL AND EQUIPMENT VERIFICATION PROGRAM

WAC 173-182-700 Drill participation, scheduling and evaluation. (1) Plan holders and PRCs shall participate in a drill and equipment verification program for the purpose of ensuring that all contingency plan components function to provide, to the maximum extent practicable, prompt and proper removal of oil and minimization of damage from a variety of spill sizes. In Washington, a modified triennial cycle for drills, as found in the National Preparedness for Response Drill Program (PREP), is relied on to test each component of the plan.

(2) Ecology shall be provided an opportunity to help design and evaluate all tabletop and deployment drills. To ensure this, plan holders shall schedule drills on the NWACP area exercise calendar. Scheduling requirements are noted in the table below.

(3) Ecology shall mail a written drill evaluation report for drills to the plan holder. Credit will be granted for drill objectives that are successfully met.

(4) Objectives that are not successfully met shall be tested again and must be successfully demonstrated within the triennial cycle, except that significant failures will be retested within thirty days.

(5) Plan deficiencies identified in the written evaluation may require plan holders to make specific amendments to the plan.

(6) A plan holder may request an informal review of the ecology evaluation within thirty days of receipt of the report.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-700, filed 9/25/06, effective 10/26/06.]

WAC 173-182-710 Type and frequency of drills. The following drills shall be conducted within each triennial cycle.

Type of Drill	Frequency Within the Triennial Cycle	Special Instructions	Scheduling Instructions
Tabletop drills	3 - one in each year of the cycle	One of the three shall involve a worst case discharge scenario. The worst case discharge scenario drill shall be conducted once every three years.	Must be scheduled at least 60 days in advance, except the worst case discharge scenario at least 90 days in advance.
Deployment drills	6 - done two per year	These drills shall include, GRP deployments, testing of each type of equipment to demonstrating compliance with the planning standards.	Scheduled at least 30 days in advance.
Ecology initiated unannounced drills	As necessary	This drill may involve testing any component of the plan, including notification procedures, deployment of personnel, boom, recovery and storage equipment.	No notice.

(1) Tabletop drills:

(a) Tabletop drills are intended to demonstrate a plan holder's capability to manage a spill using the ICS. Role playing shall be required in this drill.

(b) Once during each three year cycle, the plan holder shall ensure that key members of the regional/national "away" team as identified in the plan shall be mobilized in state for a drill, except that: At ecology's discretion, away team members may be evaluated in out-of-state tabletop drills if ecology has sufficient notice, an opportunity to participate in the drill planning process, and that the out-of-state drills are of similar scope and scale to what would have

occurred in state. In this case, key away team members shall be mobilized in this state at least once every five years.

(2) Equipment deployment drills:

(a) During the triennial cycle, deployment drills shall include a combination of owned and contracted assets.

(b) Plan holders should ensure that each type of equipment listed in the plan and personnel responsible for operating the equipment are tested during each triennial cycle. Plan holders must design drills that will demonstrate the ability to meet the planning standards, including recovery systems and system compatibility. Drills shall be conducted in all operating environments that the plan holder could impact from spills.

(c) At least twice during a triennial cycle, plan holders shall deploy a GRP strategy identified within the plan. If no GRPs exist for the operating area, plan holders will consult with ecology to determine alternative sensitive areas to protect.

(d) Plan holders may request credit for the prebooming of an oil transfer.

(3) Plan holders may receive credit for GRP deployment drills conducted by PRCs if:

(a) The PRC is listed in the plan; and

(b) The plan holder operates in the area, schedules and participates in the drill.

(4) Ecology initiated scheduled inspections and unannounced deployment and tabletop drills.

(a) In addition to the drills listed above, ecology will implement a systematic scheduled inspection and unannounced drill program to survey, assess, verify, inspect or deploy response equipment listed in the plan. This program will be conducted in a way so that no less than fifty percent of the resources will be confirmed during the first triennial cycle, and the remaining fifty percent during the subsequent triennial cycle.

(b) Unannounced drills may be called when specific problems are noted with individual plan holders, or randomly, to strategically ensure that all operating environments, personnel and equipment readiness have been adequately tested.

(c) Unannounced notification drills are designed to test the ability to follow the notification and call-out process in the plan.

(d) Immediately prior to the start of an unannounced deployment or tabletop drill, plan holders will be notified in writing of the drill objectives, expectations and scenario.

(e) Plan holders may request to be excused if conducting the drill poses an unreasonable safety or environmental risk, or significant economic hardship. If the plan holder is excused, ecology will conduct an unannounced drill at a future time.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-710, filed 9/25/06, effective 10/26/06.]

WAC 173-182-720 Evaluation criteria. The PREP guidance document lists fifteen core components that shall be demonstrated during the triennial cycle. Ecology adopts the fifteen core components as the criteria used to evaluate drills. The core components are as follows:

(1) Notifications: Test the notifications procedures identified in the plan.

(2) Staff mobilization: Demonstrate the ability to assemble the spill response organization identified in the plan.

(3) Ability to operate within the response management system described in the plan. This includes demonstration of the ICS staffing and process identified in the plan.

(4) Source control: Demonstrate the ability of the spill response organization to control and stop the discharge at the source.

(5) Assessment: Demonstrate the ability of the spill response organization to provide an initial assessment of the discharge and provide continuing assessments of the effectiveness of the tactical operations.

(6) Containment: Demonstrate the ability of the spill response organization to contain the discharge at the source or in various locations for recovery operations.

(7) Recovery: Demonstrate the ability of the spill response organization to recover, mitigate, and remove the discharged product. Includes mitigation and removal activities, e.g., dispersant use, in situ burn use, and bioremediation use.

(8) Protection: Demonstrate the ability of the spill response organization to protect the environmentally and economically sensitive areas identified in the NWACP and the plan.

(9) Disposal: Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris in compliance with guidance found in the NWACP.

(10) Communications: Demonstrate the ability to establish an effective communications system throughout the scope of the plan for the spill response organization.

(11) Transportation: Demonstrate the ability to provide effective multimode. Transportation both for execution of the discharge and support functions.

(12) Personnel support: Demonstrate the ability to provide the necessary logistical support of all personnel associated with the response.

(13) Equipment maintenance and support: Demonstrate the ability to maintain and support all equipment associated with the response.

(14) Procurement: Demonstrate the ability to establish an effective procurement system.

(15) Documentation: Demonstrate the ability of the plan holder's spill management organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-720, filed 9/25/06, effective 10/26/06.]

WAC 173-182-730 Other ways to get drill credit. (1) Plan holders may request drill credit for a response to an actual spill, provided that ecology has an opportunity to participate and evaluate the spill response. Credit from spills shall not entirely alleviate the plan holder's responsibility to drill.

To obtain credit, a written request to ecology shall be made within sixty days of completion of the cleanup operations.

(a) The request shall include documentation supporting the components of WAC 173-182-720.

(b) Plan holders shall have up to ninety days to submit a lessons learned summary supporting the request for drill credit.

(2) Plan holders may request drill credit for out-of-state tabletop drills if:

(a) Ecology has been invited to attend the drill;

(b) Ecology has an opportunity to participate in the planning process for the drill. There shall be a meeting to discuss the scope and scale of the exercise, the drill objectives and the types of criteria for which Washington credit may be applicable;

(c) Documentation of the drill and self certification documentation shall be provided to ecology within thirty days of the drill;

(d) The plan holder has one response plan for a number of facilities or a fleet of vessels; and

(e) Plan holders seeking credit for a scheduled out-of-state drill shall notify ecology in writing ninety days in advance, to provide ecology an opportunity to participate.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-730, filed 9/25/06, effective 10/26/06.]

WAC 173-182-740 Drill requirement waivers. (1) Plan holders may request a waiver for a deployment or tabletop drill requirements.

(2) The request shall be in writing and shall describe why a waiver should be considered and how the plan holder is meeting the purpose and intent of the drill program with the waiver.

(3) Plan holder's requests for a drill waiver will be made available for public review for a period of thirty days.

(4) Ecology will evaluate the request and respond in writing within sixty calendar days of receipt of the letter.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-740, filed 9/25/06, effective 10/26/06.]

PART IV: PRIMARY RESPONSE CONTRACTOR (PRC) STANDARDS

WAC 173-182-800 PRC application. (1) To become a state-approved PRC, a response contractor must:

(a) Submit an application as set forth in subsection (2) of this section;

(b) Have a process to provide twenty-four hour/day contact for spill response;

(c) Commit to begin mobilization efforts immediately upon notification but no later than one hour from notification of a spill;

(d) Maintain equipment in accordance with manufacturer specifications; and

(e) Assist plan holders in meeting the requirements for plans and drills in Washington.

(2) To apply, a contractor should complete, sign and submit the application form number ECY 070-216.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-800, filed 9/25/06, effective 10/26/06.]

WAC 173-182-810 Submittal and review of contractor applications. (1) Once an application is received, ecology will determine whether it is complete. If not, the response contractor shall be notified of deficiencies in writing and given a time period for submitting the required information.

(2) Equipment and personnel readiness will be verified once the application is approved. Ecology may inspect equipment, training records, maintenance records, drill records, and may request a test of the call-out procedures, and require operation of each type of equipment listed in the application. These inspections may be conducted at any/all equipment locations. Any resources not on-site at the time of an inspection shall be accounted for by company records.

(3) If the application is approved and the verification is satisfactory, the contractor shall receive a letter of approval describing the terms of approval, including expiration dates and EDRC of the recovery equipment. PRC approvals will be reviewed by ecology every three years. Applications shall be resubmitted forty-five calendar days in advance of the expiration date.

(4) If the application is not approved, the contractor shall receive an explanation of the factors for disapproval and a list of actions to be taken to gain approval.

(5) Approval of a response contractor by ecology does not constitute an express assurance regarding the adequacy of the contractor nor constitute a defense to liability imposed under state law.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-810, filed 9/25/06, effective 10/26/06.]

WAC 173-182-820 Significant changes require notification. (1) The PRC is responsible to provide written notification to ecology and plan holders to whom they are obligated, within twenty-four hours, of any significant change in the information reported in the approved application. The notice shall include the identification of back up resources sufficient to maintain the PRC readiness level, and the estimated date that the original equipment shall be back in full service. Changes which are considered significant include loss of equipment that affect the planning standard spreadsheet of any plan holder covered by the PRC, personnel identified in ICS positions by plan holders, changes in equipment ownership, or a greater than ten percent decrease in available spill response equipment. Failure to report changes could result in the loss of PRC approval. Notification by facsimile or e-mail will be considered written notice.

(2) If ecology determines that PRC approval conditions are no longer met, approval may be revoked or conditionally modified. The PRC will receive a written notice of the loss of approval or conditional modifications and a time period to either appeal or correct the deficiency.

(3) Ecology will immediately notify plan holders of changes in the approval status of PRCs.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-820, filed 9/25/06, effective 10/26/06.]

PART V: RECORDKEEPING AND COMPLIANCE INFORMATION

WAC 173-182-900 Recordkeeping. Ecology may verify compliance with this chapter by examining training and equipment maintenance records, drill records, accuracy of call-out and notification lists, spill management team lists,

ICS forms, waste disposal records, post-spill reviews and records on lessons learned.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-900, filed 9/25/06, effective 10/26/06.]

WAC 173-182-910 Noncompliance. (1) If an owner or operator of a covered vessel, onshore or offshore facility, a person or plan holder is unable to comply with an approved contingency plan or otherwise fails to comply with requirements of this chapter, ecology may, at its discretion:

(a) Place conditions on approval; and

(b) Require additional drills to demonstrate effectiveness of the plan; or

(c) Revoke the approval status.

(2) Approval of a plan by ecology does not constitute an express assurance regarding the adequacy of the plan nor constitute a defense to liability imposed under state law.

(3) Any violation of this chapter may be subject to the enforcement and penalty sanctions.

(4) Ecology may assess a civil penalty of up to one hundred thousand dollars against any person who is in violation of this section. Each day that a covered vessel, facility or person is in violation of this section shall be considered a separate violation.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-910, filed 9/25/06, effective 10/26/06.]

WAC 173-182-920 Operation without plan. (1) A covered vessel may not enter or operate on the waters of the state without an approved, or conditionally approved, contingency plan, except that a covered vessel not in compliance with this chapter may enter waters of the state if the Coast Guard has determined that the vessel is in distress.

(2) The owner or operator of an onshore or offshore facility may not operate without an approved, or conditionally approved, plan nor transfer cargo or passengers to or from a covered vessel that does not have an approved, or conditionally approved, contingency plan. The owner or operator of a covered vessel may not transfer oil to or from an onshore or offshore facility that does not have an approved or conditionally approved contingency plan.

(3) Ecology may assess a civil penalty under RCW 43.21B.300 of up to one hundred thousand dollars against any person who is in violation of this section. In the case of a continuing violation, each day's continuance shall be considered a separate violation.

(4) Any person found guilty of willfully violating any of the provisions of this section, or any final written orders or directive of ecology or a court shall be deemed guilty of a gross misdemeanor and upon conviction shall be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment in the discretion of the court. Each day upon which a willful violation of the provisions of this chapter occurs may be deemed a separate and additional violation.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-920, filed 9/25/06, effective 10/26/06.]

WAC 173-182-930 Severability. If any provision of this chapter is held invalid, the remainder of the rule is not affected.

[Statutory Authority: Chapters 88.46, 90.56, and 90.48 RCW. 06-20-035 (Order 00-03), § 173-182-930, filed 9/25/06, effective 10/26/06.]

Chapter 173-183 WAC

PREASSESSMENT SCREENING AND OIL SPILL COMPENSATION SCHEDULE REGULATIONS

WAC

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WAC 173-183-010 Purpose. The purpose of this rule is to establish procedures for convening a resource damage assessment (RDA) committee, preassessment screening of resource damages resulting from oil spills to determine which damage assessment methods to use, and determining damages in cases where the compensation schedule is selected as the damage assessment methodology to apply. The RDA committee, utilizing the preassessment screening process, shall determine whether a detailed resource damage assessment studies should be conducted or whether the compensation schedule authorized under RCW 90.48.366 and 90.48.367 will be used to assess damages for each oil spill into state waters.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-010, filed 4/23/92, effective 5/24/92.]

WAC 173-183-020 Authority. This regulation implements RCW 90.48.366, 90.48.367, and 90.48.368 of the Water Pollution Control Act, as amended in 1987, 1989, and 1991.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-020, filed 4/23/92, effective 5/24/92.]

WAC 173-183-030 Applicability. This chapter shall apply to all oil spills into the waters of the state. Under this chapter, the department may require or take any and all actions necessary to investigate and assess damages from those spills.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-030, filed 4/23/92, effective 5/24/92.]

WAC 173-183-100 Definitions. (1) "Columbia River estuary environment" means the habitat and all other public resources associated with or dependent on the estuarine waters of the Columbia River.

(2) "Compensation schedule" means the set of procedures enumerated in WAC 173-183-300 through 173-183-870 to determine the public resource damages resulting from an oil spill for cases in which damages are not quantifiable at a reasonable cost.

(3) "Damages" means the amount of monetary compensation necessary to:

(a) Restore any injured public resource to its condition before sustaining injury as a result of an oil discharge in violation of chapter 90.48 or 90.56 RCW, to the extent technically feasible, including any loss in value incurred during the period between injury and restoration in cases where damages are quantifiable at a reasonable cost; or

(b) Adequately compensate for the loss or diminution in value as determined through application of the compensation schedule provided in WAC 173-183-300 through 173-183-870 in cases where damages are not quantifiable at a reasonable cost.

(4) "Department" means the department of ecology.

(5) "Director" means the director of the department of ecology, or his or her designee.

(6) "Discharge" means any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

(7) "Estuarine environment" means the habitat and all other public resources associated with or dependent on estuarine waters of the state.

(8) "Estuarine waters" or "estuarine waters of the state" means the waters within state jurisdiction that are semienclosed by land but have open, partly obstructed, or sporadic access to the ocean, and in which seawater is at least occasionally diluted by freshwater runoff from land. Estuarine waters of the state include adjacent tidal flats and beaches up to the limit of tidal inundation or wave splash. For purposes of this chapter, estuarine waters of the state include those designated on the map attached as Appendix 1 to this chapter, and the portion of the Columbia River estuary within state jurisdiction upstream to river mile 46 or the line drawn perpendicularly across the river which touches the upstream end of Puget Island.

(9) "Freshwater stream, river, and lake environment" means the habitat and all other public resources associated with or dependent on the streams, rivers, and lakes under state jurisdiction.

(10) "Freshwater wetland" or "freshwater wetlands" means lands transitional between terrestrial and freshwater aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water, and lands having one or more of the following attributes at least periodically: The land supports predominantly hydrophytes; the substrate is predominately undrained hydric soil; and the substrate is nonsoil and saturated with water or covered by shallow water at some time during the growing season each year.

(11) "Freshwater wetland environment" means the habitat and all other public resources associated with or dependent on the freshwater wetlands of the state.

(12) "Freshwaters" or "freshwaters of the state" means all waters of the state except those classified as marine and estuarine waters of the state as defined in this chapter, including lakes, rivers, streams, ponds, other surface waters and wetlands.

(13) "Habitat" means the substrate and complement of associated biota not otherwise included in the vulnerability rankings in the applicable compensation schedule(s) that is part of this chapter.

(14) "Immediate removal" or "immediately removes" means removal of the spilled oil, or portions thereof, from the receiving environment by the potentially liable party within six hours of spill initiation.

(15) "Initial department responder" means the department of ecology spill responder who first arrives at the scene of the spill.

(16) "Injury" or "injuries" means an adverse change, either long- or short-term, to a public resource resulting either directly or indirectly from exposure to a discharge of oil in violation of chapter 90.48 or 90.56 RCW.

(17) "Loss in services" means a temporary or permanent reduction in the ability of the resource to provide its use or benefit to the public or to other resources.

(18) "Loss in value or lost value" of a damaged resource means the amount equal to the sum of consumptive, nonconsumptive, and indirect use values, as well as lost taxation, leasing, and licensing revenues during the period between injury and restoration; indirect use values may include existence, bequest, option, and aesthetic values.

(19) "Marine and estuarine habitats" mean the habitats found in marine and estuarine waters of the state as defined in this chapter.

(20) "Marine birds" means all seabirds, shorebirds, waterfowl, raptors and other avifauna that are dependent on marine and estuarine environments of the state for some portion of their life requirements including feeding, breeding, and habitat.

(21) "Marine environment" means the habitat and all other public resources associated with or dependent on marine waters of the state.

(22) "Marine fish," in context of the compensation schedule, means the species listed in Appendix 2.

(23) "Marine mammals" means the cetaceans, pinnipeds, sea otters, and river otters associated with marine and estuarine waters of the state.

(24) "Marine waters" or "marine waters of the state" means all coastal waters not appreciably diluted by freshwater, including open coastal areas, straits, and euhaline inland waters extending from the seaward limit of state jurisdiction to:

(a) The landward limit of tidal inundation or wave splash; or

(b) The seaward limit of estuarine waters of the state.

(25) "Not quantifiable at a reasonable cost" means any diminution in value of a public resource that cannot be measured with sufficient precision or accuracy by currently available and accepted procedures within a reasonable time frame.

(26) "Oil" or "oils" means oil of any kind that is liquid at atmospheric temperature and pressure and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, biological oils and blends, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of C.F.R. Part 302 adopted August 14, 1989, under section 101(14) of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by P.L. 99-499.

(27) "On scene coordinator" (OSC) means the department official who supervises the spill response team and compiles the initial report concerning the facts and circumstances of the spill for the department.

(28) "Person" means any political subdivision, government agency, municipality, industry, public or private corporation, copartnership, association, firm, individual, or any other entity whatsoever.

(29) "Potentially liable party" means the person or persons who may be liable for damages resulting from an oil spill.

(30) "Preassessment screening" means the investigation and determination of the facts and circumstances surrounding an oil spill which are used to determine whether a damage assessment investigation should be conducted, or alternatively, whether the compensation schedule will be used to assess damages.

(31) "Public resources" or "publicly owned resources" means fish, animals, vegetation, land, waters of the state, and other resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the state.

(32) "Reasonable cost" for a damage assessment means a cost that is anticipated to be less than the amount of damages that may have occurred or may occur.

(33) "Receiving environment" means waters of the state exposed to the spill and all public resources associated with or dependent on the exposed waters.

(34) "Resource damage assessment committee" or "RDA committee" means the preassessment screening committee established under RCW 90.48.368 and charged with determining whether to conduct detailed damage assessment studies or to apply the compensation schedule for oil spills into waters of the state, and overseeing reconnaissance and damage assessment activities.

(35) "Restoration or enhancement projects or studies" means an activity that is intended to restore, replenish, restock, or replace public resources, or to further investigate the long-term effect of resource injuries as determined by the RDA committee for the benefit of the public.

(36) "Salmon," in context of the compensation schedule, means the species listed in Appendix 3.

(37) "Scientific advisory board" means the advisory group established by the department to assist in development of the compensation schedule as required by RCW 90.48.-366.

(38) "Season" or "seasons" means winter, spring, summer, and/or fall, where winter occurs during the months December through February, spring occurs during the months March through May, summer occurs during the months June through August, and fall occurs during the months September through November.

(39) "Shellfish," in context of the compensation schedule, means the species listed in Appendix 4, but does not include privately grown shellfish on public lands.

(40) "Spill" means an unauthorized discharge of oil into waters of the state.

(41) "State" means state of Washington.

(42) "State trustee agencies" means the state agencies with responsibility for protecting and/or managing public resources.

(43) "Subregion" or "subregions" means the areas into which state marine and estuarine waters have been divided for purposes of the compensation schedule as designated on the maps attached as Appendix 1.

(44) "Technical feasibility" or "technically feasible" means that given available technology, a restoration or enhancement project can be successfully completed at a cost that is not disproportionate to the value of the public resource before the injury.

(45) "Trust resources" means the public resource(s) under a particular state agency's jurisdiction for protection and/or management.

(46) "Unquantifiable damage" means any diminution in value of a public resource that cannot be measured with suf-

ficient precision or accuracy by currently available and accepted procedures within a reasonable period of time.

(47) "Waters of the state" or "state waters" includes lakes, rivers, ponds, streams, inland waters, underground water, salt waters, estuaries, tidal flats, beaches, and lands adjoining the seacoast of the state, sewers, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

(48) "Wetland" or "wetlands" means lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water, and lands having one or more of the following attributes at least periodically: The land supports predominantly hydrophytes; the substrate is predominantly undrained hydric soil; and the substrate is nonsoil and saturated with water or covered by shallow water at some time during the growing season each year.

[Statutory Authority: Chapters 90.56, 88.46, 90.48 RCW. 07-22-119 (Order 07-14), § 173-183-100, filed 11/7/07, effective 12/8/07. Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-100, filed 4/23/92, effective 5/24/92.]

THE RDA COMMITTEE AND PREASSESSMENT SCREENING

WAC 173-183-200 Preassessment screening process. (1) Findings from the preassessment screening shall be used to determine whether a formal damage assessment investigation should be conducted or whether the compensation schedule will be applied to assess public resource damages associated with spills of oil into state waters.

(2) The preassessment screening process shall occur concurrently with reconnaissance and cleanup activities as defined in WAC 173-183-220(2).

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-200, filed 4/23/92, effective 5/24/92.]

WAC 173-183-210 Incident discovery and reporting. The state on-scene coordinator (OSC) or initial department responder, shall provide prompt notice to the committee chair when there is evidence of an oil spill into state waters.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-210, filed 4/23/92, effective 5/24/92.]

WAC 173-183-220 Initial site reconnaissance and notification of the RDA committee. (1) The on-scene coordinator (OSC) or initial department responder to an oil spill shall report the following to the RDA committee chair as soon as practicable:

(a) Initial determination of the type and character of the oil(s) spilled;

(b) Initial determination of location of the spill, general type of habitat(s) impacted, geographic coverage of the spill, and amount of oil(s) spilled; and

(c) Initial determination of potentially liable party identity.

(2) The RDA committee chair shall notify RDA committee members of an oil spill as soon as practicable after receiving a report by the OSC or initial department responder, and provide a preliminary assessment of the potential risks to public resources.

(3) The RDA committee may, upon notification of an oil spill, initiate or authorize the RDA committee chair to initiate any necessary reconnaissance activities to:

(a) Further identify public resources at risk;

(b) Determine the extent to which public resources are, or may be, adversely affected;

(c) Document actual or potential injury to public resources; and

(d) Determine which local, state, and federal agencies and Indian tribes may have interests or jurisdiction over any of the public resources that may be adversely affected by the spill.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-220, filed 4/23/92, effective 5/24/92.]

WAC 173-183-230 RDA committee. (1) The following state agencies shall have membership on the RDA committee: Departments of ecology, fisheries, health, natural resources, wildlife, and the parks and recreation commission.

(2) Agencies with membership on the RDA committee shall nominate a representative and alternate to be appointed to the committee by the director.

(3) The department of ecology shall chair the RDA committee.

(4) The department may select representatives from the following agencies and governments for participation on the RDA committee on a spill-by-spill basis: Departments of emergency management, as well as other federal, state, and local agencies, and tribal and local governments whose presence would enhance reconnaissance or damage assessment activities of spill response.

If a selected representative declines or is unable to participate on the committee, the representative shall provide written notice to the department within twelve hours of being notified so that a replacement member may be appointed. Prompt consideration will be given to other local, state, or federal agency, or tribal government requests for participation on the RDA committee on a spill-by-spill basis.

(5) The RDA committee shall convene as soon as possible, but no later than thirty days after the department receives notification of a spill, or the next regularly scheduled meeting of the committee following a spill.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-230, filed 4/23/92, effective 5/24/92.]

WAC 173-183-240 Preassessment screening. (1) The primary duty of the RDA committee during the preassessment screening is to determine whether detailed damage assessment studies should be conducted under RCW 90.48.367, or alternatively, whether the compensation schedule authorized under RCW 90.48.366 and 90.48.367 will be used to assess damages.

(2) The RDA committee shall consider information collected during reconnaissance and cleanup as well as other relevant background information pertaining to threatened public resources or resource use for the preassessment screening.

(3) The RDA committee shall consider the following factors when determining the type of damage assessment to be conducted:

(a) Whether evidence from reconnaissance investigations suggests that injury has occurred or is likely to occur to publicly owned resources;

(b) The potential loss in services provided by public resources injured or likely to be injured and the expected value of the potential loss;

(c) Whether a restoration project to return lost services is technically feasible;

(d) The accuracy of damage quantification methods that could be used and the anticipated cost-effectiveness of applying each method;

(e) The extent to which likely injury to public resources can be verified with available quantification methods; and

(f) Whether the injury, once quantified, can be translated into monetary values with sufficient precision or accuracy.

(4) The department shall apply the compensation schedule to determine the amount of damages if the RDA committee determines that:

(a) Restoration or enhancement of the injured resources is not technically feasible;

(b) Damages are not quantifiable at a reasonable cost; and

(c) The restoration and enhancement projects or studies proposed by the potentially liable party are insufficient to adequately compensate the people of the state for public resource damages.

(5) The RDA committee is encouraged to work cooperatively with the potentially liable party, to the greatest extent possible, to increase the efficiency of the damage assessment process, and shall provide for the ongoing involvement of the potentially liable party.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-240, filed 4/23/92, effective 5/24/92.]

WAC 173-183-250 Damage assessment studies. (1) If the RDA committee, after considering the factors enumerated in WAC 173-183-240(3), determines that the damages to be investigated are quantifiable at a reasonable cost and that proposed assessment studies are clearly linked to quantification of the damages incurred, then the RDA committee may authorize damage assessment studies.

(2) If the RDA committee authorizes damage assessment studies under RCW 90.48.367(3), the RDA committee chair shall promptly notify the potentially liable party of this decision.

(3) The state trustee agency(ies) responsible for the potentially injured resource and habitat shall conduct the damage assessment studies and pursue all appropriate remedies with the responsible party. The RDA committee shall consider the proposed damage assessment studies and the effects of any proposed remedies in a timely manner, consistent with WAC 173-183-240(3).

(4) As new information becomes available, the committee may reevaluate the scope of damage assessment studies using the factors listed in WAC 173-183-240(3), and may reduce or expand the scope of damage assessment studies as appropriate.

(5) The department may negotiate with a potentially liable party to perform restoration and enhancement projects or studies which may substitute for all or part of the damages determined through the damage assessment studies.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-250, filed 4/23/92, effective 5/24/92.]

WAC 173-183-260 Restoration and enhancement projects proposed by the PLP. (1) The potentially liable party (PLP) may propose restoration or enhancement projects or studies during the preassessment screening phase to substitute for some or all of:

(a) The damages calculated from the compensation schedule authorized under RCW 90.48.366 and 90.48.367; or

(b) The claims from damage assessment studies authorized under RCW 90.48.142 and 90.48.367.

(2) To be considered as part of the preassessment screening decision process specified in WAC 173-183-240, PLP proposals must be submitted to the RDA committee chair within ten days of PLP notification by the RDA committee.

(3) The RDA committee may accept the PLP proposal in lieu of some or all of:

(a) The damages calculated from the compensation schedule authorized under RCW 90.48.366 and 90.48.367; or

(b) The claims from damage assessment studies authorized under RCW 90.48.142 and 90.48.367.

(4) For the RDA committee to find a proposal sufficient to adequately compensate the people of the state for public resource damages, the PLP proposal must at least contain the following elements:

(a) An investigation of all potentially injured public resources to determine if they have been exposed to the spilled oil;

(b) Follow-up investigations on all public resources documented to be exposed to determine if exposure has resulted in injury;

(c) Follow-up investigations on all public resources documented to be injured by the spill to quantify the injury;

(d) Quantification of damages for all public resources where injury has been quantified; and

(e) Restoration/enhancement projects to compensate for public resource injuries to the extent technically feasible; and, for damages that cannot be compensated by technically feasible restoration or enhancement projects, implementation of projects/studies to compensate for these losses. Public resource restoration and enhancement projects and studies shall be prioritized as follows:

(i) On-site, in-kind;

(ii) Off-site, in-kind;

(iii) On-site, out-of-kind; and

(iv) Off-site, out-of-kind.

(5) Prior to the PLP initiating any projects or studies intended to substitute for damages, the PLP's proposal must be approved by the RDA committee. If a PLP proposal is found to be acceptable to the RDA committee, the committee shall notify the PLP of this decision.

(6) If RDA committee finds a PLP project and study plan proposal to be acceptable, the RDA committee shall oversee all projects and studies conducted by the PLP.

(7) Upon completion of the PLP's project and study plan, the RDA committee shall decide the extent to which the PLP's projects and studies substitute for public resource damages as identified in subsection (3) of this section.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-260, filed 4/23/92, effective 5/24/92.]

WAC 173-183-270 Participation. To efficiently implement WAC 173-183-250 the RDA committee may develop public resource damage assessment agreements to facilitate cooperation between state and federal agencies and Indian tribes.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-270, filed 4/23/92, effective 5/24/92.]

OIL SPILL COMPENSATION SCHEDULE GENERAL

WAC 173-183-300 Purpose. The purpose of this section is to establish a compensation schedule that will provide a simple methodology for assessing damages to public resources from oil spills into fresh, marine, and estuarine waters of the state. The intent is to provide an alternate methodology to the extensive and expensive natural resource damage assessments presently being conducted following oil spills. This section provides the procedures for:

(1) Establishing the relative vulnerability of public resources to oil spills by taking into consideration the relative toxicity of the oil spilled and the sensitivity of public resources present in the receiving environment; and

(2) Determining adequate monetary compensation for injury to public resources resulting from an oil spill.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-300, filed 4/23/92, effective 5/24/92.]

WAC 173-183-310 Authority. This regulation implements the establishment of a resource damage compensation schedule consistent with the provisions of RCW 90.48.366 for the discharge of oil in violation of chapter 90.48 or 90.56 RCW which requires the department to establish the compensation schedule in consultation with the departments of fisheries, wildlife, and natural resources, and the parks and recreation commission, and with the assistance of a scientific advisory board.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-310, filed 4/23/92, effective 5/24/92.]

WAC 173-183-320 Compensation schedule. (1) The compensation schedule determines adequate compensation for unquantifiable damages or for damages not quantifiable at a reasonable cost for persons liable under RCW 90.48.142.

(2) Adequate compensation as determined from the compensation schedule is derived from preexisting information of resource vulnerability to a class of oil spilled in a particular subregion of the state during a particular season, plus any additional information collected at the reconnaissance stage of the spill response.

(3) Under RCW 90.48.366, the amount of compensation assessed under this schedule shall be no less than one dollar per gallon of oil spilled and no greater than one hundred dollars per gallon of oil spilled.

[Statutory Authority: Chapters 90.56, 88.46, 90.48 RCW. 07-22-119 (Order 07-14), § 173-183-320, filed 11/7/07, effective 12/8/07. Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-320, filed 4/23/92, effective 5/24/92.]

WAC 173-183-330 Resource damage assessment using the compensation schedule. The compensation schedule includes:

(1) A relative ranking for each of the classes of oil defined in this chapter as determined by their known chemical, physical, and mechanical properties, and other factors that may affect the severity and persistence of the spill on the receiving environment;

(2) A relative vulnerability ranking of receiving environments which takes into account location of the spill, habitat and public resource sensitivity to oil, seasonal distribution of public resources, areas of recreational use and aesthetic importance, the proximity of the spill to important habitats for birds, aquatic mammals, fish, or to species listed as threatened or endangered under state or federal law, and other areas of special ecological or recreational importance as determined by the department;

(3) A quantitative method for determining public resource damages resulting from an oil spill, based on the oil effects and vulnerability rankings designed to compensate the people of this state for those damages that cannot be quantified at a reasonable cost that result from oil spills; and

(4) A method for adjusting damages calculated under the compensation schedule based on actions taken by the potentially liable party that:

(a) Demonstrate a recognition and affirmative acceptance of responsibility for the spill, such as the immediate removal of oil and the amount of oil removed from the environment; or

(b) Enhance or impede the detection of the spill, the determination of the quantity of oil spilled, or the extent of damage, including the unauthorized removal of evidence such as injured fish or wildlife.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-330, filed 4/23/92, effective 5/24/92.]

WAC 173-183-340 Oil class ranking. (1) The purpose of this section is to provide a relative ranking of the severity of effects caused by a spilled oil. The ranking is based on the known chemical, physical, and mechanical properties of oils in the six classes identified in this section, as well as other properties affecting propensity to cause acute toxicity and mechanical injury, and to persist in the environment. For purposes of the compensation schedule, relative rankings of the severity of effects caused by a spilled oil are provided for the following classes of oils:

(a) Prudhoe Bay crude oil;

(b) Bunker C;

(c) No. 2 fuel oil;

(d) Gasoline;

(e) Kerosene; and

(f) Kerosene-type jet fuel.

(2) The relative ranking scores for the oil classes range from 1 to 5, where 1 represents the least harmful effect and 5 represents the most harmful effect. For purposes of RCW 90.48.366 and 90.48.367, the acute toxicity, mechanical injury, and persistence relative ranking scores for the oils described by the classes enumerated in subsection (1) of this section shall be as follows:

Table 1. Acute Toxicity, Mechanical Injury and Persistence Relative Ranking Scores for Classified Oils (OIL).

Oil Class	Acute Toxicity	Mechanical Injury	Persistence
Prudhoe Bay Crude Oil	0.9	3.6	5
Bunker C	2.3	5.0	5
No. 2 Fuel Oil	2.3	3.2	2
Gasoline	5.0	1.0	1
Kerosene	1.4	2.4	1
Kerosene-type Jet Fuel	1.4	2.4	1

(3) In cases where the spilled oil is not described by any of the oil classes listed in subsection (1) of this section, or is a mixture of oils, the department shall determine the acute toxicity, mechanical injury, and persistence scores as follows:

(a) By assigning the acute toxicity, mechanical injury, and persistence scores assigned to the oil class best describing the spilled oil from subsection (2) of this section; or

(b) By using the following guidance to determine the acute toxicity, mechanical injury, and persistence relative ranking scores:

(i) Acute toxicity relative ranking score. An acute toxicity raw score is determined by summing the weighted averages of the 1-, 2-, and 3-ringed aromatic compounds comprising the spilled oil and dividing this sum by 107, where aromatic compound composition is determined by percent-weight, and weighting is determined by aqueous solubility of the aromatic compounds, as described by the following formula:

Acute Toxicity Raw Score =
$[(SOL_1*PCT\text{-}WT_1)+(SOL_2*PCT\text{-}WT_2)+(SOL_3*PCT\text{-}WT_3)]/107$

where SOL_i = solubility in seawater of i-ring aromatic hydrocarbons, and

$PCT\text{-}WT_i$ = percent weight of i-ring aromatic hydrocarbons in the spilled oil, i = 1, 2, and 3.

The final acute toxicity relative ranking score is determined by rounding the acute toxicity raw score to the nearest 0.1 using standard rounding procedures where decimals less than 0.05 are rounded down and decimals equal to or greater than 0.05 are rounded up.

(ii) Mechanical injury relative ranking score. A mechanical injury raw score is determined by subtracting 0.688 from the specific gravity of the spilled oil and dividing this result by 0.062 as follows:

Mechanical Injury Score = (SP - 0.688)/0.062
where SP = specific gravity of the spilled oil.

The final mechanical injury ranking score is determined by rounding the mechanical injury raw score to the nearest 0.1 using standard rounding procedures where decimals less than 0.05 are rounded down and decimals equal to or greater than 0.05 are rounded up.

(iii) Persistence relative ranking score. A persistence relative ranking score is determined from empirical data describing the length of time the spilled oil is known to, or is likely to, persist in a variety of habitat types. Scoring is assigned on a 1 to 5 scale as follows:

SCORE	ANTICIPATED PERSISTENCE
5	5 - 10 years or more
4	2 - 5 years
3	1 - 2 years
2	1 month to 1 year
1	days to weeks.

(4) In cases where the spilled oil is comprised of two or more types of oil, damages shall be calculated under the schedule for each oil type and then summed to calculate total damages liability.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-340, filed 4/23/92, effective 5/24/92.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

COMPENSATION SCHEDULE FOR SPILLS INTO MARINE AND ESTUARINE WATERS, EXCLUDING ESTUARINE WATERS OF THE COLUMBIA RIVER

WAC 173-183-400 Vulnerability of marine and estuarine environments to oil spills. (1) The purpose of this section is to describe the method of ranking vulnerability of marine and estuarine environments, excluding the Columbia River estuary environment to oil spills for the purposes of assessing damages using the compensation schedule.

(2) Marine and estuarine waters of the state excluding the Columbia River estuary are divided into sixteen regions and one hundred thirty-one subregions for purposes of RCW 90.48.366, as designated on the maps attached as Appendix 5 of this chapter.

(3) A spill vulnerability score (SVS) shall be calculated at the time of a spill for the most sensitive subregion and season impacted by the spill. The SVS rates the vulnerability of public resources to spilled oil based on the propensity of the oil to cause acute toxicity and mechanical injury, and to persist in the environment. SVS is determined by summing the vulnerability scores for marine birds, marine mammals, fishery species, recreational use and habitats for the subregion(s) and most sensitive season impacted by the spill. The formula to be used to calculate SVS for each of the three oil effects, acute toxicity, mechanical injury, and persistence, is as follows:

Spill vulnerability score $(SVS)_{ij}$=
$HVS_i + BVS_j + MVS_j + MFVS_j + SFVS_j + SAVS_j + RVS_j$

where HVS_i = habitat vulnerability to oil's propensity to cause i
BVS = marine bird vulnerability score (WAC 173-183-420(3));
MVS = marine mammal vulnerability score (WAC 173-183-460(3));
MFVS = marine fisheries vulnerability score (WAC 173-183-430(3));
SFVS = shellfish vulnerability score (WAC 173-183-440(3));
SAVS = salmon vulnerability score (WAC 173-183-450(5));
RVS = recreation vulnerability score (WAC 173-183-470(3));
i = acute toxicity (AT), mechanical injury (MI), or persistence (Per); and
j = the most sensitive season affected by the spill: Spring, summer, fall, or winter

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-400, filed 4/23/92, effective 5/24/92.]

WAC 173-183-410 Marine and estuarine habitat vulnerability. (1) The purpose of this section is to provide a marine and estuarine habitat vulnerability ranking. The marine and estuarine habitats present in the state are:

(a) Classified into thirty-seven types based on substrate type, energy regime and depth of occurrence; and

(b) Relatively ranked and scored for vulnerability to oil spills on a 1 to 5 scale, where a habitat vulnerability score (hv) of 5 represents the greatest vulnerability and an hv of 1 represents the least vulnerability.

(2) Marine and estuarine habitat vulnerability scores (hv) are based on the following:

(a) Presence of living public resources at risk, where living public resources include only those not otherwise incorporated into the compensation schedule in the marine fish, shellfish, salmon, marine mammal or marine bird vulnerability rankings of WAC 173-183-420 through 173-183-460; and

(b) Predicted sensitivity to the acute toxicity, mechanical injury and persistence effects of oil based on energy regime of the habitat and propensity to entrain oil.

(3) For purposes of RCW 90.48.366, marine and estuarine habitats of the state are classified into the following thirty-seven habitat types:

(a) Marine intertidal habitats.

(i) Exposed and semiexposed rocky shores. Bedrock and boulder habitats exposed to the full range of wave energies of the Pacific (i.e., on the outer coast), or to extensive wave fetch along the Strait of Juan de Fuca. Rocky areas on the coast partly protected behind sea stacks or islands also fall into this category.

(ii) Sand-scoured rocky shores. Rocky headlands or sea stacks directly adjacent to high energy sandy beaches such that there is much suspended sand in the water, which scours the rock. Unique plants and animals are found here.

(iii) Protected rocky shores. Bedrock and boulder habitats lacking oceanic swell and extensive wave fetch; e.g., inside waters of the San Juan Islands, headlands in bays off the Strait of Juan de Fuca or well protected behind islands on the outer coast.

(iv) Semiexposed cobble and mixed-coarse beaches. Beaches exposed to moderate wave action composed of cobble overlying sand, or to somewhat less wave action, with a mix of cobble, gravel, and sand where no one component occupies more than seventy percent of the surface. Algae may grow on larger cobbles, and animals live both on the surface and in the sediment. Species vary dramatically with degree of wave exposure and composition of the sediment. Found inside the San Juan Islands, outside of Whidbey Island, at semiprotected sites along the Strait, and behind island and sea stacks on the coast.

(v) Semiexposed gravel beaches. Unstable beaches, containing some sand in more protected areas. Many sites along the Strait of Juan de Fuca.

(vi) Exposed sandy beaches. Pure marine sands found in moderate to high-energy areas, e.g., on the outer coast and along the Strait of Juan de Fuca. Mouths of bays with some wave action also fall into this category.

(vii) Semiprotected mixed-fine beaches. Mixed sand and silt habitats, found in bays and inlets with some wave action so they are not dominated by the finer sediments (muds). Patches of gravel may be present high on the shore.

(viii) Protected mud flats. Areas of little to no wave energy, where fine sediments settle and accumulate organic matter. Found in calm bays and inlets with little freshwater influx (i.e., not estuaries).

(b) Marine subtidal.

(i) Shallow subtidal rock and boulders. Areas less than 15 m depth with some currents so that sediments do not totally cover bedrock. Kelp beds are found in these habitats, which are widespread in the state.

(ii) Deep subtidal rock and boulders. Areas deeper than 15 m and thus lacking in significant algal cover, but still with enough currents to keep the substrate exposed. Common in the San Juans and the Strait.

(iii) Deep subtidal cobble and mixed-coarse areas. "Scoured" areas in channels or passes with high currents, composed entirely of cobbles or with gravel and sand mixed in.

(iv) Shallow subtidal mixed-coarse to mixed-fine areas (low energy). Areas ranging from cobbles lying over a matrix of sand and gravel to mixed sand and silt, in waters less than 15 m. Bays and inlets commonly have this range of substrate types. Plants and animals exist both on the cobbles and in the sediment.

(v) Shallow subtidal gravel or mixed-fine areas (high energy). Areas just offshore of sand or gravel beaches, where swells or wave action keep fine sediments from accumulating. Substrates range from pure gravel to gravel mixed with sand and shells. Common in the Strait.

(vi) Deep subtidal sand. Areas deeper than 15 m in the Strait or on the coast where swells keep the substratum fairly coarse.

(vii) Deep subtidal mixed-fine areas. Areas of sand, shells, and pebbles with some currents removing finer particles.

(viii) Deep subtidal muddy areas. Areas with no swell and few currents, where fine silts settle out and accumulate organic matter.

(ix) Open water. Areas deeper than 20 m.

(c) Estuarine intertidal.

(i) Open rocky shores. Rocky intertidal areas (including hardpan and riprap) in areas exposed to moderate waves or currents, e.g., on headlands in Puget Sound.

(ii) Open mixed-coarse beaches. One of the most common beach types in Puget Sound, composed of a mix of cobble, gravel, and sand in areas with some wave action that keeps finer silts suspended. Sparse salt marsh vegetation may occur at the tops of these beaches, especially in quieter areas.

(iii) Open gravel beaches. Areas of gravel or pebbles, often overlying sand, in areas of moderate wave action.

(iv) Open sandy beaches. Common habitats of gently sloping beaches but moderate wave action. May have gravel on the upper shore. Found in Puget Sound and in some areas of other estuaries, including Grays Harbor.

(v) Sandy low marshes. Found on spits, berms, and deltas where sand collects. Areas of different salinities are dominated by different marsh plant communities. Widespread (although disturbed) throughout the Puget Trough.

(vi) Mixed-fine beaches and low marshes. Found in backwaters or deltas away from large channels, where the substrate is mixed sand and mud, sometimes with patches of gravel or peat. Substrate is stable and organic-rich. Marsh communities vary with salinity.

(vii) Saline lagoons. Areas where water-borne sediments are deposited into a spit closing off an embayment, which is flushed regularly or irregularly. Salinities vary with evaporation and runoff but are generally high.

(viii) Low-salinity lagoons. Lagoons that are nearly separated from tidal/salt influence by a berm, and where there is a source of freshwater. Substrate is usually soft silt. This habitat is rare in the state.

(ix) Mud flats. Areas lacking in gravel or significant amounts of sand due to limited wave action, usually found in the heads of bays and inlets. Includes undisturbed channels and sloughs which drain slowly through a tidal cycle, and which may contain some sand.

(x) High salt marshes. Areas above normal high water but salt influenced, with organic/peat substrata. Salinities vary, and plant communities with them.

(xi) Transition zone wetland. Areas transitional between salt marshes and uplands, where salt water only rarely inundates. Substrata are peat or fine silts.

(d) Estuarine subtidal.

(i) Shallow subtidal rock and boulders. Areas less than 15 m deep with moderate currents or wave action that remove silt. Kelp beds develop here.

(ii) Deep subtidal rock and boulders. Areas in narrow channels or around headlands where currents remove sediment that otherwise would settle in these deeper areas. These habitats are essentially marine, since freshwater tends to stay layered in shallow water.

(iii) Shallow subtidal cobble and mixed-coarse areas. Mixed cobble, gravel, and sand remain in shallow areas fairly open to wave action or currents.

(iv) Deep subtidal cobble and mixed-coarse areas. Tidal currents running through deep channels in Puget Sound keep fine silts from settling and create areas of mixed cobbles, sand, and gravel.

(v) Shallow subtidal sandy or mixed-fine areas. High-current areas with little debris and some gravel, or less current-swept with more debris. Both are common outside of enclosed bays in Puget Sound.

(vi) Deep subtidal sandy or mixed-fine areas. Current-swept areas below 15 m. Organic debris and gravel tend to accumulate deeper (below 30 m), leading to different assemblages there.

(vii) Shallow subtidal muddy bays. Common habitats in open to partly enclosed bays in Puget Sound, where limited water movement allows fine sediments to accumulate. Organic enrichment is high, especially in more enclosed bays.

(viii) Deep subtidal muddy bays. Habitats in the heads and centers of inlets in Puget Sound where there is little motion and the substrate is soft mud and sand. Assemblages vary with depth and amount of organic debris accumulated.

(ix) Open water. Areas deeper than twenty meters.

(4) For purposes of RCW 90.48.366, marine and estuarine habitat vulnerability scores (hv) for each of the habitat types classified in subsection (3) of this section shall be as follows:

TABLE 2. Habitat Vulnerability for a Single Habitat Type and Oil Effect (hv)

HABITAT TYPE	HABITAT VULNERABILITY (hv) ACUTE (hv_{AT})	MECH (hv_{MI})	PERS (hv_{PER})
MARINE INTERTIDAL			
Exposed and semiexposed rock shores	3.7	4.3	3.1
Sand-scoured rocky shores	3.3	3.8	2.7
Protected rocky shores	3.0	3.5	3.0
Semiexposed cobble and mixed-coarse beaches	3.2	3.2	3.2
Semiexposed gravel beaches	3.2	1.4	2.0
Exposed sandy beaches	2.9	1.3	1.8
Semiprotected mixed-fine beaches	3.2	2.6	3.7
Protected mud flats	3.8	2.7	4.3
MARINE SUBTIDAL			
Shallow subtidal rock and boulders	3.7	3.7	3.1
Deep subtidal rock and boulders	2.7	2.7	3.3
Deep subtidal cobble and mixed coarse	1.5	2.2	2.2
Shallow subtidal mixed-coarse to mixed-fine	3.6	3.6	3.6
Shallow subtidal gravel or mixed-fine	2.8	1.6	2.3
Deep subtidal sand	1.6	2.0	1.6
Deep subtidal mixed-fine	1.5	2.6	3.1
Deep subtidal muddy	2.0	2.0	3.2
Open water	5.0	3.2	2.2
ESTUARINE INTERTIDAL			
Open rocky shores	3.0	3.5	3.0
Open mixed-coarse beaches and low marsh	3.7	3.2	3.2
Open gravel beaches	3.4	1.5	2.2
Open sandy beaches	3.3	2.8	2.3
Sandy low marshes	3.5	3.0	3.0
Mixed-fine beaches and low marshes	4.3	4.3	4.3
Saline lagoons	3.7	3.7	4.1
Low-salinity lagoons	3.0	3.5	3.9
Mud flats	3.7	2.6	4.1
High salt marshes	3.0	3.5	3.9
Transition zone wetlands	3.0	3.5	3.9
ESTUARINE SUBTIDAL			
Shallow subtidal rock and boulders	3.2	3.2	2.6
Deep subtidal rock and boulders	2.3	2.3	2.8
Shallow subtidal cobble and mixed-coarse	2.6	3.2	3.2
Deep subtidal cobble and mixed-coarse	1.5	2.2	2.2
Shallow subtidal sandy or mixed-fine	3.2	3.2	3.2
Deep subtidal sandy or mixed-fine	2.0	2.4	2.8
Shallow subtidal muddy bays	3.0	2.4	3.9
Deep subtidal muddy bays	1.8	1.8	2.9
Open water	5.0	3.2	2.2

(5) When seagrass or kelp are present in a particular habitat type, the portion of the habitat type with seagrass or kelp shall be treated as a separate habitat type. The habitat vulnerability for a particular habitat type and oil effect (hv) shall be multiplied by a factor of 1.5 for habitat types with seagrass or kelp present. The RDA committee shall be responsible for determining whether seagrass or kelp are present in a habitat type, and the portion of a habitat type containing seagrass or kelp.

(6) In general, several of the habitat types classified in this section may be affected by a particular spill. The habitat

vulnerability score for a particular spill and oil effect (HVSi) is composite of the habitat vulnerability scores for each of the habitat types affected by the spill which takes into consideration the percent coverage of each habitat type in the area of spill impact.

(7) The habitat vulnerability score for a particular spill and oil effect (HVS) shall be determined as follows:

(a) For spills of 1,000 gallons or more. Sum the weighted habitat vulnerability scores for each habitat type exposed to the spill as described by the formula provided in (c) of this subsection, where weighting is defined by percent coverage of each habitat type within the area of spill exposure.

(b) For spills of less than 1,000 gallons. Sum the weighted habitat vulnerability scores for each habitat type present in the subregion(s) exposed to the spill as described by the formula provided in (c) of this subsection, where weighting is defined by percent coverage of each habitat type present in the subregion(s) exposed to the spill.

(c) The formula to calculate the raw habitat vulnerability score for a particular spill and oil effect (HVSi) is as follows:

$$HVS_i = |^{n}_{j=1} (hv_{ij} \times PC_j)$$

where PC_j = Percent-coverage of habitat-type j expressed as a decimal;
hv_{ij} = habitat vulnerability for a particular habitat type & oil effect;
j = habitat type;
i = acute toxicity (AT), mechanical injury (MI) and persistence (PER); and
n = number of habitats to be considered as determined under (a) and (b) of this subsection.

(d) The final HVS_{AT}, HVS_{MI}, and HVS_{PER} scores are found by rounding the raw scores calculated from the formula in (c) of this subsection to the nearest 0.01 as follows: Decimals less than 0.005 shall be rounded down and decimals equal to or greater than 0.005 shall be rounded up.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-410, filed 4/23/92, effective 5/24/92.]

WAC 173-183-420 Marine bird vulnerability. (1) Each of the marine and estuarine subregions of state waters established in WAC 173-183-400(2) is relatively ranked and scored for marine bird vulnerability to oil spills on a 1 to 5 scale for each season, where a score of 5 represents the greatest vulnerability and a score of 1 represents the least vulnerability.

(2) The marine bird vulnerability ranking relatively ranks the vulnerability of seabirds, shorebirds, and waterfowl present in a subregion during a particular season to oil spills, where vulnerability is based on population status, abundance, roosting habits, escape behavior, flocking behavior, feeding specialization, population size, reproductive capacity, breeding dispersion, winter dispersion, seasonal exposure to waters where oil spills could occur, and significance of Washington population to total population.

(3) Marine bird seasonal vulnerability scores for each of the marine and estuarine subregions defined in WAC 173-183-400 are based on existing information and determinations made by the marine bird subcommittee of the scientific advisory board. For purposes of RCW 90.48.366, marine bird seasonal vulnerability scores (BVS) for each of the subregions defined in WAC 173-183-400 shall be as follows:

Table 4. Subregional Marine Bird Vulnerability Scores (BVS)

SUBREGION		SP	SU	FA	WI
101	NORTHERN OUTER COAST	5	5	5	5
102	KALALOCH	5	5	5	5
103	QUINAULT	5	5	5	5
104	COPALIS BEACH	5	5	5	5
105	GRAYS HARBOR	5	5	5	5
106	TWIN HARBORS BEACH	5	5	5	5
107	WILLAPA BAY	5	5	5	5
108	LONG BEACH	5	5	5	5
109	INNER SHELF	4	2	5	5
110	OUTER SHELF	4	1	1	1
111	SHELF EDGE	5	1	1	1
112	CONTINENTAL SLOPE	2	1	1	1
201	STRAIT OF JUAN DE FUCA-OUTER	3	2	5	4
203	CAPE FLATTERY	4	3	4	3
204	NEAH BAY	2	2	2	2
205	NEAH BAY TO CLALLAM BAY	2	3	3	2
206	CLALLAM BAY	2	2	2	2
207	CLALLAM BAY TO CRESCENT BAY	2	3	3	2
208	CRESCENT BAY	2	2	2	2
209	CRESCENT BAY TO EDIZ HOOK	2	2	2	4
301	STRAIT OF JUAN DE FUCA-INNER	3	3	3	4
302	EDIZ HOOK	1	1	1	1
303	PORT ANGELES	2	3	3	2
304	VOICE OF AMERICA	2	2	2	2
305	DUNGENESS SPIT	2	2	2	3
306	DUNGENESS BAY/HARBOR	4	2	2	3
307	JAMESTOWN	5	5	5	5
308	SEQUIM BAY	2	1	1	2
309	MILLER PENINSULA	2	2	2	3
310	PROTECTION ISLAND	4	5	5	3
311	DISCOVERY BAY	3	1	1	4
312	QUIMPER PENINSULA	2	3	3	4
313	WHIDBEY ISLAND	1	2	2	2
314	SMITH ISLAND	3	5	5	3
315	DECEPTION PASS	2	2	2	2
316	LOPEZ ISLAND (SOUTH SHORE)	5	4	4	3
317	SAN JUAN IS. (SOUTH SHORE)	2	2	2	2
401	ADMIRALTY INLET	3	5	5	2
402	SOUTH ADMIRALTY INLET	2	1	2	3
403	PORT TOWNSEND	3	2	3	4
404	OAK BAY	2	2	2	2
405	KILISUT HARBOR	3	2	3	4
501	BELLINGHAM CHANNEL	2	2	4	4
502	GUEMES CHANNEL	2	2	1	3
503	FIDALGO BAY	2	2	2	3
504	PADILLA BAY	5	5	4	5
505	SAMISH BAY	5	5	4	5
506	BELLINGHAM BAY	4	4	4	5
507	HALE PASSAGE	3	3	2	2
601	LUMMI BAY	5	5	3	4
602	CHERRY POINT	5	5	2	2
603	BIRCH BAY	4	4	3	3
604	SEMIAHOO SPIT	4	4	4	4
605	DRAYTON HARBOR	3	3	3	4

Table 4. Subregional Marine Bird Vulnerability Scores (BVS)

SUBREGION		SP	SU	FA	WI
607	SAN JUAN IS.-NORTHERN TIER	3	3	2	4
608	GEORGIA STRAIT-EASTERN	4	4	4	4
701	PT. ROBERTS	4	4	2	4
703	GEORGIA STRAIT-WESTERN	2	2	2	2
801	NORTHERN HARO STRAIT	2	2	4	3
802	SOUTHERN HARO STRAIT	1	1	1	2
901	SOUTHERN ROSARIO STRAIT	3	3	3	5
902	CENTRAL ROSARIO STRAIT	3	3	5	4
903	NORTHERN ROSARIO STRAIT	5	5	5	4
1001	PRESIDENT CHANNEL	2	2	2	2
1002	NORTHERN AREAS	1	1	2	3
1101	SPEIDEN CHANNEL	1	1	2	2
1102	NORTHERN SAN JUAN CHANNEL	1	1	1	1
1103	SOUTHERN SAN JUAN CHANNEL	1	1	2	3
1104	WASP PASS	1	1	1	2
1105	UPRIGHT CHANNEL	1	1	2	2
1106	HARNEY CHANNEL	1	1	1	2
1107	OBSTRUCTION PASS	2	2	3	2
1108	THATCHER PASS	1	1	1	1
1201	MOSQUITO/ROCHE COMPLEX	2	2	2	3
1202	FRIDAY HARBOR	2	2	2	2
1203	GRIFFIN BAY	2	2	2	3
1205	FISHERMAN BAY	2	2	2	3
1206	SWIFTS/SHOAL BAYS	2	2	2	2
1207	DEER HARBOR	2	2	2	2
1208	WEST SOUND	1	1	2	2
1209	EAST SOUND	2	2	1	2
1210	LOPEZ SOUND	2	2	3	4
1401	SKAGIT BAY	5	3	2	1
1402	PENN COVE/CRESCENT HARBOR	5	3	2	1
1403	SARATOGA PASSAGE	5	1	2	2
1404	HOLMES HARBOR	4	2	3	3
1405	PORT SUSAN	3	1	1	1
1406	POSSESSION SOUND	3	1	2	2
1501	HOOD CANAL ENTRANCE	2	1	2	3
1502	PORT LUDLOW	2	2	2	2
1503	PORT GAMBLE	2	2	2	2
1504	NORTHERN HOOD CANAL	2	1	2	2
1505	CENTRAL HOOD CANAL	2	1	2	2
1506	DABOB BAY	2	1	2	3
1507	QUILCENE BAY	2	2	2	2
1508	SOUTHCENTRAL HOOD CANAL	2	1	2	3
1509	ANNAS BAY	2	2	2	2
1510	GREAT BEND	3	1	3	5
1601	N. PUGET SOUND	4	1	2	2
1602	N. CENTRAL PUGET SOUND	2	1	2	2
1603	CENTRAL PUGET SOUND	2	1	2	2
1604	ELLIOT BAY	2	2	2	1
1605	EAST PASSAGE	2	1	2	2
1606	COLVOS PASSAGE	2	1	2	2
1607	COMMENCEMENT BAY	2	2	2	2
1608	NARROWS	3	2	3	4
1609	STEILACOOM	2	1	2	3
1610	NISQUALLY	2	1	2	3
1611	TREBLE-JOHNSON	2	2	2	2
1612	HALE PASSAGE	3	2	3	3
1613	CARR INLET	3	1	3	4

Table 4. Subregional Marine Bird Vulnerability Scores (BVS)

SUBREGION		SP	SU	FA	WI
1614	PITT PASSAGE	2	2	2	2
1615	DRAYTON HARBOR	2	2	2	2
1616	CASE INLET	2	1	2	3
1617	HENDERSON INLET	2	2	2	1
1618	DANA PASSAGE	2	2	2	1
1619	BUDD INLET	2	2	2	2
1620	ELD INLET	2	2	2	2
1621	TOTTEN INLET	2	2	2	2
1622	PICKERING PASSAGE	2	2	2	2
1623	PEALE PASSAGE	2	2	2	1
1624	SQUAXIN	2	2	2	2
1625	SKOOKUM INLET	2	2	2	2
1626	HAMMERSLEY INLET	2	2	2	2
1627	OAKLAND BAY	2	2	2	2
1628	AGATE PASSAGE	2	2	2	2
1629	LIBERTY BAY	3	2	3	3
1630	PORT ORCHARD	2	2	2	2
1631	SINCLAIR INLET	3	2	3	3
1632	DYES INLET	2	2	2	2
1633	RICH PASSAGE	2	2	2	2
1634	QUARTERMASTER HARBOR	3	2	3	3
1635	DALCO PASSAGE	2	2	2	2
1636	BALCH PASS	2	2	2	2

(4) The marine bird vulnerability score for a spill shall be multiplied by 1.5 when any number of state or federal threatened or endangered marine birds are exposed to spilled oil.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-420, filed 4/23/92, effective 5/24/92.]

WAC 173-183-430 Marine fisheries vulnerability. (1) Each of the subregions designated in WAC 173-183-430 is relatively ranked and scored for marine fisheries vulnerability to oil spills on a 1 to 5 scale for each season where 5 represents the most vulnerable ranking and 1 represents the least vulnerable ranking.

(2) The marine fisheries vulnerability ranking relatively ranks the vulnerability of marine fisheries species present in a subregion to oil spills, where vulnerability is based on habitat preference, population status, abundance, fecundity, and sensitivity of life stages.

(3) Marine fisheries seasonal vulnerability scores for each of the marine and estuarine subregions are based on existing information and recommendations of the marine fisheries subcommittee. For purposes of RCW 90.48.366 marine fisheries seasonal vulnerability ranking scores (MFVS) for the subregions defined in WAC 173-183-400 are as follows:

Table 5. Subregional Marine Fisheries Vulnerability Scores (MFVS)

SUBREGION		SEASON			
		SP	SU	FA	WI
101	NORTHERN OUTER COAST	5	3	3	5
102	KALALOCH	5	3	3	5
103	QUINAULT	5	3	3	5
104	COPALIS BEACH	5	3	3	5

SUBREGION		SEASON			
		SP	SU	FA	WI
105	GRAYS HARBOR	5	5	5	5
106	TWIN HARBORS BEACH	5	3	3	4
107	WILLAPA BAY	5	5	5	5
108	LONG BEACH	5	3	3	4
109	INNER SHELF	5	3	3	4
110	OUTER SHELF	4	2	2	4
111	SHELF EDGE	4	1	2	3
112	CONTINENTAL SLOPE	2	1	1	1
201	STRAIT OF JUAN DE FUCA-OUTER	5	3	3	4
203	CAPE FLATTERY	5	3	3	4
204	NEAH BAY	5	3	3	4
205	NEAH BAY TO CLALLAM BAY	5	3	3	4
206	CLALLAM BAY	5	3	3	4
207	CLALLAM BAY TO CRESCENT BAY	5	3	3	4
208	CRESCENT BAY	5	3	3	4
209	CRESCENT BAY TO EDIZ HOOK	5	3	3	4
301	STRAIT OF JUAN DE FUCA-INNER	5	3	3	4
302	EDIZ HOOK	5	3	3	4
303	PORT ANGELES	5	3	3	4
304	VOICE OF AMERICA	5	3	3	4
305	DUNGENESS SPIT	5	3	3	4
306	DUNGENESS BAY/HARBOR	5	3	3	4
307	JAMESTOWN	5	3	3	4
308	SEQUIM BAY	5	3	3	4
309	MILLER PENINSULA	5	3	3	4
310	PROTECTION ISLAND	5	3	3	4
311	DISCOVERY BAY	5	3	3	4
312	QUIMPER PENINSULA	5	3	3	4
313	WHIDBEY ISLAND	5	3	3	4
314	SMITH ISLAND	5	3	3	4
315	DECEPTION PASS	5	3	3	4
316	LOPEZ ISLAND (SOUTH SHORE)	5	3	3	4
317	SAN JUAN ISLAND (SOUTH SHORE)	5	3	3	4
401	ADMIRALTY INLET	5	4	3	5
402	SOUTH ADMIRALTY INLET	5	4	3	5
403	PORT TOWNSEND	5	4	3	5
404	OAK BAY	5	4	3	5
405	KILISUT HARBOR	5	4	3	5
501	BELLINGHAM CHANNEL	5	4	3	5
502	GUEMES CHANNEL	5	4	3	5
503	FIDALGO BAY	5	4	3	5
504	PADILLA BAY	5	4	3	5
505	SAMISH BAY	5	3	3	5
506	BELLLINGHAM BAY	5	3	3	5
507	HALE PASSAGE	5	3	3	5
601	LUMMI BAY	5	3	3	5
602	CHERRY POINT	5	3	3	5
603	BIRCH BAY	5	3	3	5
604	SEMIAHOO SPIT	5	3	3	5
605	DRAYTON HARBOR	5	3	3	5
607	SAN JUAN ISLANDS-NORTHERN TIER	5	3	3	4
608	GEORGIA STRAIT-EASTERN	5	3	3	5
701	PT. ROBERTS	5	3	3	5
703	GEORGIA STRAIT-WESTERN	5	3	3	5
801	NORTHERN HARO STRAIT	5	3	3	4
802	SOUTHERN HARO STRAIT	5	3	3	4
901	SOUTHERN ROSARIO STRAIT	5	3	3	4
902	CENTRAL ROSARIO STRAIT	5	3	3	4
903	NORTHERN ROSARIO STRAIT	5	3	3	4
1001	PRESIDENT CHANNEL	5	3	3	4
1002	NORTHERN AREAS	5	3	3	4
1101	SPEIDEN CHANNEL	5	3	3	4
1102	NORTHERN SAN JUAN CHANNEL	5	3	3	4
1103	SOUTHERN SAN JUAN CHANNEL	5	3	3	4
1104	WASP PASS	5	3	3	4
1105	UPRIGHT CHANNEL	5	3	3	4
1106	HARNEY CHANNEL	5	3	3	4
1107	OBSTRUCTION PASS	5	3	3	4
1108	THATCHER PASS	5	3	3	4
1201	MOSQUITO/ROCHE COMPLEX	5	3	3	4
1202	FRIDAY HARBOR	5	3	3	4
1203	GRIFFIN BAY	5	3	3	4
1205	FISHERMAN BAY	5	3	3	4
1206	SWIFTS/SHOAL BAYS	5	3	3	4
1207	DEER HARBOR	5	3	3	4
1208	WEST SOUND	5	3	3	4
1209	EAST SOUND	5	3	3	4
1210	LOPEZ SOUND	5	3	3	4
1401	SKAGIT BAY	5	4	3	5
1402	PENN COVE /CRESCENT HARBOR	5	4	3	5
1403	SARATOGA PASSAGE	5	4	3	5
1404	HOLMES HARBOR	5	4	3	5
1405	PORT SUSAN	5	4	3	5
1406	POSSESSION SOUND	5	4	3	5
1501	HOOD CANAL ENTRANCE	2	1	1	2
1502	PORT LUDLOW	2	1	1	2
1503	PORT GAMBLE	2	1	1	2
1504	NORTHERN HOOD CANAL	2	1	1	2
1505	CENTRAL HOOD CANAL	2	1	1	2
1506	DABOB BAY	2	1	1	2
1507	QUILCENE BAY	2	1	1	2
1508	SOUTHCENTRAL HOOD CANAL	2	1	1	2
1509	ANNAS BAY	2	1	1	2
1510	GREAT BEND	2	1	1	2
1601	N. PUGET SOUND	5	4	3	5
1602	N. CENTRAL PUGET SOUND	5	4	3	5
1603	CENTRAL PUGET SOUND	5	4	3	5
1604	ELLIOT BAY	5	4	3	5
1605	EAST PASSAGE	4	3	2	3
1606	COLVOS PASSAGE	4	3	2	3
1607	COMMENCEMENT BAY	4	3	2	3
1608	NARROWS	4	3	2	3
1609	STEILACOOM	4	3	2	3
1610	NISQUALLY	4	3	2	3
1611	TREBLE-JOHNSON	4	3	2	3
1612	HALE PASSAGE	4	3	2	3
1613	CARR INLET	4	3	2	3
1614	PITT PASSAGE	4	3	2	3
1615	DRAYTON HARBOR	4	3	2	3
1616	CASE INLET	4	3	2	3

SUBREGION	SEASON			
	SP	SU	FA	WI
1617 HENDERSON INLET	4	3	2	3
1618 DANA PASSAGE	4	3	2	3
1619 BUDD INLET	4	3	2	3
1620 ELD INLET	4	3	2	3
1621 TOTTEN INLET	4	3	2	3
1622 PICKERING PASSAGE	4	3	2	3
1623 PEALE PASSAGE	4	3	2	3
1624 SQUAXIN	4	3	2	3
1625 SKOOKUM INLET	4	3	2	3
1626 HAMMERSLEY INLET	4	3	2	3
1627 OAKLAND BAY	4	3	2	3
1628 AGATE PASSAGE	5	4	3	5
1629 LIBERTY BAY	5	5	5	5
1630 PORT ORCHARD	5	5	5	5
1631 SINCLAIR INLET	5	5	5	5
1632 DYES INLET	5	5	5	5
1633 RICH PASSAGE	5	5	5	5
1634 QUARTERMASTER HARBOR	4	3	2	3
1635 DALCO PASSAGE	4	3	2	3
1636 BALCH PASS	4	3	2	3

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-430, filed 4/23/92, effective 5/24/92.]

WAC 173-183-440 Shellfish vulnerability. (1) Each of the subregions designated in WAC 173-183-430 is relatively ranked and scored for shellfish vulnerability to oil spills on a 1 to 5 scale for each season where 5 represents the most vulnerable ranking and 1 represents the least vulnerable ranking.

(2) Shellfish vulnerability ranking relatively ranks the vulnerability of shellfish present in a subregion to oil spills, where vulnerability is based on habitat preference, population status, abundance, fecundity, and sensitivity of life stages.

(3) Shellfish seasonal vulnerability scores for each of the marine and estuarine subregions are based on existing information and recommendations of the shellfish subcommittee of the scientific advisory board. For purposes of RCW 90.48.366 shellfish seasonal vulnerability ranking scores (SFVS) for the subregions defined in WAC 173-183-400 are as follows:

Table 6. Shellfish Vulnerability Scores (SFVS)

Region/Subregion	SP	SU	FA	WI
101	4	4	4	4
102	5	5	5	5
103	3	3	3	3
104	4	4	4	4
105	2	2	2	2
106	3	3	2	2
107	4	4	4	4
108	4	3	3	3
109	5	5	5	5
110	1	1	1	1
111	1	1	1	1
112	1	1	1	1
2	5	5	5	5
3	5	5	5	5
401	2	1	1	2
402	3	3	3	3
403	4	4	3	4
404	3	3	3	3
405	4	4	3	4
5	5	5	5	5
6	5	5	4	5
7	5	5	4	5
8	4	3	3	4
9	4	3	3	4
1	4	3	3	4
11	4	3	3	4
12	4	3	3	4
1401	2	3	3	2
1402	1	1	1	1
1403	1	1	1	1
1404	1	1	1	1
1405	1	2	2	1
1406	1	2	2	1
1501	2	2	2	2
1502	2	2	2	2
1503	2	2	2	2
1504	3	3	2	2
1505	3	3	2	2
1506	3	3	2	2
1507	3	3	2	2
1508	3	4	3	3
1509	3	4	3	3
1510	3	4	3	3
1601	2	2	2	2
1602	2	2	2	2
1603	2	2	2	2
1604	2	2	2	2
1605	2	2	2	2
1606	2	2	2	2
1607	2	2	2	2
1608	2	1	1	2
1609	5	5	5	5
1610	5	5	5	5
1611	5	5	5	5
1612	5	5	5	5
1613	5	5	5	5
1614	5	5	5	5
1615	5	5	5	5
1616	5	5	4	5
1617	5	5	5	5
1618	1	1	1	1
1619	4	5	4	4
1620	4	5	4	4
1621	4	5	4	4
1622	5	5	4	5
1623	4	5	4	4
1624	4	5	4	4
1625	4	5	4	4
1626	4	5	4	4
1627	4	5	4	4
1628	4	3	3	3
1629	4	3	3	3
1630	4	3	3	3
1631	4	3	3	3
1632	4	3	3	3

Region/Subregion	SP	SU	FA	WI
1633	4	3	3	3
1634	2	2	2	2
1635	2	2	2	2
1636	5	5	5	5

(4) The shellfish vulnerability score for a spill shall be multiplied by 1.5 when any number of individuals of state or federal threatened or endangered shellfish species are exposed to spilled oil.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-440, filed 4/23/92, effective 5/24/92.]

WAC 173-183-450 Salmon vulnerability. (1) The salmon vulnerability ranking is based on seasonal habitat preference of juveniles during outmigration, adults as they return to spawn and the presence of oil in river mouths during peak occurrence of salmon runs. The salmon vulnerability ranking was developed from existing information and determinations of the salmon subcommittee of the scientific advisory board. In the case of Chinook salmon, habitat preference differs for subyearlings and yearlings.

(2) The vulnerability of five salmon species in nine habitats are relatively scored for vulnerability to oil spills on a 1 to 5 scale for each season, where 5 represents the most vulnerable condition, and a score of 1 represents the least vulnerable condition, as follows:

Table 7. Vulnerability of Salmon Species and/or Species Yearclass by Habitat and Season

SPECIES/YEARCLASS and SALMON VULNERABILITY HABITAT	HABITAT VULNERABILITY SCORE (savs) SEASON			
	SP	SU	FA	WI
Chinook (subyearling)				
Intertidal				
Rocky	1	1	1	1
Cobble	2	2	1	1
Gravel	3	3	2	2
Sand (vegetated)	4	5	3	3
Sand (no vegetation)	3	3	2	2
Mud (vegetated)	4	5	3	3
Mud (no vegetation)	3	3	2	3
Subtidal	2	2	1	1
Pelagic	4	4	3	3
Chinook (yearling)				
Intertidal				
Rocky	1	1	1	1
Cobble	3	3	2	2
Gravel	3	3	3	2
Sand (vegetated)	3	3	2	2
Sand (no vegetation)	3	3	2	2
Mud (vegetated)	3	3	2	2
Mud (no vegetation)	3	3	2	2
Subtidal	2	2	1	1
Pelagic	4	4	3	3
Coho				
Intertidal				
Rocky	1	1	1	1
Cobble	3	2	2	2
Gravel	3	4	2	2
Sand (vegetated)	5	4	3	4
Sand (no vegetation)	3	2	2	3
Mud (vegetated)	5	4	3	4
Mud (no vegetation)	3	4	2	3
Subtidal	2	2	1	1
Pelagic	4	4	3	3
Pink				
Intertidal				
Rocky	1	1	1	1
Cobble	2	1	1	1
Gravel	3	1	1	3
Sand (vegetated)	5	2	2	5
Sand (no vegetation)	3	2	2	3
Mud (vegetated)	5	2	2	5
Mud (no vegetation)	3	1	1	3
Subtidal	2	1	1	1
Pelagic	4	2	2	2
Chum				
Intertidal				
Rocky	1	1	1	1
Cobble	2	1	1	1
Gravel	3	2	2	3
Sand (vegetated)	5	3	2	5
Sand (no vegetation)	3	2	2	3
Mud (vegetated)	5	4	2	5
Mud (no vegetation)	3	2	2	3
Subdtidal	2	2	1	1
Pelagic	4	4	2	2
Sockeye				
Intertidal				
Rocky	2	2	1	1
Cobble	2	1	1	1
Gravel	2	1	1	1
Sand (vegetated)	2	1	1	1
Sand (no vegetation)	2	1	1	1
Mud (vegetated)	2	1	1	1
Mud (no vegetation)	3	1	1	1
Subtidal	1	2	1	1
Pelagic	4	4	2	2

The habitat-types classified under WAC 173-183-400 correlate with the habitats listed in Table 7 as follows:

TABLE. 8. KEY TO TRANSLATINC MARINE/ESTUARINE HABITAT TYPES CLASSIFIED UNDER WAC 173-183-410 TO SALMON VULNERABILITY HABITATS

MARINE/ESTUARINE HABITAT TYPE from WAC 173-183-410(3)	EQUIVALENT SALMON VULNERABILITY HABITAT
Marine Intertidal, exposed and semiexposed rocky shores	Intertidal, rocky
Marine Intertidal, sand-scoured rocky shores	Intertidal, rocky

MARINE/ESTUARINE HABITAT TYPE from WAC 173-183-410(3)	EQUIVALENT SALMON VULNERABILITY HABITAT
Marine Intertidal, protected rocky shores	Intertidal, rocky
Estuarine Intertidal, open rocky shores	Intertidal, rocky
Marine Intertidal, semiexposed cobble and mixed-course beaches	Intertidal, cobble
Estuarine Intertidal, open mixed-course beaches	Intertidal, cobble
Marine Intertidal, semiexposed gravel beaches	Intertidal, gravel
Estuarine Intertidal, open gravel beaches	Intertidal, gravel
Marine Intertidal, exposed sandy beaches	Intertidal, sand (presence of vegetation will be determined at the time of the spill)
Marine Intertidal, semiprotected mixed-fine beaches	Intertidal, sand (presence of vegetation will be determined at the time of the spill)
Estuarine Intertidal, open sandy beaches	Intertidal, sand (presence of vegetation will be determined at the time of the spill)
Estuarine Intertidal, sandy low marshes	Intertidal, sand (presence of vegetation will be determined at the time of the spill)
Estuarine Intertidal, mixed-fine beaches and low marshes	Intertidal, sand (presence of vegetation will be determined at the time of the spill)
Marine Intertidal, protected mud flats	Intertidal, mud (presence of vegetation will be determined at the time of the spill)
Estuarine Intertidal, mud flats	Intertidal, mud (presence of vegetation will be determined at the time of the spill)
all Marine and Estuarine Subtidal categories except open water	Subtidal
Marine Subtidal, open water	Pelagic
Estuarine Subtidal, open water	Pelagic

(3) For each oil spill where the compensation schedule is applied, the RDA committee shall determine the following:

(a) For spills greater than 1,000 gallons, the salmon vulnerability habitat(s) exposed to spilled oil and each habitat's percent-coverage of the total area exposed to spilled oil;

(b) For spills of less than 1,000 gallons, the salmon vulnerability habitat(s) in the subregion(s) exposed to spilled oil and the percent-coverage of these habitats in the exposed subregion(s);

(c) The season in which spill impacts will be greatest;

(d) The individual species/year class vulnerability score (SAVSi) as described in subsection (4) of this section; and

(e) The composite salmon vulnerability score for a spill (SAVSs) as described in subsection (5) of this section.

(4) From the information enumerated in subsection (2) of this section, the RDA committee shall determine the species/year class vulnerability score for a spill (SAVSi) by summing the weighted species/year class vulnerability scores for each of the salmon vulnerability habitats classified in Table 8 of subsection (2) of this section, where weighting is defined as percent-coverage of the salmon vulnerability habitats as determined in subsection (3) of this section, as follows:

$$SAVS_i = (savs_1 * PCT\text{-}COV_1) + (savs_2 * PCT\text{-}COV_2) + \ldots + (savs_n * PCT\text{-}COV_n)$$

where $SAVS_i$ = salmon vulnerability score for a species/year class;
$savs_j$ = species/year class habitat vulnerability score for the season of greatest spill impact from subsection (2) of this section;
$PCT\text{-}COV_j$ = percent-coverage of habitat j from subsection (2) of this section;
i = Chinook, subyearling (Cs); Chinook, yearling (Cy); Coho (C); Pink (P); Chum (Ch); and Sockeye (So); and
n = the number of salmon vulnerabililty habitats used to calculate SAVS as determined in subsection (3) of this section.

(5) The raw salmon vulnerability score for a spill ($SAVS_s$) shall be calculated as follows:

(a) In years when pink salmon are present in state waters. The chinook salmon spill vulnerability scores for subyearlings ($SAVS_{Cs}$) and yearlings ($SAVS_{Cy}$) as determined in subsection (4) of this section shall be averaged, then added to the spill vulnerability scores for coho ($SAVS_C$), pink ($SAVS_P$), chum ($SAVS_{Ch}$) and sockeye ($SAVS_{So}$) salmon as determined in subsection (4) of this section. The sum of these scores shall then be divided by 5, as described by the following formula:

$$SAVS_s = [(SAVS_{Cs} + SAVS_{Cy})/2 + SAVS_C + SAVS_P + SAVS_{Ch} + SAVS_{So}]/5$$

where $SAVS_s$ = salmon vulnerability score for a spill;
$SAVS_{Cs}$ = chinook, subyearling vulnerability score from subsection (4) of this section;
$SAVS_{Cy}$ = chinook (yearling) vulnerability score from subsection (4) of this section;
$SAVS_C$ = coho salmon vulnerability score from subsection (4) of this section;
$SAVS_P$ = pink salmon vulnerability score from subsection (4) of this section;
$SAVS_C$ = chum salmon vulnerability score from subsection (4) of this section;
$SAVS_{So}$ = sockeye salmon vulnerability score from subsection (4) of this section;

(b) In years when pink salmon are not present in state waters. The chinook salmon spill vulnerability scores for subyearlings ($SAVS_{Cs}$) and yearlings ($SAVS_{Cy}$) as determined in subsection (4) of this section shall be averaged, then added to the spill vulnerability scores for coho ($SAVS_C$), chum ($SAVS_{Ch}$) and sockeye ($SAVS_{So}$) salmon as determined in subsection (4) of this section. The sum of these scores shall then be divided by 4, as described by the following formula:

$$SAVS_s = [(SAVS_{Cs} + SAVS_{Cy})/2 + SAVS_C + SAVS_{Ch} + SAVS_{So}]/4$$

where $SAVS_s$ = salmon vulnerability score for a spill;
$SAVS_{Cs}$ = chinook, subyearling vulnerability score from subsection (4) of this section;
$SAVS_{Cy}$ = chinook (yearling) vulnerability score from subsection (4) of this section;
$SAVS_C$ = coho salmon vulnerability score from subsection (4) of this section;

$SAVS_P$ = pink salmon vulnerability score from subsection (4) of this section;
$SAVS_C$ = chum salmon vulnerability score from subsection (4) of this section;
$SAVS_{So}$ = sockeye salmon vulnerability score from subsection (4) of this section;

(6) If spilled oil enters a river mouth, $SAVS_i$ from subsection (4) of this section shall be assigned a score of 5 for each species/year class in peak occurrence in a river mouth during the period of time the spilled oil enters and remains in the river mouth. Scores of 5 determined for species/year classes under this subsection shall supersede $SAVS_i$ scores calculated under subsection (4) of this section. The RDA committee shall make determinations of whether oil enters a river mouth and whether species/year classes are in peak occurrence when spilled oil is present in a river mouth.

(7) The final $SAVS_s$ score is found by rounding the raw $SAVS_s$ score calculated in subsection (5) of this section to the nearest 0.01 as follows: Decimals less than 0.005 shall be rounded down and decimals equal to or greater than 0.005 shall be rounded up.

(8) The final salmon vulnerability score for a spill shall be multiplied by 1.5 when any number of individuals of state or federal threatened or endangered salmon races and/or runs are exposed to spilled oil.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 and 92-13-083 (Order 91-13 and 91-13A), § 173-183-450, filed 4/23/92 and 6/16/92, effective 5/24/92 and 7/17/92.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-183-460 Marine mammal vulnerability. (1) Each of the marine and estuarine subregions of state waters designated in WAC 173-183-400(2) is relatively ranked and scored for marine mammal vulnerability to oil spills on a 1 to 5 scale for each season where 5 represents the greatest vulnerability and 1 represents the least vulnerability.

(2) Marine mammal vulnerability ranking scores take into consideration species presence, diversity, population status, breeding vulnerability, presence of young, physiological vulnerability, primary habitat, feeding habitats and abundance.

(3) Marine mammal seasonal vulnerability scores for each of the marine and estuarine subregions of state waters are based on existing information and determinations made by the marine mammals subcommittee of the scientific advisory board. For purposes of RCW 90.48.366, marine mammal vulnerability ranking scores for subregions classified in WAC 173-183-400(2) are as follows:

Table 9. Marine Mammal Vulnerability Scores (MVS)

		SEASON			
SUBREGION		SP	SU	FA	WI
101	NORTHERN OUTER COAST	5	5	5	5
102	KALALOCH	5	5	5	5
103	QUINAULT	5	5	5	5
104	COPALIS BEACH	5	5	5	4
105	GRAYS HARBOR	5	4	5	4
106	TWIN HARBORS BEACH	5	5	5	4
107	WILLAPA BAY	5	5	5	4

Table 9. Marine Mammal Vulnerability Scores (MVS)

		SEASON			
SUBREGION		SP	SU	FA	WI
108	LONG BEACH	5	5	5	5
109	INNER SHELF	5	5	5	5
110	OUTER SHELF	4	2	3	3
111	SHELF EDGE	4	1	3	3
112	CONTINENTAL SLOPE	1	1	1	1
201	STRAIT OF JUAN DE FUCA-OUTER	4	4	3	2
203	CAPE FLATTERY	4	4	3	2
204	NEAH BAY	4	4	3	2
205	NEAH BAY TO CLALLAM BAY	3	3	2	2
206	CLALLAM BAY	3	3	2	2
207	CLALLAM BAY TO CRESCENT BAY	3	3	2	2
208	CRESCENT BAY	3	3	2	2
209	CRESCENT BAY TO EDIZ HOOK	3	3	2	2
301	STRAIT OF JUAN DE FUCA-INNER	4	4	4	3
302	EDIZ HOOK	4	4	4	3
303	PORT ANGELES	4	4	4	3
304	VOICE OF AMERICA	4	4	4	3
305	DUNGENESS SPIT	4	4	4	3
306	DUNGENESS BAY/HARBOR	4	4	4	3
307	JAMESTOWN	4	4	4	3
308	SEQUIM BAY	4	4	4	3
309	MILLER PENINSULA	4	4	4	3
310	PROTECTION ISLAND	4	4	4	3
311	DISCOVERY BAY	4	4	4	3
312	QUIMPER PENNSULA	4	4	4	3
313	WHIDBEY ISLAND	4	4	4	3
314	SMITH ISLAND	4	4	4	3
315	DECEPTION PASS	4	4	4	3
316	LOPEZ ISLAND (SOUTH SHORE)	4	4	4	3
317	SAN JUAN ISLAND (SOUTH SHORE)	4	4	4	3
401	ADMIRALTY INLET	4	4	4	3
402	SOUTH ADMIRALTY INLET	4	4	4	3
403	PORT TOWNSEND	4	4	4	3
404	OAK BAY	4	4	4	3
405	KILISUT HARBOR	4	4	4	3
501	BELLINGHAM CHANNEL	2	3	2	2
502	GUEMES CHANNEL	2	3	2	2
503	FIDALGO BAY	2	3	2	2
504	PADILLA BAY	2	3	2	2
505	SAMISH BAY	2	3	2	2
506	BELLINGHAM BAY	2	3	2	2
507	HALE PASSAGE	2	3	2	2
601	LUMMI BAY	4	4	4	3
602	CHERRY POINT	4	4	4	3
603	BURCH BAY	4	4	4	3
604	SEMIAHOO SPIT	4	4	4	3
605	DRAYTON HARBOR	4	4	4	3
607	SAN JUAN ISLANDS-NORTHERN TIER	4	4	4	3
608	GEORGIA STRAIT-EASTERN	4	4	4	3
701	PT. ROBERTS	4	4	4	3
703	GEORGIA STRAIT-WESTERN	4	4	4	3
801	NORTHERN HARO STRAIT	5	4	4	4

Table 9. Marine Mammal Vulnerability Scores (MVS)

SUBREGION		SEASON SP	SU	FA	WI
802	SOUTHERN HARO STRAIT	5	4	4	4
901	SOUTHERN ROSARIO STRAIT	4	4	3	2
902	CENTRAL ROSARIO STRAIT	4	4	3	2
903	NORTHERN ROSARIO STRAIT	5	4	3	2
1001	PRESIDENT CHANNEL	5	4	4	3
1002	NORTHERN AREAS	5	4	4	3
1101	SPEIDEN CHANNEL	3	3	3	2
1102	NORTHERN SAN JUAN CHANNEL	3	3	3	2
1103	SOUTHERN SAN JUAN CHANNEL	3	3	3	2
1104	WASP PASS	3	3	3	2
1105	UPRIGHT CHANNEL	3	3	3	2
1106	HARNEY CHANNEL	3	3	3	2
1107	OBSTRUCTION PASS	3	3	3	2
1108	THATCHER PASS	3	3	3	2
1201	MOSQUITO/ROCHE COMPLEX	3	3	3	2
1202	FRIDAY HARBOR	3	3	3	2
1203	GRIFFIN BAY	3	3	3	2
1205	FISHERMAN BAY	3	3	3	2
1206	SWIFTS/SHOAL BAYS	3	3	3	2
1207	DEER HARBOR	3	3	3	2
1208	WEST SOUND	3	3	3	2
1209	EAST SOUND	3	3	3	2
1210	LOPEZ SOUND	3	3	3	2
1401	SKAGIT BAY	2	1	1	1
1402	PENN COVE/CRESCENT HARBOR	2	1	1	1
1403	SARATOGA PASSAGE	2	1	1	2
1404	HOLMES HARBOR	2	1	1	1
1405	PORT SUSAN	2	1	1	1
1406	POSSESSION SOUND	2	1	1	2
1501	HOOD CANAL ENTRANCE	1	1	1	1
1502	PORT LUDLOW	1	1	1	1
1503	PORT GAMBLE	1	1	1	1
1504	NORTHERN HOOD CANAL	1	1	1	1
1505	CENTRAL HOOD CANAL	1	1	1	1
1506	DABOB BAY	1	1	1	1
1507	QUILCENE BAY	1	1	1	1
1508	SOUTHCENTRAL HOOD CANAL	1	1	1	1
1509	ANNAS BAY	1	1	1	1
1510	GREAT BEND	1	1	1	1
1601	N. PUGET SOUND	3	2	2	2
1602	N. CENTRAL PUGET SOUND	3	2	2	2
1603	CENTRAL PUGET SOUND	2	1	1	1
1604	ELLIOT BAY	2	1	1	1
1605	EAST PASSAGE	2	1	1	1
1606	COLVOS PASSAGE	2	1	1	1
1607	COMMENCEMENT BAY	2	1	1	1
1608	NARROWS	2	1	1	1
1609	STEILACOOM	2	1	1	1
1610	NISQUALLY	2	1	1	1
1611	TREBLE-JOHNSON	2	1	1	1
1612	HALE PASSAGE	2	1	1	1
1613	CARR INLET	2	1	1	1
1614	PITT PASSAGE	2	1	1	1
1615	DRAYTON HARBOR	2	1	1	1
1616	CASE INLET	2	1	1	1
1617	HENDERSON INLET	2	1	1	1
1618	DANA PASSAGE	2	1	1	1
1619	BUDD INLET	2	1	1	1
1620	ELD INLET	2	1	1	1
1621	TOTTEN INLET	2	1	1	1
1622	PICKERING PASSAGE	2	1	1	1
1623	PEALE PASSAGE	2	1	1	1
1624	SQUAXIN	2	1	1	1
1625	SKOOKUM INLET	2	1	1	1
1626	HAMMERSLEY INLET	2	1	1	1
1627	OAKLAND BAY	2	1	1	1
1628	AGATE PASSAGE	2	1	1	1
1629	LIBERTY BAY	2	1	1	1
1630	PORT ORCHARD	2	1	1	1
1631	SINCLAIR INLET	2	1	1	1
1632	DYES INLET	2	1	1	1
1633	RICH PASSAGE	2	1	1	1
1634	QUARTERMASTER HARBOR	2	1	1	1
1635	DALCO PASSAGE	2	1	1	1
1636	BALCH PASS	2	1	1	1

(4) The marine mammal vulnerability score for a spill shall be multiplied by 1.5 when any number of state or federal threatened or endangered marine mammal species are exposed to spilled oil.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-460, filed 4/23/92, effective 5/24/92.]

WAC 173-183-470 Marine and estuarine recreation vulnerability. (1) Each of the marine and estuarine subregions of state waters designated in WAC 173-183-400(2) are relatively ranked and scored for recreation vulnerability on a 1 to 5 scale for each season where a score of 5 represents the greatest vulnerability and a score of 1 represents the least vulnerability.

(2) Recreation vulnerability ranking scores take into consideration seasonal level of participation in recreational activities, number of recreation sites and types of recreational amenities available in a subregion.

(3) Recreation vulnerability ranking scores for each of the marine and estuarine subregions of state waters in each season has been determined from existing information and recommendations of the recreation subcommittee of the scientific advisory board. For purposes of RCW 90.48.366, recreation vulnerability ranking scores (RVS) for the subregions designated in WAC 173-183-400(2) are as follows:

Table 10. Marine and Estuarine Recreation Vulnerability Scores (RVS)

SUBREGION		SEASON SP	SU	FA	WI
101	NORTHERN OUTER COAST	5	5	5	5
102	KALALOCH	5	5	5	5
103	QUINAULT	1	1	1	1
104	COPALIS BEACH	5	5	5	5
105	GRAYS HARBOR	4	4	4	3
106	TWIN HARBORS BEACH	5	5	5	5

Table 10. Marine and Estuarine Recreation Vulnerability Scores (RVS)

SUBREGION		SEASON SP	SU	FA	WI
107	WILIAPA BAY	5	5	5	5
108	LONG BEACH	5	5	5	5
109	INNER SHELF	1	1	1	1
110	OUTER SHELF	1	1	1	1
111	SHELF EDGE	1	1	1	1
112	CONTINENTAL SLOPE	1	1	1	1
201	STRAIT OF JUAN DE FUCA-OUTER	1	1	1	1
203	CAPE FLATTERY	1	1	1	1
204	NEAH BAY	1	1	1	1
205	NEAH BAY TO CLALLAM BAY	5	5	5	4
206	CLALLAM BAY	3	4	3	2
207	CLALLAM BAY TO CRESCENT BAY	5	5	5	4
208	CRESCENT BAY	3	4	3	3
209	CRESCENT BAY TO EDIZ HOOK	4	5	4	3
301	STRAIT OF JUAN DE FUCA-INNER	1	1	1	1
302	EDIZ HOOK	3	4	3	3
303	PORT ANGELES	5	5	5	4
304	VOICE OF AMERICA	2	3	2	2
305	DUNGENESS SPIT	1	1	1	1
306	DUNGENESS BAY/HARBOR	5	5	5	4
307	JAMESTOWN	2	3	2	2
308	SEQUIM BAY	4	5	4	4
309	MILLER PENINSULA	2	3	2	2
310	PROTECTION ISLAND	1	1	1	1
311	DISCOVERY BAY	2	2	2	2
312	QUIMPER PENNSULA	3	3	2	2
313	WHIDBEY ISLAND	2	3	2	2
314	SMITH ISLAND	1	1	1	1
315	DECEPTION PASS	5	5	5	5
316	LOPEZ ISLAND (SOUTH SHORE)	4	5	4	3
317	SAN JUAN ISLAND (SOUTH SHORE)	4	5	4	3
401	ADMIRALTY INLET	5	5	5	4
402	SOUTH ADMIRALTY INLET	5	5	5	4
403	PORT TOWNSEND	3	4	3	3
404	OAK BAY	4	5	4	3
405	KILISUT HARBOR	2	2	2	2
501	BELLINGHAM CHANNEL	5	5	5	4
502	GUEMES CHANNEL	1	1	1	1
503	FIDALGO BAY	4	4	3	3
504	PADILLA BAY	5	5	5	4
505	SAMISH BAY	4	4	3	3
506	BELLINGHAM BAY	5	5	5	4
507	HALE PASSAGE	3	4	3	2
601	LUMMI BAY	1	1	1	1
602	CHERRY POINT	1	1	1	1
603	BURCH BAY	3	4	3	3
604	SEMIAHOO SPIT	3	4	3	3
605	DRAYTON HARBOR	2	2	2	2
607	SAN JUAN ISLANDS-NORTHERN TIER	5	5	5	5
608	GEORGIA STRAIT-EASTERN	1	1	1	1
701	PT. ROBERTS	3	3	3	2
703	GEORGIA STRAIT-WESTERN	1	1	1	1
801	NORTHERN HARO STRAIT	5	5	5	4
802	SOUTHERN HARO STRAIT	5	5	5	4
901	SOUTHERN ROSARIO STRAIT	5	5	5	5
902	CENTRAL ROSARIO STRAIT	4	5	4	4
903	NORTHERN ROSARIO STRAIT	4	4	4	3
1001	PRESIDENT CHANNEL	4	5	4	4
1002	NORTHERN AREAS	4	5	4	3
1101	SPEIDEN CHANNEL	3	4	3	2
1102	NORTHERN SAN JUAN CHANNEL	4	5	4	3
1103	SOUTHERN SAN JUAN CHANNEL	5	5	5	4
1104	WASP PASS	5	5	5	4
1105	UPRIGHT CHANNEL	5	5	4	4
1106	HARNEY CHANNEL	4	5	4	3
1107	OBSTRUCTION PASS	2	2	2	2
1108	THATCHER PASS	4	5	4	3
1201	MOSQUITO/ROCHE COMPLEX	3	4	3	3
1202	FRIDAY HARBOR	3	3	3	2
1203	GRIFFIN BAY	4	5	4	4
1205	FISHERMAN BAY	1	1	1	1
1206	SWIFT/SHOAL BAYS	1	1	1	1
1207	DEER HARBOR	2	2	2	2
1208	WEST SOUND	3	4	3	2
1209	EAST SOUND	4	5	4	4
1210	LOPEZ SOUND	5	5	5	4
1401	SKAGIT BAY	5	5	5	5
1402	PENN COVE/CRESCENT HARBOR	4	4	3	3
1403	SARATOGA PASSAGE	3	4	3	3
1404	HOLMES HARBOR	2	3	2	2
1405	PORT SUSAN	3	4	3	3
1406	POSSESSION SOUND	4	5	4	3
1501	HOOD CANAL ENTRANCE	4	5	4	3
1502	PORT LUDLOW	4	4	4	3
1503	PORT GAMBLE	1	1	1	1
1504	NORTHERN HOOD CANAL	1	1	1	1
1505	CENTRAL HOOD CANAL	4	4	3	3
1506	DABOB BAY	4	5	4	3
1507	QUILCENE BAY	3	3	2	2
1508	SOUTHCENTRAL HOOD CANAL	4	5	4	3
1509	ANNAS BAY	4	4	4	3
1510	GREAT BEND	3	4	3	3
1601	N. PUGET SOUND	4	4	3	3
1602	N. CENTRAL PUGET SOUND	4	5	4	4
1603	CENTRAL PUGET SOUND	5	5	4	4
1604	ELLIOT BAY	4	5	4	3
1605	EAST PASSAGE	4	5	4	3
1606	COLVOS PASSAGE	3	3	2	2
1607	COMMENCEMENT BAY	2	2	2	2
1608	NARROWS	3	3	3	2
1609	STEILACOOM	3	3	3	2
1610	NISQUALLY	5	5	5	4
1611	TREBLE-JOHNSON	3	3	2	2
1612	HALE PASSAGE	2	2	2	2

Table 10. Marine and Estuarine Recreation Vulnerability Scores (RVS)

SUBREGION	SEASON SP	SU	FA	WI
1613 CARR INLET	4	5	4	4
1614 PITT PASSAGE	2	2	2	2
1615 DRAYTON HARBOR	2	2	2	2
1616 CASE INLET	4	4	3	3
1617 HENDERSON INLET	2	2	2	1
1618 DANA PASSAGE	2	2	2	2
1619 BUDD INLET	3	4	3	3
1620 ELD INLET	2	3	2	2
1621 TOTTEN INLET	1	1	1	1
1622 PICKERING PASSAGE	3	4	3	2
1623 PEALE PASSAGE	3	3	3	2
1624 SQUAXIN	2	2	2	1
1625 SKOOKUM INLET	1	1	1	1
1626 HAMMERSLEY INLET	2	2	2	2
1627 OAKLAND BAY	2	2	1	1
1628 AGATE PASSAGE	2	2	2	2
1629 LIBERTY BAY	2	3	2	2
1630 PORT ORCHARD	3	3	3	2
1631 SINCLAIR INLET	2	3	2	2
1632 DYES INLET	3	3	2	2
1633 RICH PASSAGE	3	4	3	3
1634 QUARTERMASTER HARBOR	2	3	2	2
1635 DALCO PASSAGE	4	5	4	3
1636 BALCH PASS	1	1	1	1

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-470, filed 4/23/92, effective 5/24/92.]

COMPENSATION SCHEDULE FOR SPILLS INTO THE COLUMBIA RIVER ESTUARY

WAC 173-183-500 Vulnerability of the Columbia River estuary environment to oil spills. (1) The purpose of this section is to describe the method of ranking vulnerability of the Columbia River estuary environment to oil spills for purposes of assessing damages using the compensation schedule.

(2) The Columbia River estuary has been distinguished from other estuarine waters of the state because it resides within the jurisdiction of two states, Washington and Oregon.

(3) For purposes of RCW 90.48.366, estuarine waters of the Columbia River are divided into one kilometer square cells. Bird, fish, mammal, invertebrate, habitat, and human use resource sensitivity have been evaluated for each cell by season. Seasonal resource sensitivities are ranked for each cell on a 1 to 5 scale where 5 represents the greatest sensitivity and 1 represents the least sensitivity as designated on the maps attached as Appendix 6 of this chapter.

(4) A vulnerability score (VS) shall be calculated at the time of a spill for each cell and for the most sensitive season impacted by the spill. The VS rates the vulnerability of public resources to the spilled oil.

(a) VS for a particular cell is determined by summing the sensitivity scores assigned to each cell for bird, fish, mammal, invertebrate, habitat, and human use resources as follows:

$$VS_{ij} = BSS_{ij} + FSS_{ij} + MSS_{ij} + ISS_{ij} + HSS_{ij} + HUS_{ij}$$

where VS_{ij} = spill vulnerability score for a particular call and season
BSS = bird sensitivity score (from Appendix 6 of this chapter)
FSS = fish sensitivity score (from Appendix 6 of this chapter)
MSS = mammal sensitivity score (from Appendix 6 of this chapter)
ISS = invertebrate sensitivity score (from Appendix 6 of this chapter)
HSS = habitat sensitivity score (from Appendix 6 of this chapter)
HUS = human use sensitivity score (from Appendix 6 of this chapter)
i = the cell under consideration
j = the most sensitive season impacted; fall, winter, spring, or summer

(b) The raw vulnerability score for a spill (SVS) is determined by calculating the average of the vulnerability scores for the cells exposed to the spill as follows:

$$SVS_j = (VS_1 + VS_2 + ... + VS_x)/x$$

where VS_i = vulnerability score for cell i (from subsection (4)(a) of this section),
x = number of cells exposed to the spill, and

(5) The final SVS score is found by rounding the raw SVS score calculated from the formula in subsection (4) of this section to the nearest 0.01 as follows: Decimals less than 0.005 shall be rounded down and decimals equal to or greater than 0.005 shall be rounded up.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-500, filed 4/23/92, effective 5/24/92.]

COMPENSATION SCHEDULE FOR SPILLS INTO FRESHWATER STREAMS, RIVERS, AND LAKES

WAC 173-183-600 Vulnerability of freshwater stream, river, and lake environments to oil spills. (1) The purpose of this section is to describe the method of ranking the vulnerability of state freshwater stream, river, and lake environments, and portions thereof, to oil spills for purposes of applying the compensation schedule.

(2) Vulnerability of freshwater stream, river, and lake environments to oil spills is based on water type classifications and a habitat index.

(3) For each oil spill into a freshwater stream, river, or lake, a spill vulnerability score (SVS) is calculated. The SVS rates the vulnerability of public resources to spilled oil based on the spilled oil's propensity to cause acute toxicity, mechanical injury, and to persist in the environment. SVS is determined by multiplying the freshwater vulnerability score, which is based on the water type classification, by the habitat index score as described by the following formula:

Raw Spill Vulnerability Score (SVS)= FVS* HI.

where FVS = Freshwater vulnerability score (from WAC 173-183-610), and
HI = Habitat index (from WAC 173-183-620).

(4) The final SVS score is found by rounding the raw SVS score calculated from the formula in subsection (3) of this section to the nearest 0.01 as follows: Decimals less than 0.005 shall be rounded down and decimals equal to or greater than 0.005 shall be rounded up.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-600, filed 4/23/92, effective 5/24/92.]

WAC 173-183-610 Freshwater vulnerability index. (1) For purposes of this chapter, freshwater streams, rivers, lakes, and portions thereof, are classified into 5 water types based on the identification system set forth in WAC 222-16-030 which is incorporated by reference.

(a) "Type 1 Water" means all waters, within their ordinary high-water mark, as inventoried as "shorelines of the state" under chapter 90.58 RCW.

(b) "Type 2 Water" shall mean segments of natural waters which are not classified as Type 1 Water and have a high use and are important from a water quality standpoint for:

(i) Domestic water supplies;

(ii) Public recreation;

(iii) Fish spawning, rearing, or migration or wildlife uses; or

(iv) Are highly significant to protect water quality.

(c) "Type 3 Water" shall mean segments of natural waters which are not classified as Type 1 or 2 Water and have a moderate to slight use and are moderately important from a water quality standpoint for:

(i) Domestic water supplies;

(ii) Public recreation;

(iii) Fish spawning, rearing, or migration or wildlife uses; or

(iv) Are highly significant to protect water quality.

(d) "Type 4 Water" shall mean segments of natural waters which are not classified as Type 1, 2, or 3. Their significance lies in their influence of water quality downstream in Type 1, 2, or 3 Waters. These may be perennial or intermittent.

(e) "Type 5 Water" means all other waters, in natural water courses, including streams with or without a well-defined channel, areas of perennial or intermittent seepage, ponds, and natural sinks. Drainage ways having short periods of runoff are considered to be Type 5 Waters.

(3) The vulnerability of freshwater environments is based on the stream typing system established in WAC 222-16-030 incorporated by reference. The rating of biological and recreational resources ranges from 1 to 5 where 5 represents the most sensitive category and 1 represents the least sensitive category as follows:

TABLE 11. Freshwater Vulnerability Score (FVS).

FVS	QUALIFICATION
5	"Type 1 waters"
4	"Type 2 waters"
3	"Type 3 waters"
2	"Type 4 waters"
1	"Type 5 waters"

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-610, filed 4/23/92, effective 5/24/92.]

WAC 173-183-620 Habitat index. (1) Most state freshwaters vary to some degree from the natural condition as increased activities within individual watersheds have decreased stream, river, and/or lake habitat quality. In order to account for that degradation prior to assessing damages using the compensation schedule, a habitat index (HI) is calculated to represent existing stream conditions prior to the oil spill.

(2) For each stream, river, or lake impacted by an oil spill where the preassessment screening committee determines that the compensation schedule shall be used, a habitat index (HI) shall be calculated following an oil spill using the following methodology. The HI measures the amount of stream degradation from natural conditions and shall be calculated using the following formula:

$$\text{Habitat Index (HI)} = [(P_1+P_2+P_3+P_4+P_5+P_6)\div N_p] \times f_1 \times f_2 \times f_3$$

where: P_1 = barriers to natural fish movement
P_2 = urbanization
P_3 = condition of riparian vegetation
P_4 = condition of flood plain
P_5 = land use of watershed
P_6 = flow alteration
N_p = number of P parameters used to calculate HI
f_1 = channel modifications
f_2 = impoundment
f_3 = water quality

(3) The RDA committee shall determine which of the habitat quality parameters described in subsection (2) of this section are applicable to the particular spill under consideration. If a parameter is not applicable to the spill under consideration, the parameter shall not be included in the formula provided in subsection (2) of this section.

(4) Habitat quality parameters (P).

(a) Barriers to natural fish movement (P_1). Barriers, to some degree, limit the free passage of fish upstream thus limiting the ability of streams to recover. The scoring of this parameter is based on the influence of barriers in the natural dispersal of fish populations as follows:

Table 12. Scoring of Barriers to Natural Fish Movement (P_1).

RATING	QUALIFICATION
10	No manmade obstructions to free upstream passage of fish
8	No dams or other structures causing a vertical drop of more than 1 foot during low flow
5	No dams or other structures causing a vertical drop of more than 3 foot during low flow
3	No dams or other structures causing a vertical drop of more than 10 foot during low flow
0	One to several dams or other structures each causing a drop of more than 10 feet during low flow

(b) Urbanization (P_2). Urban development has historically had negative habitat effects on freshwater ecosystems. The percent of urban development in a watershed directly influences siltation, riparian abuse, and water quality deterioration. The scoring of this parameter is based on the percent of urbanization in the stream watershed.

Table 13. Scoring of Urbanization (P_2).

RATING	QUALIFICATION
10	Less than 5 percent of the watershed in urban development
8	Five to 10 percent of the watershed in urban development
5	Ten to 40 percent of the watershed in urban development
3	Forty to 70 percent of the watershed in urban development
0	Seventy to 100 percent of the watershed in urban development

(c) Condition of riparian vegetation (P_3). Riparian vegetation is important to seventy percent of the animal and bird species in Washington for some part of their life cycle. It also exerts thermal regulatory and thermal controls for the aquatic system. The scoring of this parameter is based on the percent of banks that are protected by effective riparian vegetation.

Table 14. Scoring of Condition of Riparian Vegetation (P_3).

RATING	QUALIFICATION
10	Ninety to 100 percent of the banks are protected by appropriate perennial vegetation
8	Sixty to 90 percent of the banks are protected by appropriate perennial vegetation
5	Forty to 60 percent of the banks are protected by appropriate perennial vegetation
3	Ten to 40 percent of the banks are protected by appropriate perennial vegetation
0	Zero to 10 percent of the banks are protected by appropriate perennial vegetation

(d) Condition of the flood plain (P_4). The condition of the flood plain forecasts the amount of sedimentation and erosion in the watershed and as such is a primary predictor of stream degradation. The rating of this parameter is as follows:

Table 15. Scoring of the Condition of the Flood Plain (P_4).

RATING	QUALIFICATION
10	Little or no evidence of active or recent erosion of the flood plain during floods
5	All segments show evidence of occasional erosion of the flood plain. Stream channel essentially intact
0	Flood plain severely eroded and degraded, stream channel poorly defined with much lateral erosion and much reduced flow capacity

(e) Land use of the watershed (P_5). Land use practices exert a great deal of influence on the quality of the aquatic habitat. The rating of this parameter is as follows:

Table 16. Scoring of Land Use of the Watershed (P_5).

RATING	QUALIFICATION
10	More than 80 percent of the watershed protected by timber, improved pasture, terraces, or other conservation practices
8	Sixty to 80 percent of the watershed protected by timber, improved pasture, terraces, or other conservation practices
5	Forty to 60 percent of the watershed protected by timber, improved pasture, terraces, or other conservation practices
3	Twenty to 40 percent of the watershed protected by timber, improved pasture, terraces, or other conservation practices
1	Zero to 20 percent of the watershed protected by timber, improved pasture, terraces, or other conservation practices

(f) Flow alteration (P_6). Alteration of the natural flow regime can frequently alter habitat conditions that are necessary for certain behavioral and ecological needs of species. The rating of this parameter is as follows:

Table 17. Scoring for Flow Alteration (P_6).

RATING	QUALIFICATION
10	Less than 1 percent of the watershed controlled by impoundments and/or less than 50 percent of the watershed controlled by farm ponds
8	One to 30 percent of the watershed controlled by impoundments and/or less than 50 percent of the watershed controlled by farm ponds
5	Thirty to 60 percent of the watershed controlled by impoundments and/or less than 50 percent of the watershed controlled by farm ponds
3	Sixty to 95 percent of the watershed controlled by impoundments and/or less than 50 percent of the watershed controlled by farm ponds
0	Ninety-five to 100 percent of the watershed controlled by impoundments and/or less than 50 percent of the watershed controlled by farm ponds

(5) Habitat alteration functions (F). Each habitat alteration function has the power to reduce the habitat quality rating, dependent on the type and extent of alteration. Functions are expressed on a scale of 0 to 1.0.

(a) Channel modification (F_1). Channel modification can have a dramatic effect of the ability of a stream to provide for a diversity of habitats. This parameter is rated as follows:

Channel Modification (F_1) = 1.0 - (SM*FR)

where F_1 = Channel modification rate
SM = Percent stream reach modified, expressed as a decimal
FR = Percent fish reduction, expressed as a decimal

Table 18. Scoring for Percent Fish Reduction (FR).

CHANNEL MODIFICATION	% FISH REDUCTION
Clearing, Snagging	25
Channel realignment	80
Channel paving	95

(b) Water quality (F_2). Water quality exerts a variety of detrimental and/or beneficial on the aquatic ecosystem. This parameter is rated as follows:

Table 19. Scoring for Water Quality (F_2).

RATING	QUALIFICATION
1.0	Stream water unpolluted. No pollutants detected by standard methods
0.8	Occasional above normal levels of one or more water pollutants usually present, but detectable only by analysis
0.5	Occasional visible signs of oversupply of nutrients or other pollutants detected by analysis
0.4	Occasional fish kills averaging about every 4 years or more
0.2	Occasional fish kills occurring more often than every 4 years
0.0	Grossly polluted waters with fish kills occurring annually or more frequently

(c) Streambed condition (F_3). The condition of the substrate habitat can be altered in such a way as to reduce the effective habitat available to the aquatic community as a whole. This parameter is ranked as follows:

Table 20. Scoring of Streambed Condition.

RATING	QUALIFICATION
1.0	No apparent unstable material in channel with substrate of bedrock, boulders, rubble, gravel or firm alluvium
0.9	Traces of unstabilized silt, sand, or gravel in quiet areas or large pools with firm substrate
0.8	Quiet areas covered with unstable materials, deep pools restricted to areas of greatest scour
0.7	Pools shallow, filled with silt, sand or gravel, riffles contain noticeable silt deposits
0.5	Streambed completely covered by varying thicknesses of transported material such as silt, sand and gravel
0.0	Stream channel nearly or completely filled with unconsolidated, transported material; no surface flow except during floods

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-620, filed 4/23/92, effective 5/24/92.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

COMPENSATION SCHEDULE FOR SPILLS INTO FRESHWATER WETLANDS

WAC 173-183-700 Vulnerability of freshwater wetland environments to oil spills. (1) The purpose of this section is to describe the method of ranking the vulnerability of freshwater wetland environments to oil spills for purposes of assessing damages by applying the compensation schedule.

(2) Vulnerability of freshwater wetland environments to oil spills is based on a wetlands classification which rates the vulnerability of a wetland to spilled oil. Wetland environments are classified into five categories which represent the sensitivity of habitat, plants, animals, and recreational use to oil spills. For purposes of this chapter, the wetlands vulnerability score shall be equal to the spill vulnerability score as follows:

Spill Vulnerability Score (SVS) = WVS

where WVS = wetlands vulnerability score (from WAC 173-183-710).

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-700, filed 4/23/92, effective 5/24/92.]

WAC 173-183-710 Wetlands vulnerability classification. (1) Freshwater wetland environments and portions thereof, are classified into 4 types based on the identification system set forth below.

(a) Category I wetlands. The following types of wetlands are classed as category I wetlands:

(i) Documented habitat for threatened or endangered plant, animal, or fish species recognized by federal or state agencies; or

(ii) Documented Natural Heritage wetland sites or high quality native wetland communities which qualify as Natural Heritage wetland sites; or

(iii) Documented habitat of regional (Pacific Coast) or national significance for migratory birds; or

(iv) Regionally rare wetland communities; or

(v) Wetlands with irreplaceable ecological functions; or

(vi) Documented wetlands of local significance.

(b) Category II wetlands. The following types of wetlands are classed as category II wetlands:

(i) Documented habitat recognized by federal and state agencies for sensitive plant, animal, or fish species; or

(ii) Documented priority habitats and species recognized by state agencies; or

(iii) Wetlands with significant functions which may not be adequately replicated through creation or restoration; or

(iv) Wetlands with significant habitat value; or

(v) Documented wetlands of local significance.

(c) Category III wetlands. The following types of wetlands are classed as category III when they satisfy no category I, II, or IV criteria.

(d) Category IV wetlands. The following types of wetlands are classed as category IV wetlands:

(i) Wetlands less than one acre in size and hydrologically isolated and comprised of one vegetated class that is dominated (more than eighty percent areal cover) by one species from the list in Table 21; or

(ii) Wetlands less than two acres and hydrologically isolated with one vegetative class and more than ninety percent of the areal cover is any combination of species from the list in Table 22.

Table 21. List of invasive/exotic plant species for rating Category IV wetlands.

Common name	Scientific name
Soft Rush	*Juncus effusus*
Reed	*Phragmites communis*
Buttercup	*Ranunculus repens*
Reed Canary Grass	*Phalaris arundinaceae*
Purple loosestrife	*Lythrum salicarla*
Townsend's cordgrass	*Spartina townsendii*
Nonnative blackberry	*Rubus discolor, laciniatus, vestitus, macrophyllus*
Velvet grass	*Holyus lanarus, mollis*
Fescue	*Festuca arundinaceae, pratensis*
Quackgrass	*Agropyron repena*
Meadow foxtail	*Alopercurus pratensis, aequalis*
Orchardgrass	*Dactylis glomerata*

Table 21. List of invasive/exotic plant species for rating Category IV wetlands.

Common name	Scientific name
Ryegrass	*Loliom parenne, multiflorum, temulentum*
Timothy	*Phleum pratense*
Bluegrass	*Poa compressa, palustris, pratensia*
Bromes	*Bromus tectorum, rigidus, brizaformis, geoalinus, japonicus, mollis, commutatus, inarmis, cractus*
Sandbur	*Cauchrus longispinus*
Crab Grass	*Digitarisa sanguinalis*
Barnyard grass	*Echinochloa crusgalli*
Green Bristlegrass	*Setaria viridius*
Foxtail Barley	*Hordeum jubatum*
Dogtail	*Cynosurus cristatus, achinatus*
Russian Thistle	*Salsola kali*
Knotweeds	*Polygonium aviculare, concoloculus, cuspidatum, lapathifolium, persicaria*
Tumblemustards	*Sisymbrium altissimum, loesclii, officinale*
Scotch broom	*Cytisus scoparius*
Sweet clover	*Melilotus alba, officinalis*
Bird's foot trefoil	*Lotus corniculatus*
Alfalfa	*Medicago sativa*
Clover	*Trifolium dubium, pratense, repens, aryense, subterraneum, hybridum*
Spurge	*Euphorbia pepius, caula*
St. John's wort	*Hyparicum parfoliatum*
Teasel	*Dipsacus sylvestris*
Pineapple weed	*Marricaria matricartioides*
Tansy	*Tanacetum vulgare*
Thistles	*Cirsium vulgare, arvense*
Burdock	*Arctium minus*
Knapweeds	*Centauras solstitialis, repens, cyanus, maculosa*
Cultivated species; wheat, corn, barley, triticum, rye	

Table 22. List of native species for rating of Category IV wetlands.

Common name	Scientific name
Hard hack	*Spirea douglasii*
Cattail	*Typha latifolia*
Soft rush	*Juncus effusus*

(2) Freshwater wetland environment vulnerability score (WVS). The vulnerability of freshwater wetland environments is based on the stream typing system established in WAC 222-16-030 incorporated by reference. The rating of the freshwater wetland environment vulnerability ranges from 1 to 5, where 5 represents the most sensitive category and 1 represents the least sensitive category as follows:

Table 23. Freshwater Wetlands Vulnerability Score (WVS).

WVS	QUALIFICATION
5	Category I wetlands
4	Category II wetlands
3	Category III wetlands
1	Category IV wetlands

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-710, filed 4/23/92, effective 5/24/92.]

CALCULATION OF DAMAGES USING THE COMPENSATION SCHEDULE

WAC 173-183-800 Calculation of damages using the compensation schedule general. The purpose of WAC 173-183-800 to 173-183-850 are to describe:

(1) The responsibilities of the OSC and RDA committee chair in applying the compensation schedule; and

(2) The procedures for determining public resource damages using the compensation schedule.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-800, filed 4/23/92, effective 5/24/92.]

WAC 173-183-810 On-scene coordinator responsibilities. (1) The OSC or department responder, or his or her designee, shall make the following determinations:

(a) Quantity and type of oil spilled;

(b) Extent and location of the spill; and

(c) The amount of oil cleaned up on a daily basis, and in total.

(2) The potentially liable party (PLP) may hire an independent expert to determine the volume of oil spilled and cleaned up, including the volume cleaned up within the first six hours after spill initiation. The volume determinations made by the independent expert shall be used in calculations of damages under the compensation schedule if the independent expert selected is acceptable to both the PLP and the department. Determinations by the mutually agreed upon independent expert of the quantity of oil spilled and cleaned up shall be provided to the RDA committee chair within sixty days of the spill under consideration.

(3) The OSC or department responder shall provide the information enumerated in subsection (1) of this section to the RDA committee chair in a timely manner.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-810, filed 4/23/92, effective 5/24/92.]

WAC 173-183-820 RDA committee chair responsibilities. (1) The RDA committee chair shall, in consultation with the OSC and RDA committee, determine the following:

(a) For spills into marine or estuarine environments excluding the Columbia River estuary:

(i) The acute toxicity, mechanical injury and persistence oil class rankings for the spilled oil as provided in WAC 173-183-340;

(ii) Subregion(s) exposed to the spilled oil;

(iii) Habitat types exposed to the spilled oil as classified in WAC 173-183-410 for spills of 1,000 gallons or more;

(iv) Percent coverage of each habitat type within the area of spill exposure for spills of 1,000 gallons or more;

(v) Percent coverage of habitat types present within the subregion(s) exposed to spilled oil for spills of less than 1,000 gallons.

(vi) A spill's habitat vulnerability scores (HVS) for acute toxicity, mechanical injury, and persistence as determined by the procedures outlined in WAC 173-183-400; and

(vii) The spill vulnerability scores (SVS_{AT}, SVS_{MI}, SVS_{PER}) for the most vulnerable season affected by the spill using the formula provided in WAC 173-183-400.

(b) For spills in the estuarine waters of the Columbia River:

(i) The acute toxicity, mechanical injury, and persistence oil class rankings for the spilled oil as provided in WAC 173-183-340;

(ii) The cell(s) exposed to the spilled oil; and

(iii) The spill vulnerability score (SVS) for the most vulnerable season affected by the spilled oil using the procedures provided in WAC 173-183-500.

(c) For spills in freshwater streams, rivers, and lakes:

(i) The acute toxicity, mechanical injury and persistence oil class rankings for the spilled oil as provided in WAC 173-183-340;

(ii) Freshwater vulnerability score as described in WAC 173-183-610;

(iii) Freshwater habitat index as described in WAC 173-183-620; and

(iv) Spill vulnerability score (SVS) as outlined in WAC 173-183-600 for each stream, river, and/or lake environment exposed to the spill; and

(d) For spills in freshwater wetlands:

(i) The acute toxicity, mechanical injury, and persistence oil class rankings for the spilled oil as provided in WAC 173-183-340;

(ii) Freshwater wetland vulnerability score as described in WAC 173-183-710;

(iii) Spill vulnerability score (SVS) as outlined in WAC 173-183-700 for each wetland exposed to the spill.

(2) For spills that enter more than one environment, the RDA committee chair shall, in consultation with the OSC and RDA committee, make the determinations enumerated under subsection (1)(a) through (d) of this section.

[Statutory Authority: Chapter 90.48 RCW. 03-11-010 (Order 03-03), § 173-183-820, filed 5/12/03, effective 6/12/03; 92-10-005 (Order 91-13), § 173-183-820, filed 4/23/92, effective 5/24/92.]

WAC 173-183-830 Calculation of damages for spills into marine and estuarine waters, except the Columbia River estuary. (1) The formula provided in subsection (2) of this section shall be used to determine damages liability for spills into marine and estuarine waters, except the estuarine waters of Columbia River. The value of the variables used in the formula shall be determined by:

(a) The OSC as enumerated in WAC 173-183-810(1);

(b) The mutually agreed upon independent expert, if applicable, as described in WAC 173-183-810(2); and

(c) The RDA committee chair as enumerated in WAC 173-183-820 (1)(a).

(2) In making the determination of percent-coverage of habitat types, the RDA committee chair may assume that the habitat-type visible at low tide extends out to the 20 meter depth contour.

(3) Damages liability shall be calculated using the following formula:

Damages ($) =

gallons spilled* 0.1* [(OIL_{AT}*$SVS_{AT,j}$) + (OIL_{MI}*$SVS_{MI,j}$) + (OIL_{PER}*$SVS_{PER,j}$)]

where: gallons spilled = the number of gallons of oil spilled as determined by the procedures outlined in WAC 173-183-810;
$SVS_{i,j}$ = spill vulnerability score (from WAC 173-183-400(3));
OIL_{AT} = Acute Toxicity Score for Oil (from WAC 173-183-340);
OIL_{MI} = Mechanical Injury Score for Oil (from WAC 173-183-340); and
OIL_{PER} = Persistence Score for Oil (from WAC 173-183-340).
i = acute toxicity, mechanical injury and persistence effect of oil
j = the most sensitive season affected by the spill
0.1 = multiplier to adjust the damages calculated to the $1-50 per gallon range.

Formula results shall be rounded to the nearest 0.01 to determine damages liability as follows: Decimals less than 0.005 shall be rounded down, and decimals equal to or greater than 0.005 shall be rounded up.

[Statutory Authority: Chapter 90.48 RCW. 03-11-010 (Order 03-03), § 173-183-830, filed 5/12/03, effective 6/12/03; 92-10-005 (Order 91-13), § 173-183-830, filed 4/23/92, effective 5/24/92.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-183-840 Calculation of damages for spills into the Columbia River estuary. (1) The formula provided in subsection (2) of this section shall be used to determine damages liability for spills into the estuarine waters of Columbia River. The value of the variables used in the formula shall be determined by:

(a) The OSC as enumerated in WAC 173-183-810(1);

(b) The mutually agreed upon independent expert, if applicable, as described in WAC 173-183-810(2); and

(c) The RDA committee chair as enumerated in WAC 173-183-820 (1)(b).

(2) Damages liability shall be calculated using the following formula:

Damages ($) =

gallons spilled* 0.2* SVS_j* (OIL_{AT}+ OIL_{MI}+OIL_{PER})

where: gallons spilled = the number of gallons of oil spilled as determined by procedures outlined in WAC 173-183-810
SVS_j = spill vulnerability score (from WAC 173-183-500(3));
j = the most sensitive season affected by the spill
OIL_{AT} = Acute Toxicity Score for Oil (from WAC 173-183-360);
OIL_{MI} = Mechanical Injury Score for Oil (from WAC 173-183-360); and

OIL_{PER} = Persistence Score for Oil (from WAC 173-183-360).
0.2 = multiplier to adjust the damages calculated to the $1-50 per gallon range.

Formula results shall be rounded to the nearest 0.01 to determine damages liability as follows: Decimals less than 0.005 shall be rounded down, and decimals equal to or greater than 0.005 shall be rounded up.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-840, filed 4/23/92, effective 5/24/92.]

WAC 173-183-850 Calculation of damages for spills in freshwater streams, rivers, and lakes. (1) The formula provided in subsection (2) of this section shall be used to determine damages liability for spills into freshwater streams, rivers, and lakes. The value of the variables used in the formula shall be determined by:

(a) The OSC as enumerated in WAC 173-183-810(1);

(b) The mutually agreed upon independent expert, if applicable, as described in WAC 173-183-810(2); and

(c) The RDA committee chair as enumerated in WAC 173-183-820 (1)(c).

(2) Damages liability shall be calculated using the following formula:

Damages ($) =
gallons spilled* 0.08* SVS* (OIL_{AT} + OIL_{MI} + OIL_{PER})
where: gallons spilled = the number of gallons of oil spilled as determined by the procedures outlined in WAC 173-183-810;
SVS = Spill vulnerability score [from WAC 173-183-600(3)];
OIL_{AT} = Acute Toxicity Score for Oil [from WAC 173-183-340];
OIL_{MI} = Mechanical Injury Score for Oil [from WAC 173-183-340]; and
OIL_{PER} = Persistence Score for Oil [from WAC 173-183-340].
0.08 = multiplier to adjust damages calculated to the $1-50 per gallon range;

Formula results shall be rounded to the nearest 0.01 to determine damages liability as follows: Decimals less than 0.005 shall be rounded down, and decimals equal to or greater than 0.005 shall be rounded up.

[Statutory Authority: Chapter 90.48 RCW. 03-11-010 (Order 03-03), § 173-183-850, filed 5/12/03, effective 6/12/03; 92-10-005 (Order 91-13), § 173-183-850, filed 4/23/92, effective 5/24/92.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-183-860 Calculation of damages for spills into freshwater wetlands. (1) The formula provided in subsection (2) of this section shall be used to determine damages liability for spills into freshwater wetlands. The value of the variables used in the formula shall be determined by:

(a) The OSC as enumerated in WAC 173-183-810(1);

(b) The mutually agreed upon independent expert, if applicable, as described in WAC 173-183-810(2); and

(c) the RDA committee chair as enumerated in WAC 173-183-820 (1)(d).

(2) Damages liability shall be calculated using the following formula:

Damages ($) =
gallons spilled* 0.81* SVS* (OIL_{AT} + OIL_{MI} + OIL_{PER})
where: gallons spilled = the number of gallons of oil spilled as determined by procedures outlined in WAC 173-183-810;
SVS = Spill vulnerability score [from WAC 173-183-700(3)];
OIL_{AT} = Acute Toxicity Score for Oil [from WAC 173-183-340];
OIL_{MI} = Mechanical Injury Score for Oil [from WAC 173-183-340]; and
OIL_{PER} = Persistence Score for Oil [from WAC 173-183-340].
0.81 = multiplier to adjust damages calculated to the $1-50 per gallon range;

Formula results shall be rounded to the nearest 0.01 to determine damages liability as follows: Decimals less than 0.005 shall be rounded down, and decimals equal to or greater than 0.005 shall be rounded up.

[Statutory Authority: Chapter 90.48 RCW. 03-11-010 (Order 03-03), § 173-183-860, filed 5/12/03, effective 6/12/03; 92-10-005 (Order 91-13), § 173-183-860, filed 4/23/92, effective 5/24/92.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-183-865 Calculation of damages for spills entering more than one type of receiving environment. For spills that enter more than one type of receiving environment, as classified in WAC 173-183-400, 173-183-500, 173-183-600, and 173-183-700, damages liability shall be determined as follows:

(1) Damages shall be calculated using the procedures enumerated in WAC 173-183-800 through 173-183-890 for each of the receiving environment types exposed to spilled oil;

(2) Total damages liability shall be equal to the greatest of the damages calculated for the receiving environment types exposed to spilled oil as determined in subsection (1) of this section.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-865, filed 4/23/92, effective 5/24/92.]

WAC 173-183-870 Modification of damages based on actions taken by the PLP. (1) Damages calculated under WAC 173-183-830 through 173-183-860 may be reduced by the amounts specified in subsections (2) through (5) of this section, as determined by the RDA committee, in the following cases:

(a) Where the potentially liable party takes an action that results in no spill exposure and no injury to the following special features: Seal and sea lion haulouts, public recreational areas, smelt, sand lance, and herring spawning areas, salmon concentration areas, hardshell and softshell clam beds, and seabird breeding colonies;

(b) Where the potentially liable party takes an action that restores, rehabilitates, or enhances resources injured by the spill; and

(c) Where the potentially liable party immediately booms spilled oil that has not come into contact with the shore, in areas where water depth is greater than twenty meters, and immediately removes the spilled oil that has been contained in booming.

(2) When the conditions specified under subsection (1)(a) of this section are met, compensation shall be reduced by the amount that the special feature that was protected contributed to the amount of damages calculated under WAC 173-183-830 through 173-183-860. Decisions on how much the protected special feature contributed to the amount of damages calculated under the compensation schedule shall be made by the RDA committee.

(3) When conditions specified under subsection (1)(b) of this section are met, amount of damages calculated under WAC 173-183-830 through 173-183-860 may be reduced. Decisions on reduction of damages shall be made by the RDA committee.

(4) When the conditions specified under subsection (1)(c) of this section are met, the damages calculated under WAC 173-183-830 through 173-183-860 shall be reduced as described by the following steps:

(a) Two separate damages calculations shall be made using the applicable damage liability formula(s) provided in WAC 173-183-830 through 173-183-860. The number of gallons used in the first formula shall be the number of gallons immediately removed from the receiving environment as described in subsection (1)(c) of this section. The number of gallons used the second formula shall be the number of gallons spilled but not immediately removed from the receiving environment. The values of all other formula variables shall be as defined for the applicable formulas in WAC 173-183-830 through 173-183-860, except as described in subsection (4)(b) of this section;

(b) The values of the mechanical injury (OIL_{MI}) and persistence (OIL_{PER}) scores for oils shall be reduced by ten percent in the first formula; and

(c) Damages derived from the first and second formulas shall be added together to calculate the reduced damages liability.

(5) In no case shall the modifications to compensation enumerated in subsections (1) through (4) of this section result in a reduction of damages to less than one dollar per gallon of oil spilled.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-870, filed 4/23/92, effective 5/24/92.]

WAC 173-183-880 Damage claim. (1) The department shall provide documentation to the liable party that details the information and calculations that were used to assess damages under the compensation schedule. This documentation shall be provided to the liable party along with the damages liability claim.

(2) The liable party shall pay the full amount specified in the damages liability claim to the department within thirty days of receipt.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-880, filed 4/23/92, effective 5/24/92.]

WAC 173-183-890 Substitution of damages. The department may negotiate with a potentially liable party to perform restoration and enhancement projects or studies which may substitute for all or part of the damages determined through application of the procedures in WAC 173-183-300 through 173-183-870.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-890, filed 4/23/92, effective 5/24/92.]

WAC 173-183-900 Annual report. The department shall submit an annual report to the appropriate standing committees of the legislature that addresses each spill for which the RDA committee was convened. The following information shall be included in the report for each spill addressed: The outcome of the preassessment screening, and compensation claims imposed or damage assessment studies conducted, and the revenues to and expenditures from the coastal protection fund.

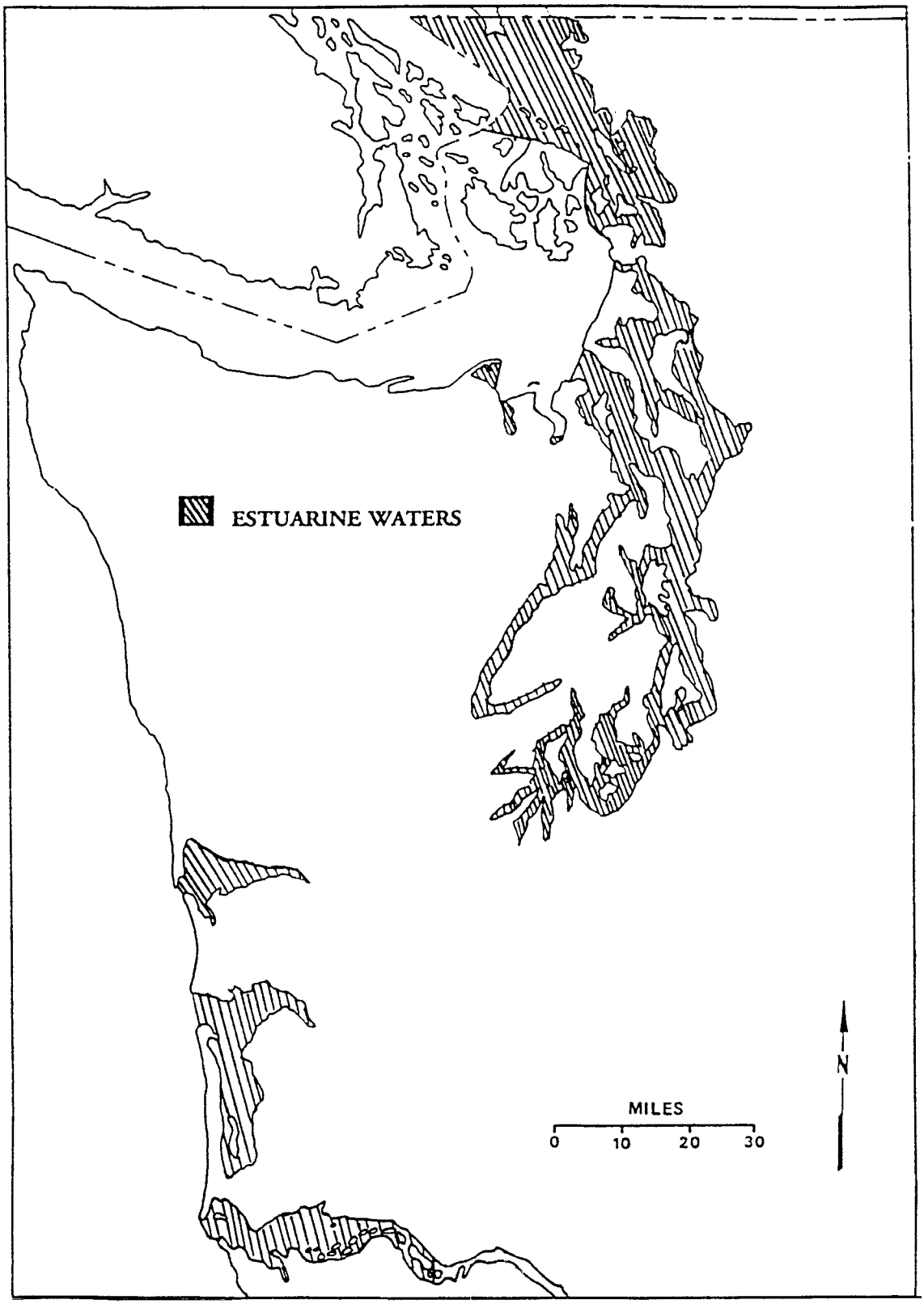
[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-900, filed 4/23/92, effective 5/24/92.]

WAC 173-183-910 Severability. If any provision of this rule or its application to any person or circumstance is held invalid, the remainder of the rule or application of the provision to other persons or circumstances is not affected.

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-910, filed 4/23/92, effective 5/24/92.]

WAC 173-183-920 Appendices.

APPENDIX 1: ESTUARINE WATERS OF THE STATE



APPENDIX 2: SPECIES AND SPECIES GROUPS INCLUDED IN THE MARINE FISH VULNERABILITY RANKING

Common Name	Scientific Name
Pacific sleeper shark	Somniosus pacificus
Spiny dogfish	Squalus acanthias
Skates	Rajidae
Spotted ratfish	Hyrodlaguscolleri
Green sturgeon	Acipensermedirostris
White sturgeon	Acipensertransmontanus
Pacific herring	Clupeapallasii
Northern anchovy	Engraulismordax
Surf smelt	Hypomesuspretiosus
Night smelt	Spirinchusstarksi
Long fin smelt	Spirinchusthaleichthys
Eulachon	Thaleichthyspacificus
Pacific cod	Gadusmacrocephalus
Pacific tomcod	Microgadusproximus
Walleye pollock	Theragrachalcogramma
Whiting	Merlucciusproductus
Plainfin midshipman	Porichthysnotatus
Tubesnout	Aulorhynchusfavidus
Three-spine stickleback	Gasterosteusaculeatus
Pacific Ocean perch	Sebastesalutus
Brown rockfish	Sebastesauriculatus
Silvergray rockfish	Sebastesbrevispinis
Copper rockfish	Sebastescaurinus
Puget Sound rockfish	Sebastesemphaeus
Widow rockfish	Sebastesentomelas
Yellowtail rockfish	Sebastesflavidus
Quillback rockfish	Sebastesmaliger
Black rockfish	Sebastesmelanops
Blue rockfish	Sebastesmystinus
China rockfish	Sebastesnebulosus
Bocaccio	Sebastespaucispinis
Canary rockfish	Sebastespinniger
Yelloweye rockfish	Sebastesruberrimus
Shortspine thornyhead	Sebastolobusalascanus
Longspine thornyhead	Sebastolobusaltivelis
Sablefish	Anoplopomafimbria
Kelp Greenling	Hexagrammosdecragrammus
Lingcod	Ophiodonelongatus
Red Irish lord	Hemilepidotus
Pacific staghorn sculpin	Leptocottusarmatus
Cabezon	Scorpaenichthysmarmoratus
Redtail surfperch	Amphistichusrhodoterus
Shiner surfperch	Cymatogasteraggregata
Pile surfperch	Damalichthysvacca
Striped surfperch	Embiotocalateralis
Eelpouts	Zoarcidae
Snake prickleback	Lumpenussagitta
Gunnels	Pholididae
Wolf-eel	Anarrhichthysocellatus
Pacific sand lance	Ammodyteshexapterus
Pacific sand dab	Citharichthyssordidus
Speckled sand dab	Citharichthysstigmaeus
Arrowtooth flounder	Atheresthesstomias
Petrale sole	Eposettajordani
Rex sole	Glyptocephaluszachirus
Pacific halibut	Hippoglossusstenolepis
Rock sole	Lepidopsettabilineata
Dover sole	Microstomuspacificus
English sole	Parophrysvetulus
Starry Flounder	Platichthysstellatus
Sand sole	Psettichthysmelanostictus

APPENDIX 3: SPECIES INCLUDED IN THE SALMON VULNERABILITY RANKING

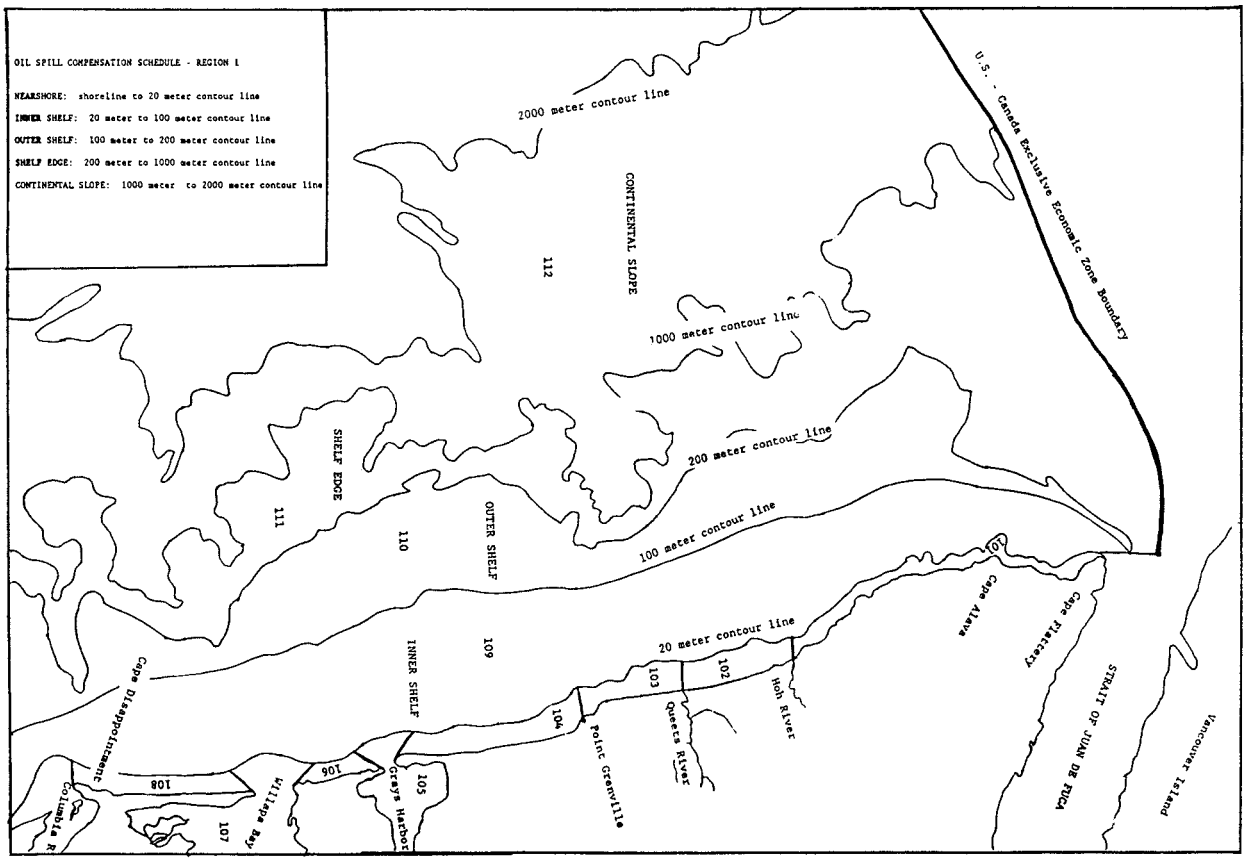
Common Name	Scientific Name
Chinook	Oncorhynchus tshawytscha
Coho	O. kisutch
Pink	O. gorbushca
Chum	O. keta
Sockeye	O. nerka

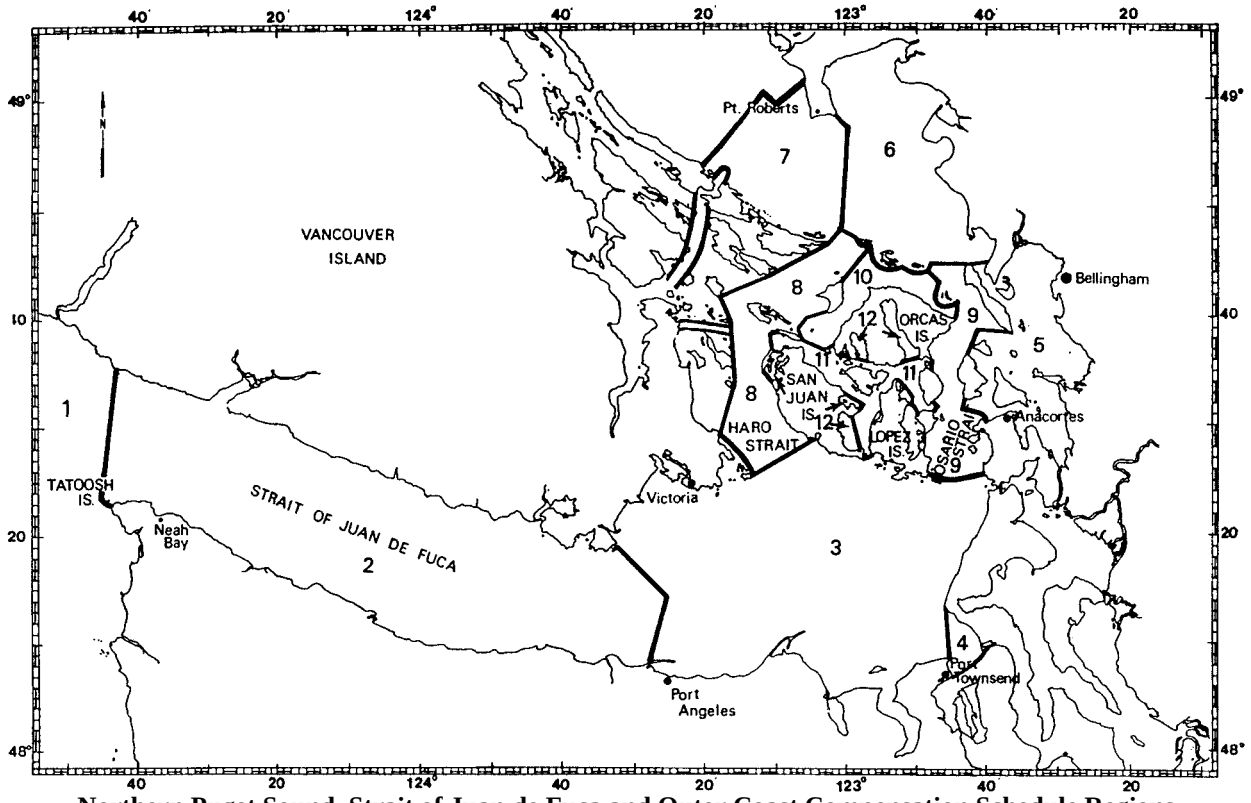
APPENDIX 4: SPECIES INCLUDED IN THE SHELLFISH VULNERABILITY RANKING

Common Name	Scientific Name
Pacific Oyster	Crassostrea gigas
Olympia Oyster	Ostrea lurida
Pacific Razor Clam	Siliqua patula
Geoduck	Panope generosa
Butter Clam	Saxidomus giganteus
Native Little Neck	Protothaca staminea
Manila Clam	Venerupis japonica
Gaper Clam	Tresus nuttalli
Horse Clam	T. capax
Eastern Soft Shell	Mya arenaria
Cockles	Clinocardium nuttalli
Pink Scallop	Chlamys rubida
Spiny Scallop	C. hastata
Rock Scallop	Hinnites multirugous
Weathervane Scallop	Pecten caurinus
Bay Mussel	Mytilus spp.
California Mussel	M. californianus
Goose(neck) Barnacle	Pollicipes polymerus
Squid	Loligo opalescens
Octopus	Octopus dolfleini
Northern Abalone	Haliotis kamschatkana
Limpets	subsistence harvest species
Whelks	subsistence harvest species
Moon Snail	Polinices
Chitons	subsistence harvest species
Sea Cucumber	Parastichopus californicus
Red Sea Urchin	Strongylocentrotus franciscanus
Green Sea Urchin	S. droebachiensis
Purple Sea Urchin	S. purpuratus
Dungeness Crab	Cancer magister
Red (Rock) Crab	C. productus
Spot Shrimp	Pandalus platyceros
Coon Stripe Shrimp	P. danae
Side Shrimp	Pandalopsis dispar
Pink Shrimp	Pandalus jordani & P. borealis
Ghost Shrimp	Callianassa spp.
Mud Shrimp	Upogebia pugettensis
Humpback Shrimp	Pandalus hypsinotus

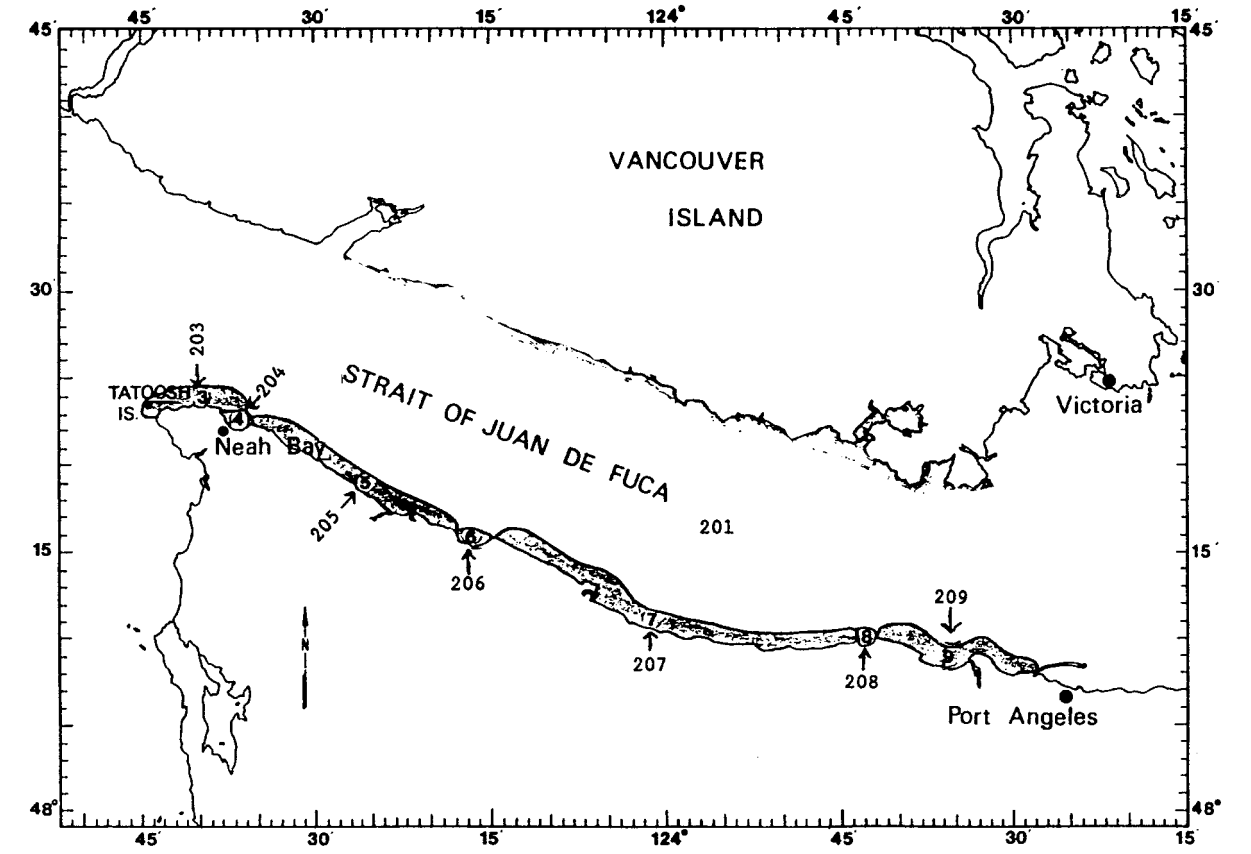
APPENDIX 5: COMPENSATION SCHEDULE REGIONS AND SUBREGIONS

Region 1 Subregions

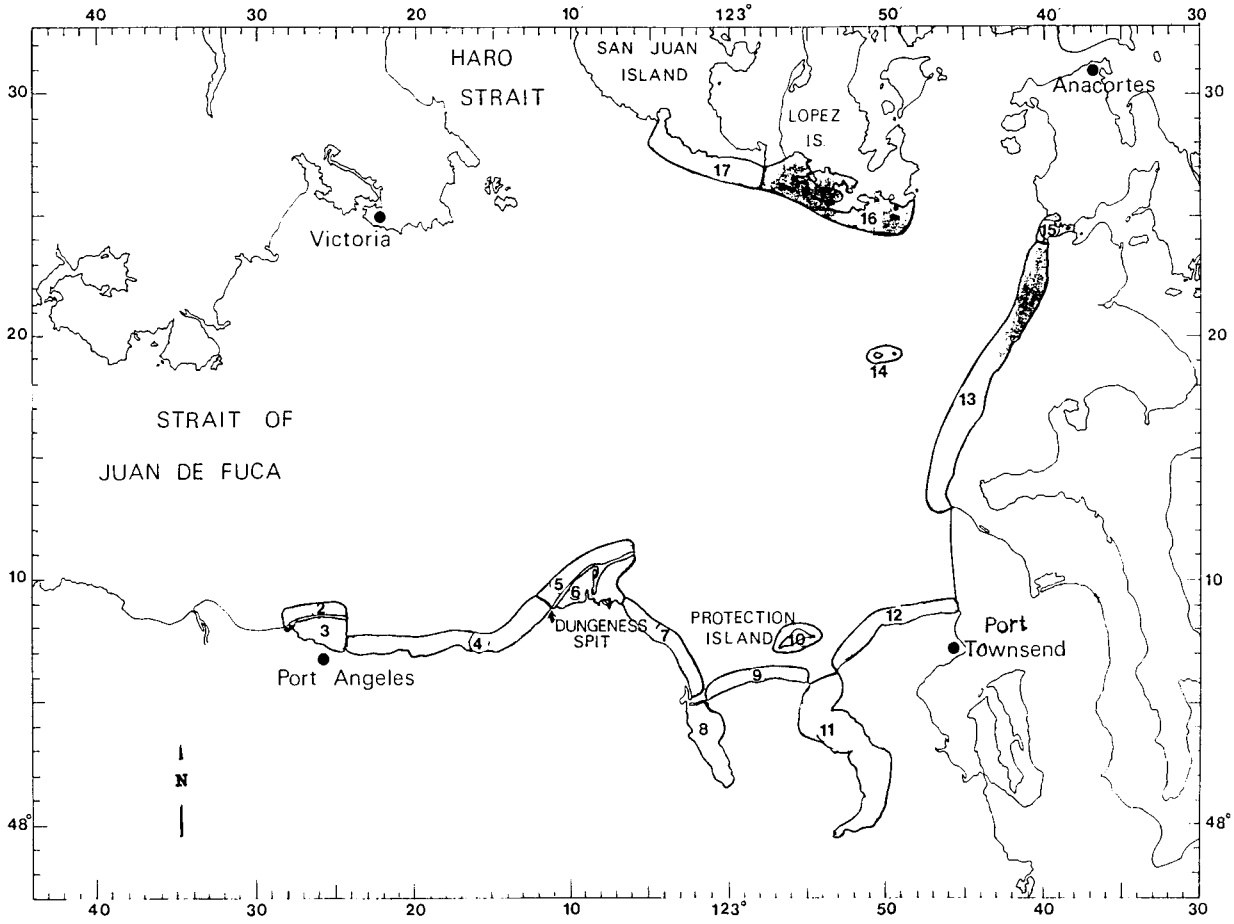




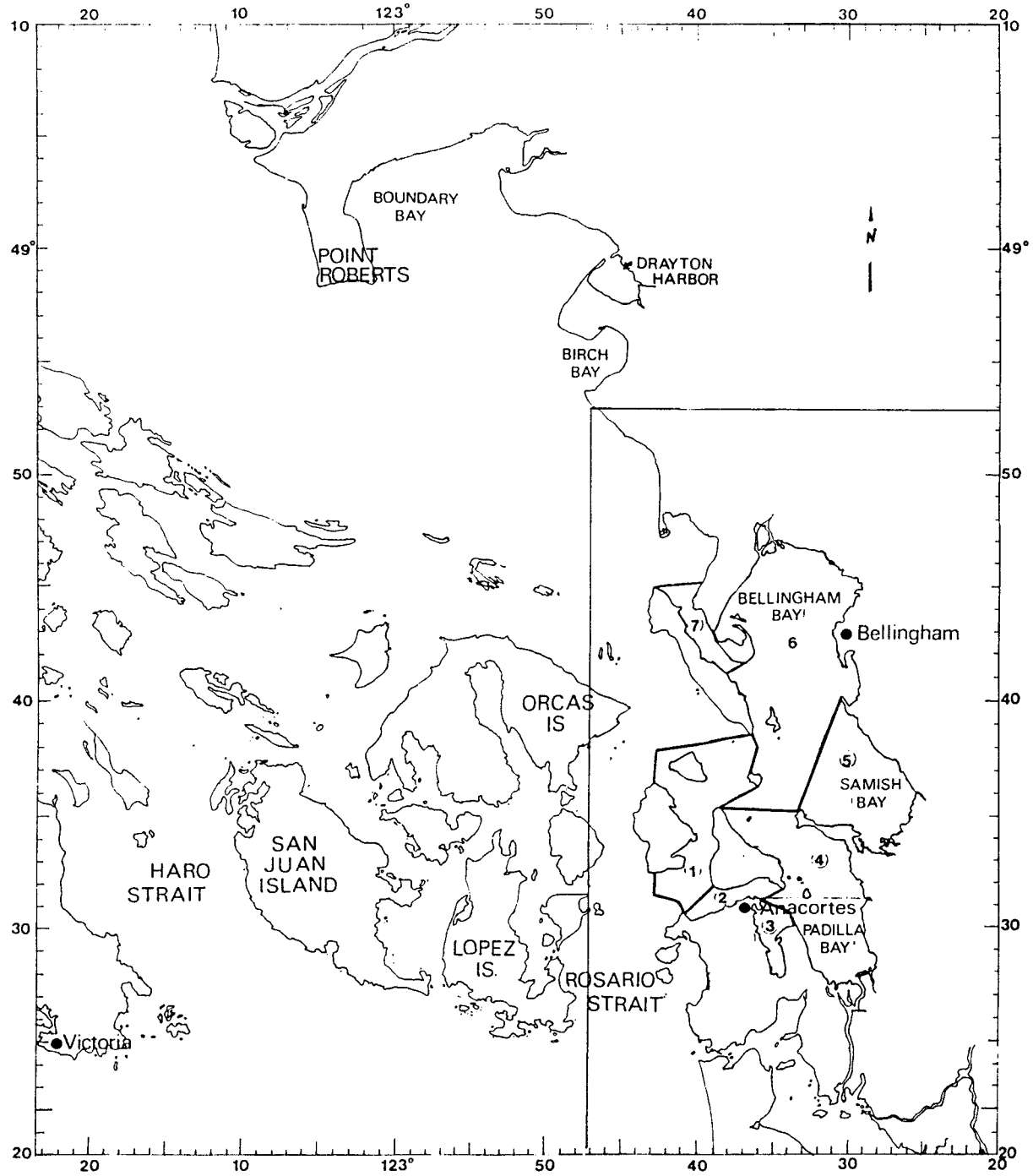
Northern Puget Sound, Strait of Juan de Fuca and Outer Coast Compensation Schedule Regions



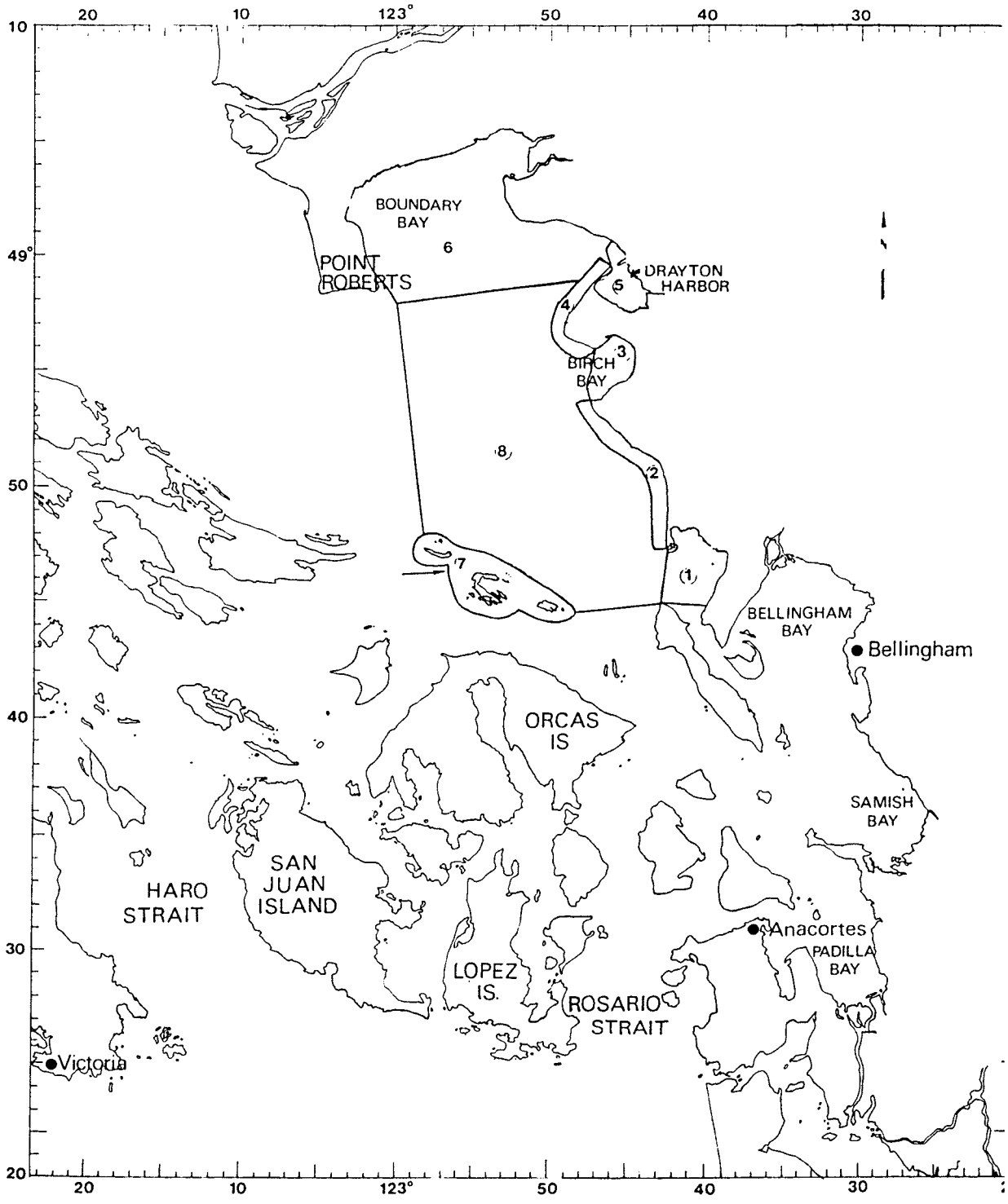
Region 2 Subregions



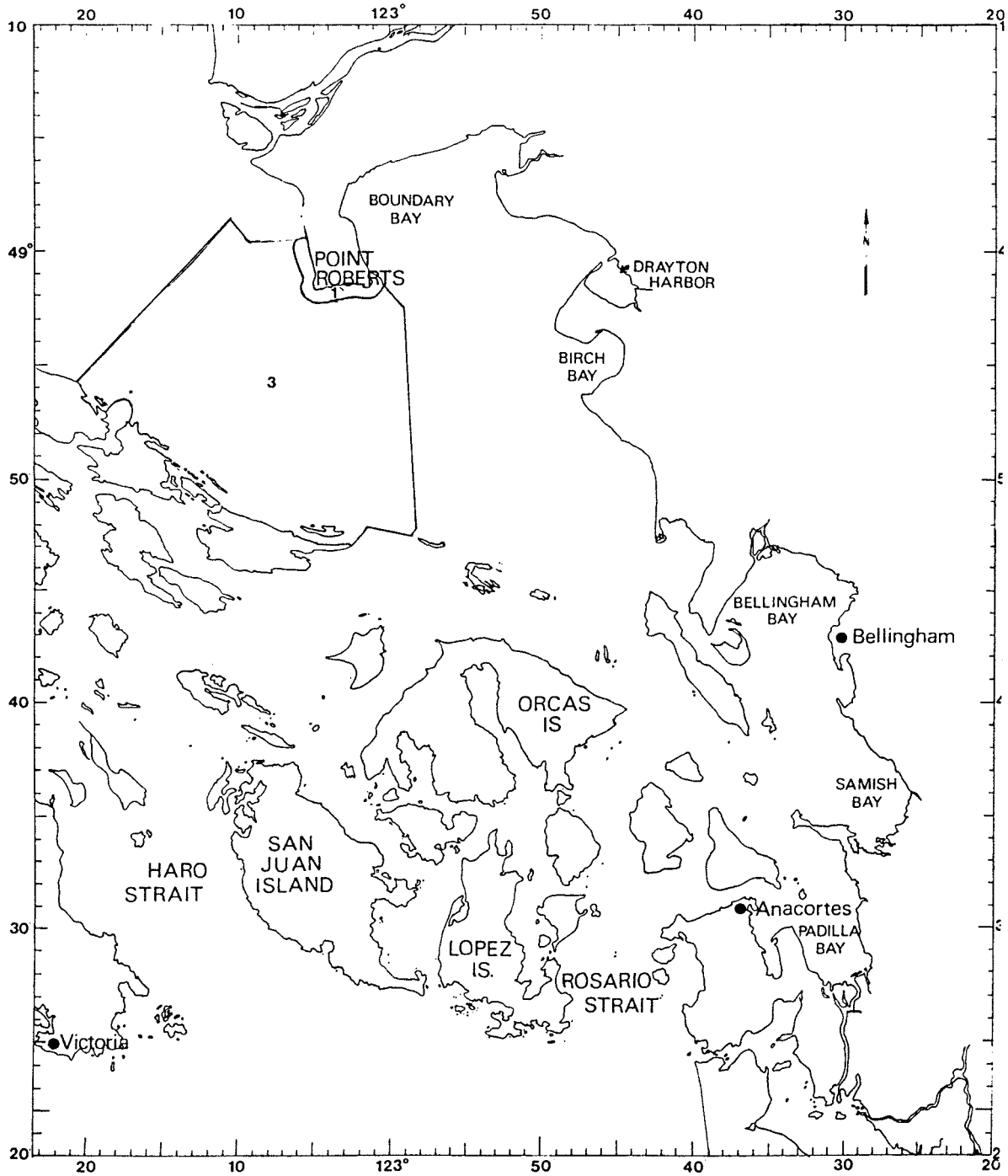
REGION 3 SUBREGIONS 301 THROUGH 317



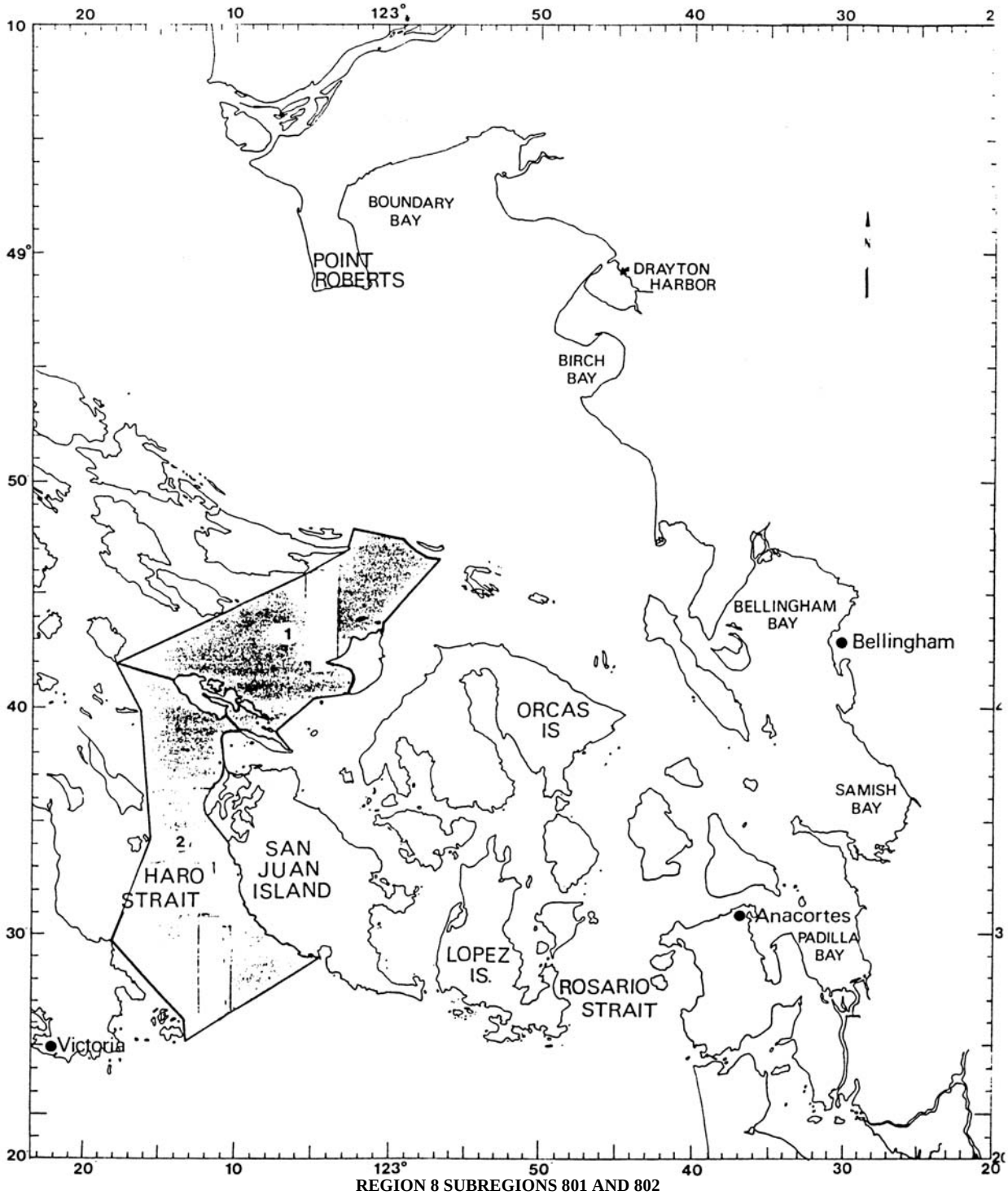
REGION 5 SUBREGIONS 501 THROUGH 507



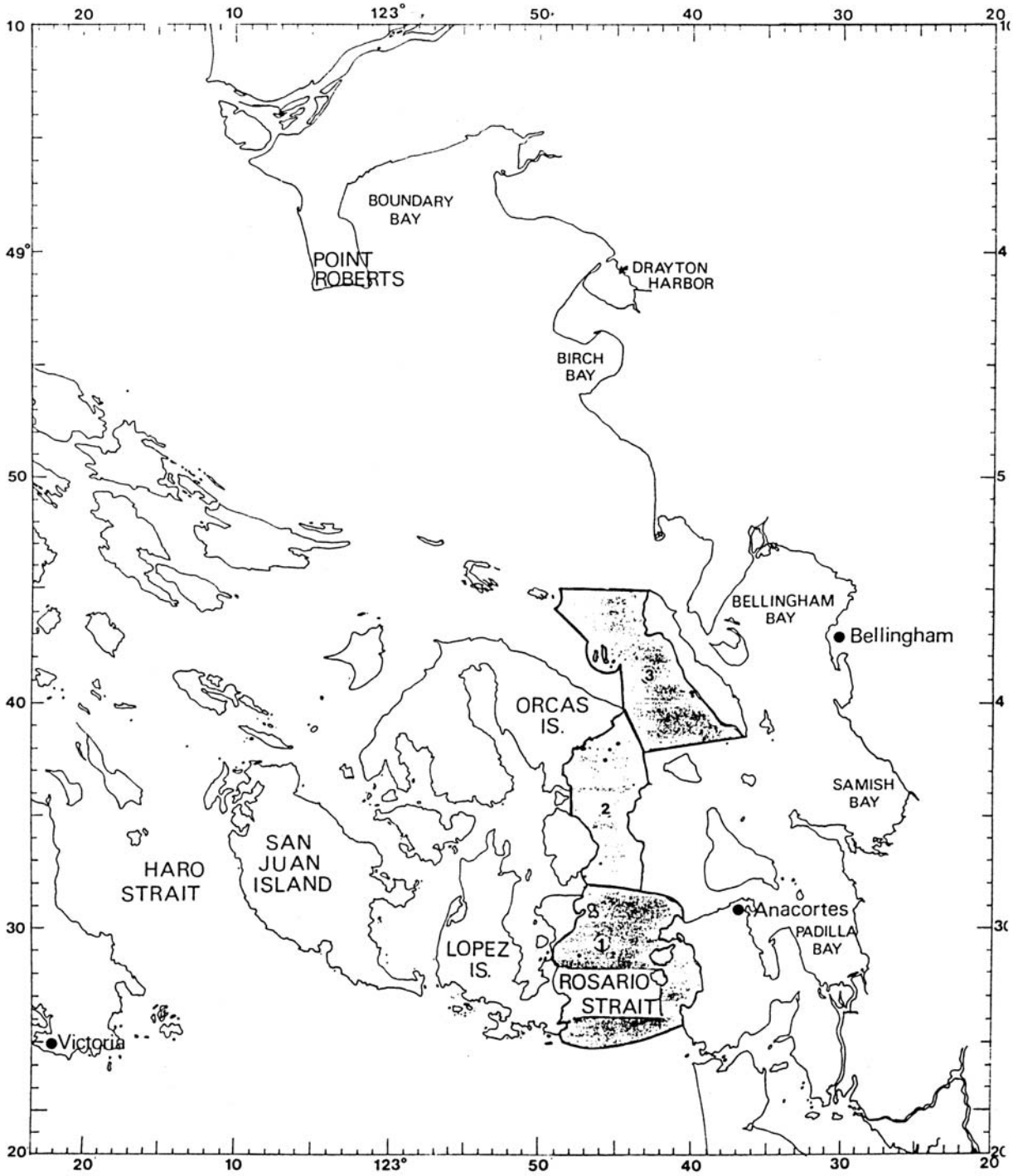
REGION 6 SUBREGIONS 601 THROUGH 607



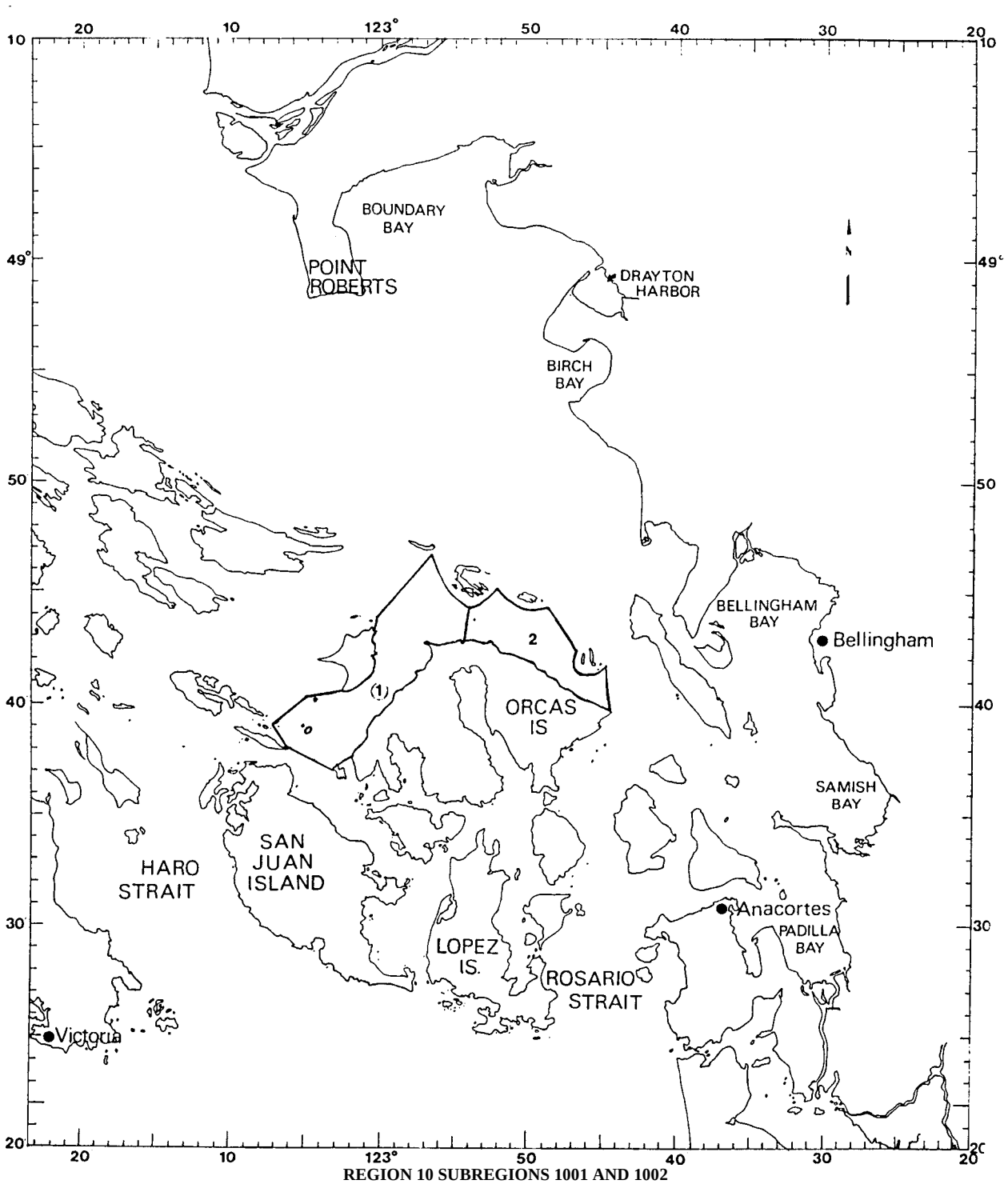
REGION 7 SUBREGIONS 701 AND 703



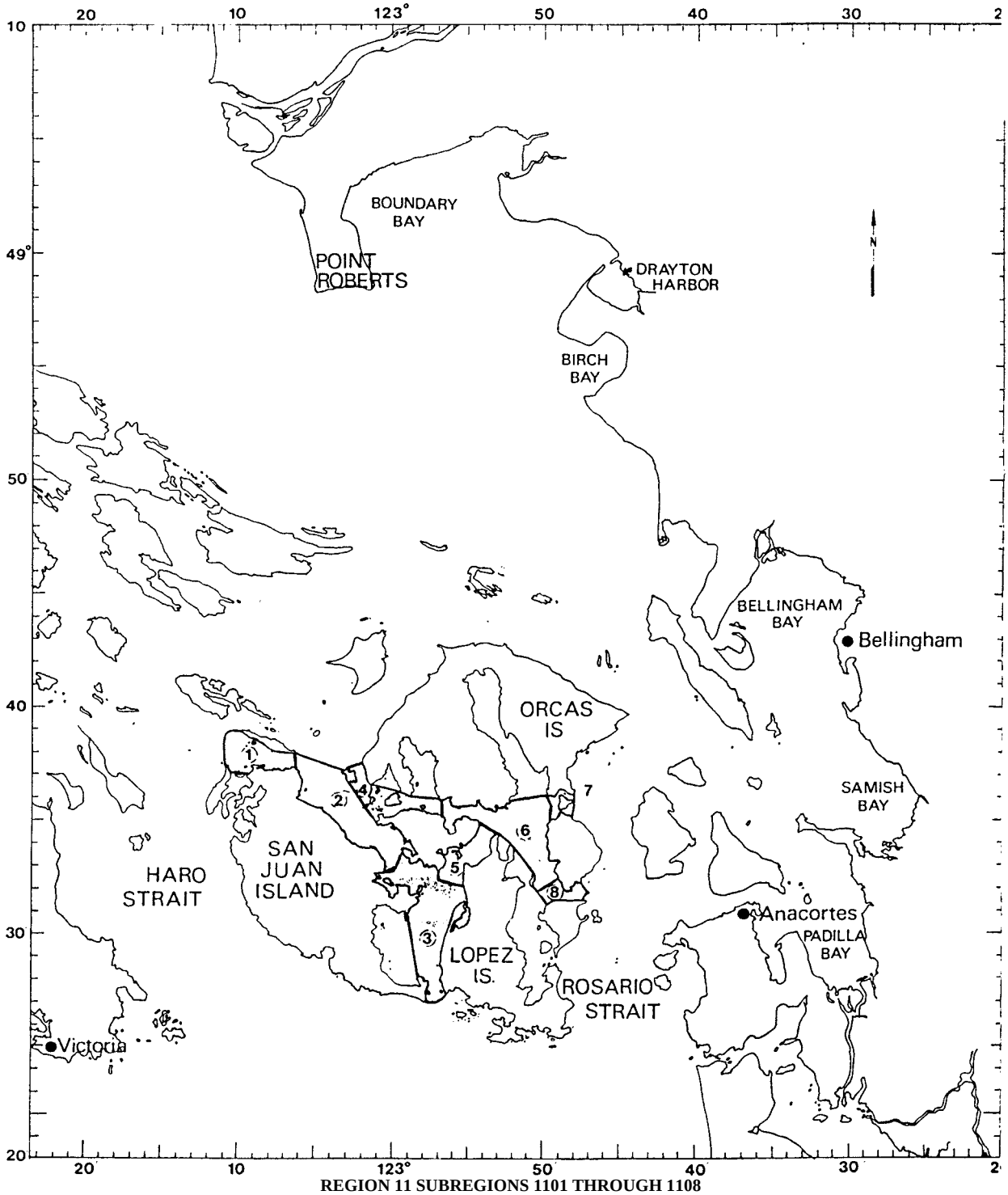
REGION 8 SUBREGIONS 801 AND 802



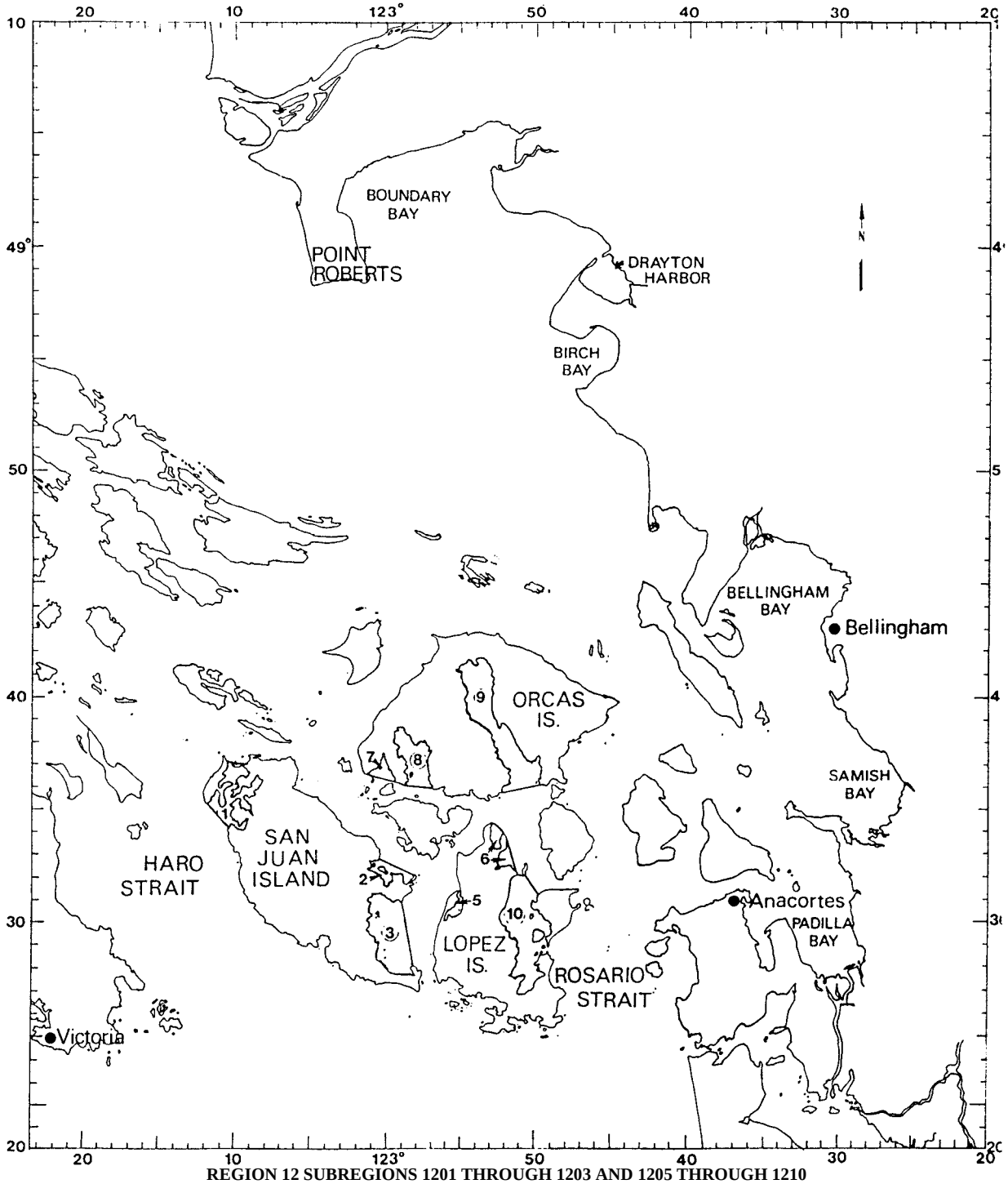
REGION 9 SUBREGIONS 901 THROUGH 903



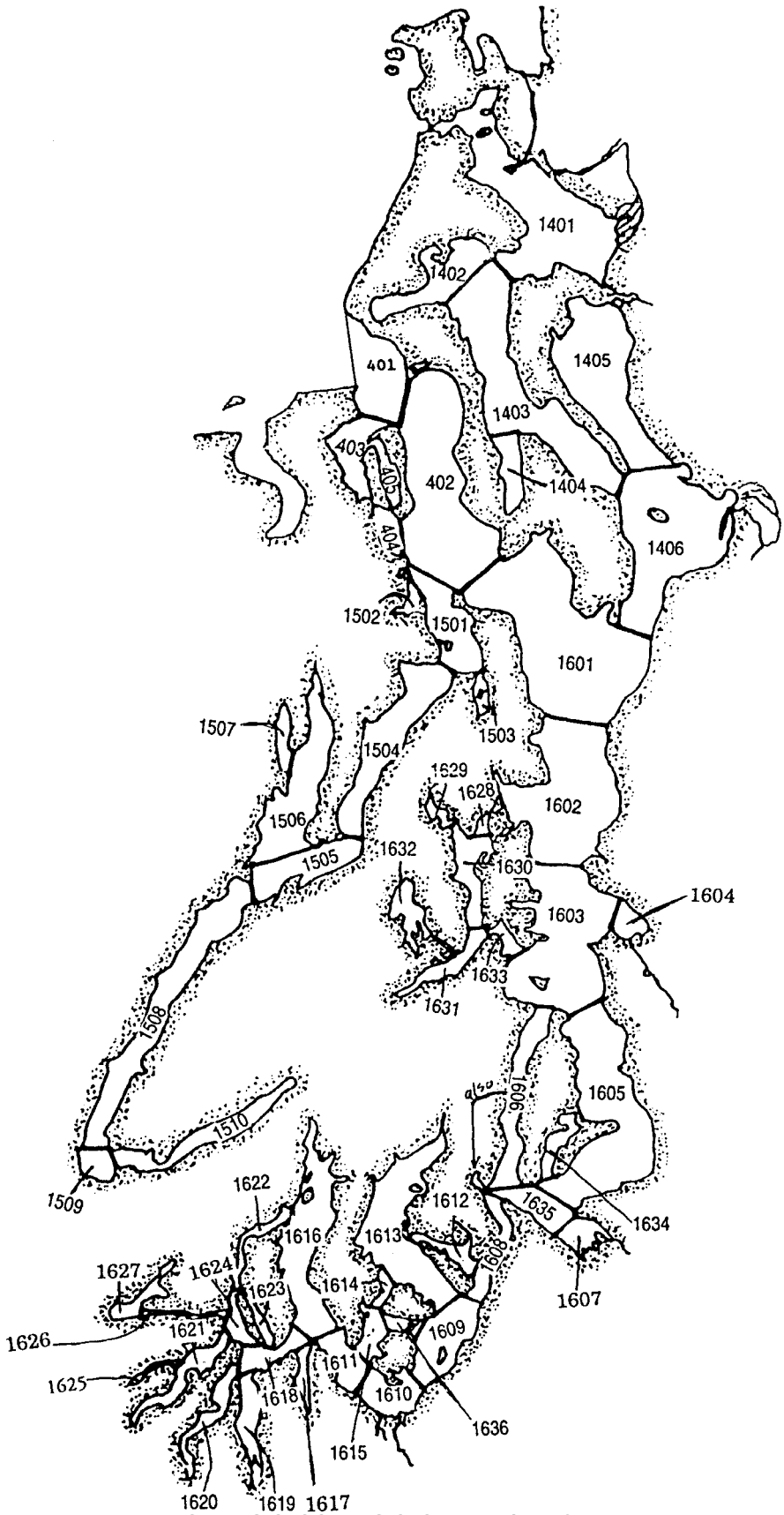
REGION 10 SUBREGIONS 1001 AND 1002



REGION 11 SUBREGIONS 1101 THROUGH 1108



REGION 12 SUBREGIONS 1201 THROUGH 1203 AND 1205 THROUGH 1210

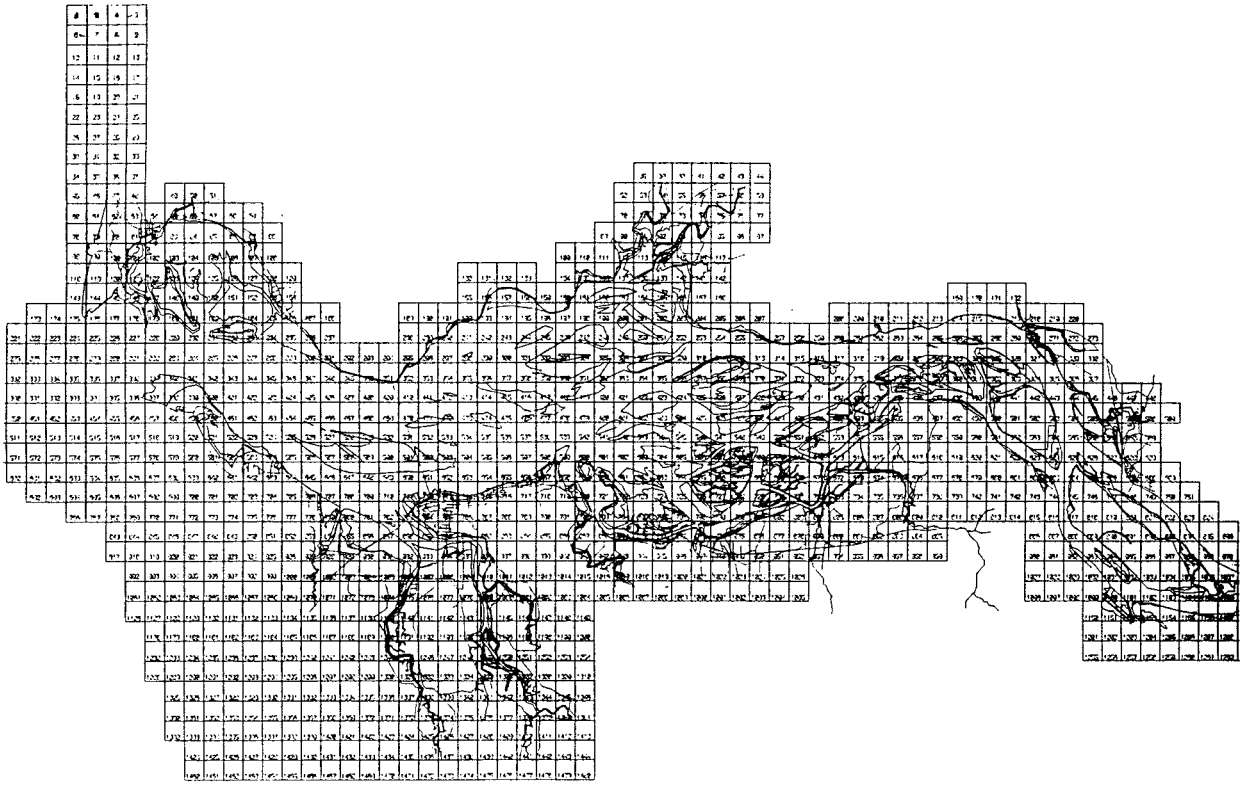


SUBREGIONS OF REGIONS 4, 14, 15 AND 16

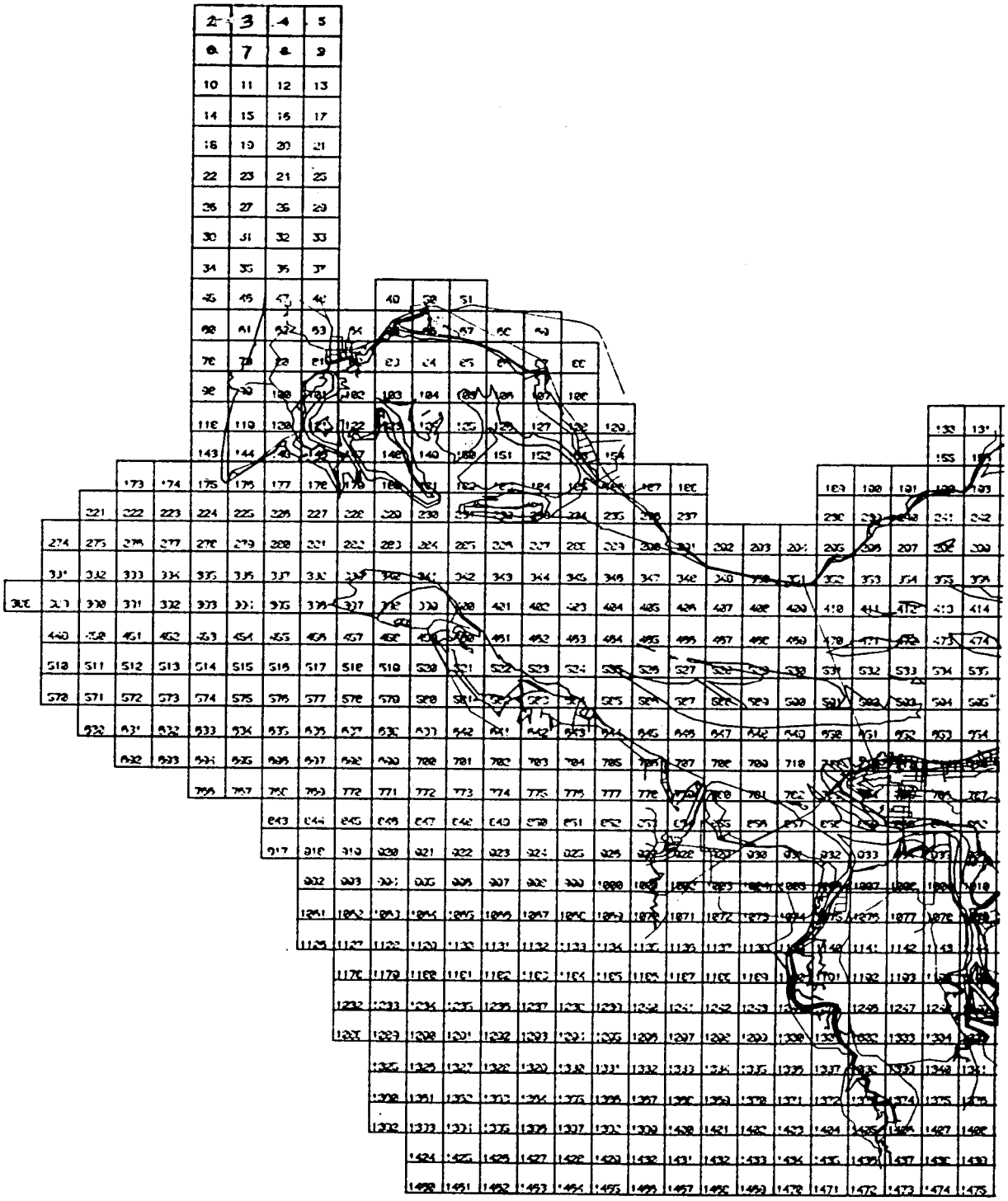
APPENDIX 6: COLUMBIA RIVER ESTUARY SEASONAL RESOURCE SENSITIVITIES BY ONE SQUARE KILOMETER GRID CELL

Columbia River Estuary Grid-Cell Indentification (CGRID-ID)

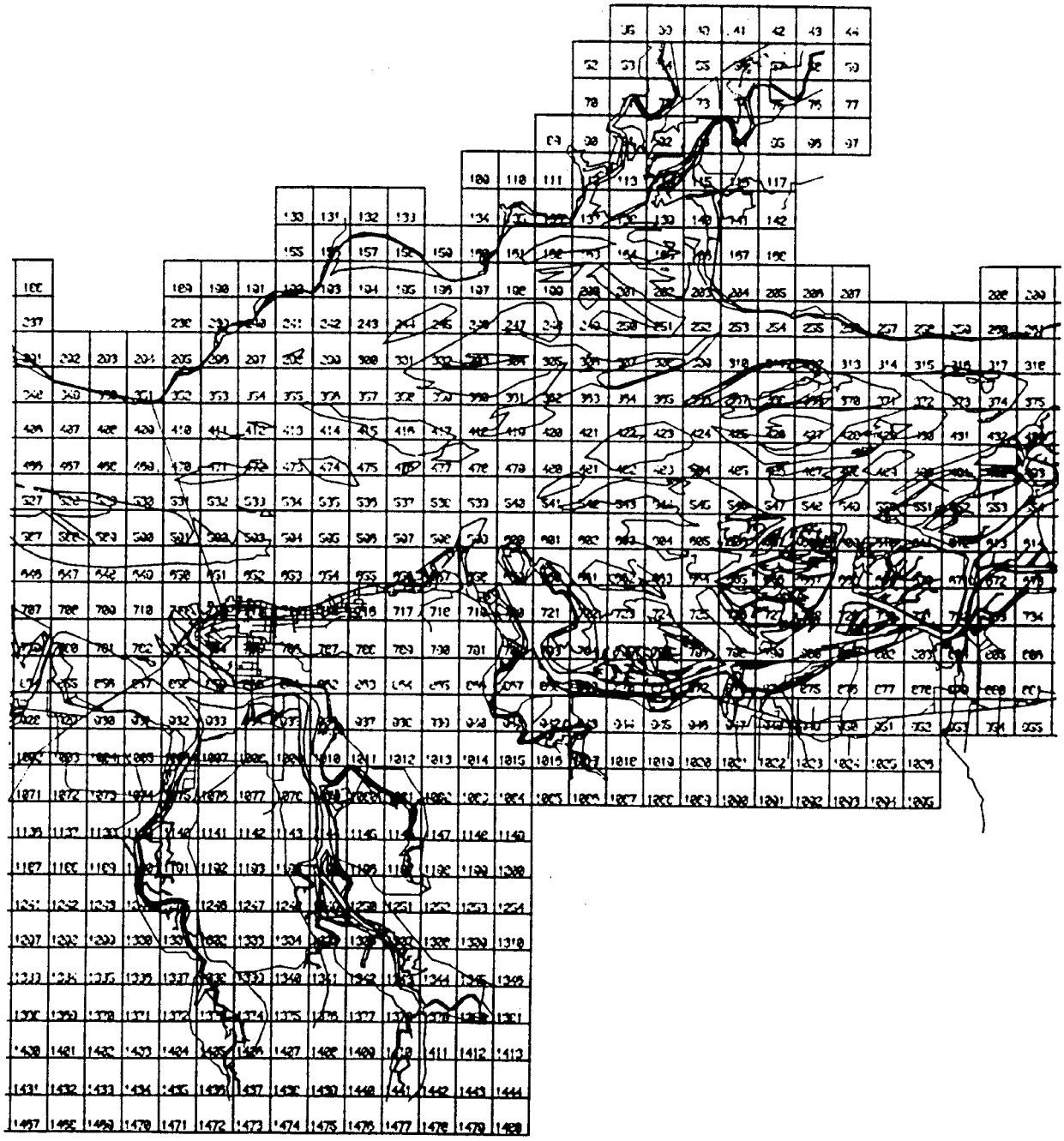
REFERENCE MAP (enlarged maps and sensitivity rankings follow)



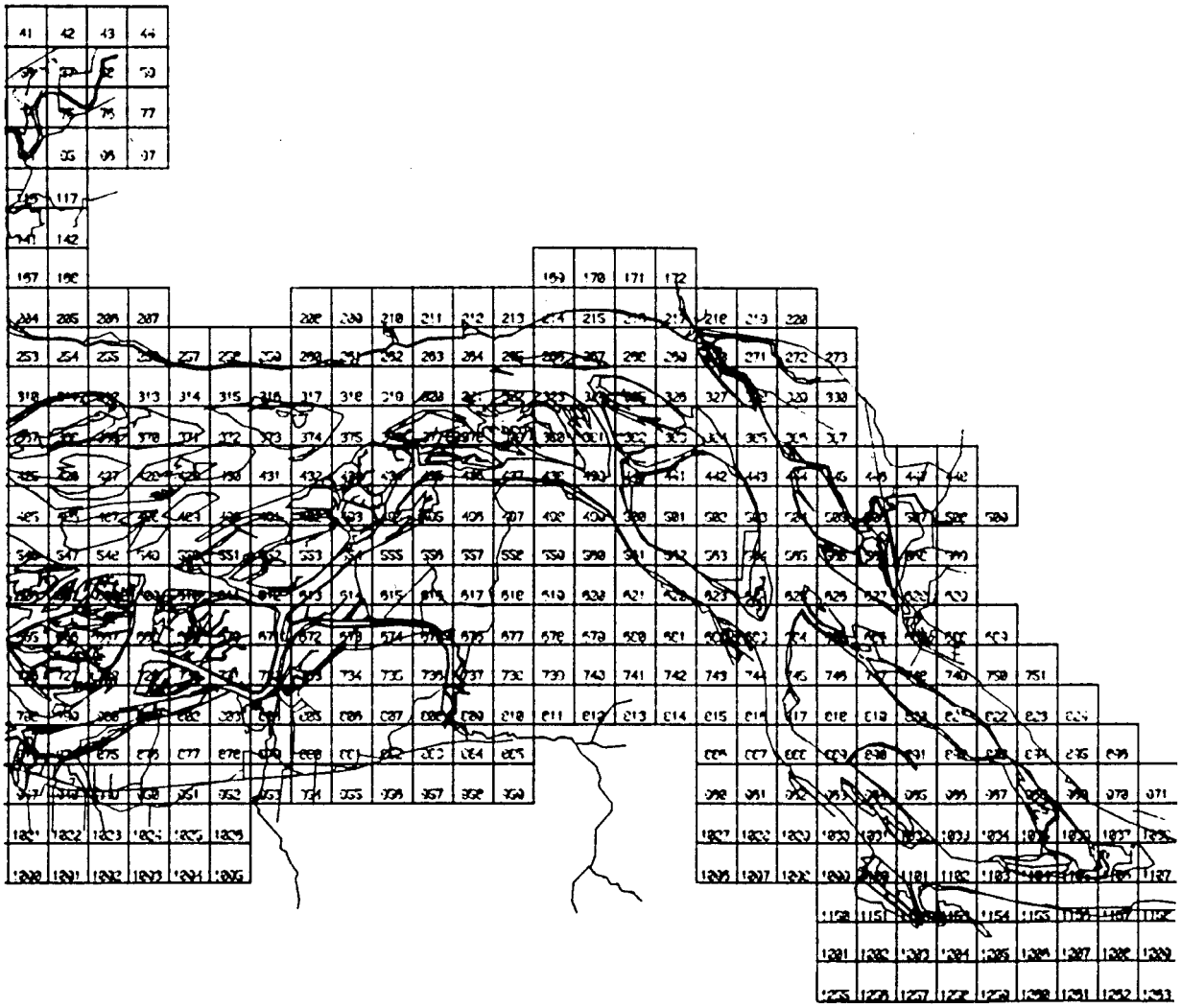
Columbia River Estuary Grid-Cell Indentification (CGRID-ID) Reference Map



Columbia River Estuary Grid-Cell Indentification (CGRID-ID) Reference Map



Columbia River Estuary Grid-Cell Indentification (CGRID-ID) Reference Map



APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
0	1111	1111	1111	1111	1111	1111	1111
1	2222	1111	1111	2222	1111	1111	1111
2	2222	1111	1111	2222	1111	1111	1111
3	1111	1111	1111	1111	1111	1111	1111
4	2222	1111	1111	2222	1111	1111	1111
5	2222	1111	1111	2222	1111	1111	1111
6	1111	1111	1111	1111	1111	1111	1111
7	2222	1111	1111	2222	1111	1111	1111
8	2222	1111	1111	2222	1111	1111	1111
9	2222	1111	1111	2222	1111	1111	1111
10	2222	1111	1111	2222	1111	1111	1111
11	2222	1111	1111	2222	1111	1111	1111
12	2222	1111	1111	2222	1111	1111	1111
13	2222	1111	1111	2222	1111	1111	1111
14	2222	1111	1111	2222	1111	1111	1111
15	2222	1111	1111	2222	1111	1111	1111
16	2222	1111	1111	2222	1111	1111	1111
17	2222	1111	1111	2222	1111	1111	1111
18	2222	1111	1111	2222	1111	1111	1111
19	2222	1111	1111	2222	1111	1111	1111
20	2222	1111	1111	2222	1111	1111	1111
21	2222	1111	1111	2222	1111	1111	1111
22	2222	1111	1111	2222	1111	1111	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
23	2222	1111	1111	2222	1111	1111	1111
24	2222	1111	1111	2222	1111	1111	1111
25	2222	1111	1111	2222	1111	1111	1111
26	2222	1111	1111	2222	1111	1111	1111
27	2222	1111	1111	2222	1111	1111	1111
28	4444	1111	1111	1111	1111	4444	1111
29	1111	1111	1111	1111	1111	1111	1111
30	1111	1111	1111	1111	1111	1111	1111
31	1111	1111	1111	1111	1111	1111	1111
32	1111	1111	1111	1111	1111	1111	1111
33	1111	1111	1111	1111	1111	1111	1111
34	4422	1111	4422	2222	1111	1111	1111
35	4422	1111	4422	2222	1111	1111	1111
36	4422	1111	4422	1111	1111	1111	1111
37	4444	1111	1111	1111	1111	4444	1111
38	5555	1111	1111	1111	1111	5555	1111
39	1111	1111	1111	1111	1111	1111	1111
40	5555	1111	1111	1111	2222	5555	1111
41	5555	1111	1111	1111	1111	5555	1111
42	5555	1111	1111	1111	1111	5555	1111
43	1111	1111	1111	1111	1111	1111	1111
44	4422	1111	4422	2222	1111	1111	1111
45	4422	1111	4422	2222	1111	1111	1111
46	4432	1111	4432	1111	1111	1111	1111
47	4422	1111	4422	1111	1111	1111	1111
48	4433	1111	4433	1111	1111	1111	1111
49	5555	1111	4433	1111	1111	5555	1111
50	5555	1111	4433	1111	1111	5555	1111
51	5555	1111	4433	1111	1111	5555	1111
52	5555	1111	1131	1111	2222	5555	1111
53	5555	1111	4444	1111	2222	5555	1111
54	5555	1111	1131	1111	2222	5555	1111
55	5555	1111	1111	1111	2222	5555	1111
56	5555	1111	1111	1111	1111	5555	1111
57	5555	1111	1111	1111	1111	5555	1111
58	1111	1111	1111	1111	1111	1111	1111
59	4422	1111	4422	2222	1111	1111	1111
60	4422	1111	4422	2222	1111	1111	1111
61	4432	1111	4432	1111	1111	1111	1111
62	4433	1111	4433	1111	1111	3333	1111
63	5555	1111	4433	1111	1111	5555	1111
64	5555	1111	4433	1111	1111	5555	1111
65	4444	1111	4433	1111	1111	4444	1111
66	5555	1111	4433	1111	1111	5555	1111
67	5555	1111	4433	1111	1111	5555	1111
68	5555	1111	4422	1111	1111	5555	1111
69	5555	1111	1144	1111	1111	5555	1111
70	5555	1111	4444	1111	1111	5555	1111
71	5555	1111	4444	1111	1111	5555	1111
72	5555	1111	4444	1111	2222	5555	1111
73	5555	1111	1111	1111	2222	5555	1111
74	1111	1111	1111	1111	1111	1111	1111
75	4422	1111	4422	2222	1111	1111	1111
76	4422	1111	4422	2222	1111	1111	1111
77	5555	1111	4433	1111	1111	5555	1111
78	5555	1111	4433	1111	1111	5555	1111
79	5555	1111	4433	1111	1111	5555	1111
80	4444	1111	4433	1111	1111	4444	1111
81	4444	1111	4433	1111	1111	4444	1111
82	4444	1111	4433	1111	1111	4444	1111
83	5555	1111	4433	1111	1111	5555	1111
84	5555	1111	4433	1111	1111	5555	1111
85	4422	1111	4422	1111	1111	1111	1111
86	5555	1111	1131	1111	1111	5555	1111
87	5555	1111	1144	1111	1111	5555	1111
88	5555	1111	4444	1111	1111	5555	1111
89	5555	1111	4444	1111	1111	5555	1111
90	5555	1111	4444	1111	1111	5555	1111
91	5555	1111	1131	1111	1111	5555	1111
92	4422	1111	4422	2222	1111	1111	1111
93	4422	1111	4422	2222	1111	1111	1111
94	5555	1111	4433	1111	1111	5555	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
95	5555	1111	4433	1111	1111	5555	1111
96	5555	1111	4433	1111	1111	5555	1111
97	5555	1111	4433	1111	1111	5555	1111
98	4444	1111	4433	1111	1111	4444	1111
99	4444	1111	4433	1111	1111	4444	1111
100	4444	1111	4433	1111	1111	4444	1111
101	5555	1111	4433	1111	2222	5555	1111
102	5555	1111	4433	1111	1111	5555	1111
103	4422	1111	4422	1111	1111	1111	1111
104	4422	1111	4422	1111	1111	1111	1111
105	5555	1111	1131	1111	1111	5555	1111
106	5555	1111	1131	1111	1111	5555	1111
107	5555	1111	1144	1111	1111	5555	1111
108	4444	1111	1144	1111	1111	4444	1111
109	5555	1111	4444	1111	1111	5555	1111
110	5555	1111	4444	1111	1111	5555	1111
111	5555	1111	1144	1111	1111	5555	1111
112	4422	1111	4422	2222	1111	1111	1111
113	5555	1111	4422	1111	1111	5555	1111
114	5555	1111	5533	1111	1111	5555	1111
115	5555	1111	5533	1111	1111	5555	1111
116	5555	1111	4433	1111	1111	5555	1111
117	5555	1111	4433	1111	1111	5555	1111
118	4444	1111	4433	1111	1111	4444	1111
119	4444	1111	4433	1111	1111	4444	1111
120	4444	1111	4433	1111	1111	4444	1111
121	4444	1111	4433	1111	2222	4444	1111
122	5555	1111	4433	1111	2222	5555	1111
123	5555	1111	4433	1111	1111	5555	1111
124	5555	1111	4433	1111	1111	5555	1111
125	5555	1111	4433	1111	1111	5555	1111
126	5555	1111	1111	1111	1111	5555	1111
127	5555	1111	1131	1111	2222	5555	1111
128	5555	1111	1131	1111	2222	5555	1111
129	3333	1111	1131	1111	1111	3333	1111
130	3333	1111	1131	1111	1111	3333	1111
131	3333	1111	1131	1111	1111	3333	1111
132	5555	1111	4444	1111	1111	5555	1111
133	5555	1111	4444	1111	1111	5555	1111
134	1144	1111	1144	1111	1111	1111	1111
135	4433	1111	4433	1111	1111	1111	1111
136	4433	1111	4433	1111	1111	1111	1111
137	2222	1111	1111	2222	1111	1111	1111
138	2222	1111	1111	2222	1111	1111	1111
139	5555	1111	4422	2222	1111	5555	1111
140	5555	1111	4422	1111	1111	5555	1111
141	4433	1111	4433	1111	1111	1111	1111
142	5533	1111	5533	1111	1111	3333	1111
143	4433	1111	4433	1111	1111	3333	1111
144	5555	1111	4433	1111	1111	5555	1111
145	5555	1111	4433	1111	1111	5555	1111
146	4433	1111	4433	1111	1111	3333	1111
147	4433	1111	4433	1111	1111	3333	1111
148	4433	1111	4433	1111	2222	3333	1111
149	5555	1111	4433	1111	2222	5555	1111
150	5555	1111	4433	1111	2222	5555	1111
151	4444	1111	4433	1111	1111	4444	1111
152	5555	1111	4433	1111	2222	5555	1111
153	4444	1111	4433	1111	1111	4444	1111
154	4444	1111	4433	1111	1111	4444	1111
155	5555	1111	1131	1111	1111	5555	1111
156	5555	1111	1131	1111	2222	5555	1111
157	3333	1111	1131	1111	2222	3333	1111
158	3333	1111	1131	1111	1111	3333	1111
159	3333	1111	1131	1111	1111	3333	1111
160	3333	1111	1131	1111	1111	3333	1111
161	5555	1111	4432	1111	1111	5555	1111
162	5555	1111	4444	1111	1111	5555	1111
163	4433	1111	4432	1111	1111	3333	1111
164	1131	1111	1131	1111	1111	1111	1111
165	4433	1111	4433	1111	1111	3333	1111
166	4433	1111	4433	1111	1111	3333	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
167	4433	1111	4433	1111	1111	3333	1111
168	4433	1111	4433	1111	1111	3333	1111
169	2222	1111	1111	2222	1111	1111	1111
170	2222	1111	1111	2222	1111	1111	1111
171	2222	1111	1111	2222	1111	1111	1111
172	4433	1111	4422	2222	1111	3333	1111
173	4422	1111	4422	2222	1111	1111	1111
174	4422	1111	4422	2222	1111	1111	1111
175	4433	1111	4433	1111	1111	3333	1111
176	4433	1111	4433	1111	1111	3333	1111
177	4433	1111	4433	1111	1111	3333	1111
178	5555	1111	4433	1111	1111	5555	1111
179	5555	1111	4433	1111	1111	5555	1111
180	5555	1111	5533	1111	1111	5555	1111
181	5555	1111	5533	1111	2222	5555	1111
182	4444	1111	4433	1111	2222	4444	1111
183	4433	1111	4433	1111	2222	3333	1111
194	5555	1111	4433	1111	2222	5555	1111
185	5555	1111	4433	1111	1111	5555	1111
186	4444	1111	4433	1111	1111	4444	1111
187	4433	1111	4433	1111	1111	1111	1111
188	4433	1111	4433	1111	1111	1111	1111
189	4433	1111	4433	1111	1111	1111	1111
190	4444	1111	4433	1111	1111	4444	1111
191	4444	1111	1111	1111	1111	4444	1111
192	4444	1111	1131	1111	1111	4444	1111
193	4444	1111	1131	1111	1111	4444	1111
194	4444	1111	1131	1111	1111	4444	1111
195	3333	1111	1131	1111	1111	3333	1111
196	3333	1111	1131	1111	1111	3333	1111
197	3333	1111	1131	1111	1111	3333	1111
198	4444	1111	4433	1111	1111	4444	1111
199	4433	1111	4432	1111	1111	3333	1111
200	4433	1111	4432	1111	1111	3333	1111
201	3333	1111	1131	1111	1111	3333	1111
202	4433	1111	4432	1111	1111	3333	1111
203	4433	1111	4433	1111	1111	3333	1111
204	4433	1111	4433	1111	1111	3333	1111
205	5555	1111	4433	1111	1111	5555	1111
206	4433	1111	4433	1111	1111	3333	1111
207	5555	1111	4433	1111	1111	5555	1111
208	4433	1111	4433	1111	1111	3333	1111
209	5555	1111	4433	1111	1111	5555	1111
210	5555	1111	4433	1111	1111	5555	1111
211	4433	1111	4433	1111	1111	1111	1111
212	5555	1111	4433	1111	1111	5555	1111
213	5555	1111	1111	1111	1111	5555	1111
214	5555	1111	1111	1111	1111	5555	1111
215	3333	1111	1111	1111	1111	3333	1111
216	2222	1111	1111	2222	1111	1111	1111
217	2222	1111	1111	2222	1111	1111	1111
218	2222	1111	1111	2222	1111	1111	1111
219	2222	1111	1111	2222	1111	1111	1111
220	4422	1111	4422	2222	1111	1111	1111
221	4422	1111	4422	2222	1111	1111	1111
222	4422	1111	4422	2222	1111	1111	1111
223	4422	1111	4422	2222	1111	1111	1111
224	4422	1111	4422	2222	1111	1111	1111
225	4422	1111	4422	2222	1111	1111	1111
226	4422	1111	4422	2222	1111	1111	1111
227	4422	1111	4422	2222	1111	1111	1111
228	4433	1111	4433	2222	1111	1111	1111
229	4433	1111	4433	2222	2222	1111	1111
230	4433	1111	4433	1111	2222	3333	1111
231	4433	1111	4433	1111	2222	3333	1111
232	5555	1111	4433	1111	2222	5555	1111
233	4433	1111	4432	1111	2222	3333	1111
234	5555	1111	4433	1111	1111	5555	1111
235	4433	1111	4433	1111	1111	1111	1111
236	4433	1111	4433	1111	1111	3333	1111
237	4433	1111	4433	1111	1111	1111	1111
238	4444	1111	4433	1111	1111	4444	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
239	4444	1111	4433	1111	1111	4444	1111
240	4444	1111	4422	1111	1111	4444	1111
241	4444	1111	4422	1111	1111	4444	1111
242	4444	1111	4422	1111	2222	4444	1111
243	4444	1111	4432	1111	2222	4444	1111
244	4444	1111	4433	1111	2222	4444	1111
245	5544	1111	5533	1111	1111	4444	1111
246	5544	1111	5533	1111	1111	4444	1111
247	5544	1111	5532	1111	1111	4444	1111
248	5544	1111	5532	1111	1111	4444	1111
249	5555	1111	4432	1111	1111	5555	1111
250	5555	1111	4432	1111	1111	5555	1111
251	4432	1111	4432	1111	1111	1111	1111
252	4433	1111	4433	1111	1111	3333	1111
253	4433	1111	4433	1111	1111	3333	1111
254	4433	1111	4433	1111	1111	3333	1111
255	4433	1111	4433	1111	1111	3333	1111
256	4433	1111	4433	1111	1111	3333	1111
257	4433	1111	4433	1111	1111	1111	1111
258	4433	1111	4433	1111	1111	3333	1111
259	5555	1111	4433	1111	1111	5555	1111
260	5555	1111	4433	1111	1111	5555	1111
261	5555	1111	4433	1111	1111	5555	1111
262	5555	1111	4433	1111	1111	5555	1111
263	5555	1111	4433	1111	1111	5555	1111
264	5555	1111	4433	1111	1111	5555	1111
265	5555	1111	5533	1111	1111	5555	1111
266	5555	1111	5533	1111	1111	5555	1111
267	5555	1111	1111	1111	1111	5555	1111
268	2222	1111	1111	2222	1111	1111	1111
269	2222	1111	1111	2222	1111	1111	1111
270	2222	1111	1111	2222	1111	1111	1111
271	2222	1111	1111	2222	1111	1111	1111
272	4422	1111	4422	2222	1111	1111	1111
273	4422	1111	4422	2222	1111	1111	1111
274	4422	1111	4422	2222	1111	1111	1111
275	4422	1111	4422	2222	1111	1111	1111
276	4433	1111	4422	2222	1111	3333	1111
277	4433	1111	4422	2222	1111	3333	1111
278	4433	1111	4422	2222	1111	3333	1111
279	4422	1111	4422	2222	1111	1111	1111
280	4422	1111	4422	2222	1111	1111	1111
281	4432	1111	4432	2222	1111	1111	1111
282	4432	1111	4432	2222	2222	1111	1111
283	4432	1111	4432	1111	2222	1111	1111
284	4433	1111	4433	1111	2222	2222	1111
285	4433	1111	4433	1111	2222	3333	1111
286	4433	1111	4433	1111	1111	3333	1111
287	4433	1111	4433	1111	1111	3333	1111
288	4433	1111	4433	1111	1111	3333	1111
289	5555	1111	4433	1111	1111	5555	1111
290	4433	1111	4433	1111	1111	1111	1111
291	4433	1111	4433	1111	1111	1111	1111
292	4433	1111	4433	1111	1111	3333	1111
293	4433	1111	4433	1111	1111	1111	1111
294	4433	1111	4433	1111	1111	1111	1111
295	4444	1111	4433	1111	1111	4444	1111
296	4444	1111	4422	1111	1111	4444	1111
297	4444	1111	4422	1111	1111	4444	1111
298	4444	1111	4422	1111	2222	4444	1111
299	4444	1111	4432	1111	2222	4444	1111
300	5544	1111	5533	1111	1111	4444	1111
301	5544	1111	5533	1111	1111	4444	1111
302	5544	1111	5533	1111	1111	4444	1111
303	5544	1111	5532	1111	1111	4444	1111
304	5544	1111	5533	1111	1111	4444	1111
305	5555	1111	5533	1111	1111	5555	1111
306	5555	1111	4432	1111	1111	5555	1111
307	5555	1111	4432	1111	1111	5555	1111
308	4433	1111	4433	1111	1111	3333	1111
309	4433	1111	4433	1111	1111	3333	1111
310	5555	1111	4433	1111	1111	5555	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
311	5555	1111	4433	1111	2222	5555	1111
312	5555	1111	4433	1111	2222	5555	1111
313	5555	1111	4433	1111	1111	5555	1111
314	5555	1111	4433	1111	1111	5555	1111
315	5555	1111	4433	1111	1111	5555	1111
316	5555	1111	4433	1111	1111	5555	1111
317	5555	1111	4433	1111	1111	5555	1111
318	5555	1111	4433	1111	1111	5555	1111
319	5555	1111	4433	1111	1111	5555	1111
320	5555	1111	4433	1111	1111	5555	1111
321	5555	1111	4433	1111	1111	5555	1111
322	5555	1111	5533	1111	1111	5555	1111
323	4444	1111	1132	1111	1111	4444	1111
324	2222	1111	1111	2222	1111	1111	1111
325	2222	1111	1111	2222	1111	1111	1111
326	2222	1111	1111	2222	1111	1111	1111
327	2222	1111	1111	2222	1111	1111	1111
328	2222	1111	1111	2222	1111	1111	1111
329	4422	1111	4422	2222	1111	1111	1111
330	4433	2222	4422	2222	1111	3333	1111
331	4433	2222	4422	2222	1111	3333	1111
332	4433	2222	4422	2222	1111	3333	1111
333	4433	2222	4422	2222	1111	3333	1111
334	4444	4444	4433	1111	1111	3333	1111
335	4444	4444	4444	1111	1111	3333	1111
336	4444	4444	4444	2222	1111	3333	1111
337	4422	1111	4422	2222	1111	1111	1111
338	4422	1111	4422	2222	1111	1111	1111
339	4432	1111	4432	1111	1111	1111	1111
340	4432	1111	4432	1111	2222	1111	1111
341	4433	1111	4433	1111	2222	1111	1111
342	4433	1111	4433	1111	2222	1111	1111
343	4433	1111	4433	1111	1111	1111	1111
344	4433	1111	4433	1111	1111	1111	1111
345	4433	1111	4433	1111	1111	3333	1111
346	4433	1111	4433	1111	1111	1111	1111
347	4433	1111	4433	1111	1111	3333	1111
348	4433	1111	4433	1111	1111	3333	1111
349	4433	1111	4433	1111	1111	3333	1111
350	4433	1111	4433	1111	1111	3333	1111
351	4433	1111	4433	1111	1111	3333	1111
352	4433	1111	4433	1111	1111	3333	1111
353	4433	1111	4422	1111	1111	3333	1111
354	4444	1111	1111	1111	1111	4444	1111
355	4444	1111	1111	1111	1111	4444	1111
356	4444	1111	1111	1111	1111	4444	1111
357	4433	1111	4433	1111	1111	3333	1111
358	5533	1111	5533	1111	1111	3333	1111
359	4433	1111	4433	1111	1111	3333	1111
360	4433	1111	4422	1111	1111	3333	1111
361	4444	1111	4422	1111	1111	4444	1111
362	5555	1111	4422	1111	1111	5555	1111
363	4433	1111	4422	1111	1111	3333	1111
364	5555	1111	4422	1111	1111	5555	1111
365	5555	1111	4433	1111	1111	5555	1111
366	5555	1111	4433	1111	1111	5555	1111
367	5555	1111	4433	1111	1111	5555	1111
368	5555	1111	4433	1111	2222	5555	1111
369	5555	1111	4433	1111	1111	5555	1111
370	5555	1111	4433	1111	1111	5555	1111
371	5555	1111	4433	1111	1111	5555	1111
372	5555	1111	4433	1111	1111	5555	1111
373	5555	1111	4433	1111	1111	5555	1111
374	5555	1111	4433	1111	1111	5555	1111
375	5555	1111	4433	1111	1111	5555	1111
376	5555	1111	4433	5555	1111	5555	1111
377	5555	1111	4433	5555	1111	5555	1111
378	5555	1111	4433	5555	1111	5555	1111
379	5555	1111	1111	1111	1111	5555	1111
380	5555	1111	5533	1111	1111	5555	1111
381	5555	1111	5533	1111	1111	5555	1111
382	2222	1111	1111	2222	1111	1111	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
383	2222	1111	1111	2222	1111	1111	1111
384	2222	1111	1111	2222	1111	1111	1111
385	2222	1111	1111	2222	1111	1111	1111
386	4422	1111	4422	2222	1111	1111	1111
387	4422	2222	4422	2222	1111	1111	1111
388	4422	2222	4422	2222	1111	1111	1111
389	4422	2222	4422	2222	1111	1111	1111
390	4433	2222	4422	2222	1111	3333	1111
391	5555	4444	4433	2222	1111	5555	1111
392	5555	4444	4444	1111	1111	5555	1111
393	5555	4444	4444	1111	1111	5555	1111
394	4444	2222	4444	1111	1111	3333	1111
395	4422	2222	4422	1111	1111	1111	1111
396	4422	1111	4422	1111	1111	1111	1111
397	4432	1111	4432	1111	1111	1111	1111
398	4433	1111	4433	1111	1111	3333	1111
399	4433	1111	4433	1111	1111	1111	1111
400	4433	1111	4433	1111	1111	1111	1111
401	4433	1111	4433	1111	1111	1111	1111
402	4433	1111	4433	1111	1111	1111	1111
403	4433	1111	4433	1111	1111	3333	1111
404	4433	1111	4433	1111	1111	3333	1111
405	4433	1111	4433	1111	1111	3333	1111
406	4433	1111	4433	1111	1111	3333	1111
407	4433	1111	4433	1111	1111	3333	1111
408	4433	1111	4433	1111	1111	3333	1111
409	4433	1111	4433	1111	1111	3333	1111
410	3333	1111	1111	1111	1111	3333	1111
411	3333	1111	1111	1111	1111	3333	1111
412	1111	1111	1111	1111	1111	1111	1111
413	3333	1111	1111	1111	1111	3333	1111
414	3333	1111	1111	1111	1111	3333	1111
415	3333	1111	1111	1111	1111	3333	1111
416	4433	1111	4422	1111	1111	3333	1111
417	4433	1111	4422	1111	1111	3333	1111
418	4433	1111	4422	1111	1111	3333	1111
419	4444	1111	4422	1111	1111	4444	1111
420	5555	1111	4422	1111	1111	5555	1111
421	5555	1111	4422	1111	1111	5555	1111
422	5555	1111	4433	1111	1111	5555	1111
423	5555	1111	4433	1111	1111	5555	1111
424	5555	1111	4433	1111	1111	5555	1111
425	5555	1111	4433	1111	1111	5555	1111
426	5555	1111	4433	1111	1111	5555	1111
427	5555	1111	4433	1111	1111	5555	1111
428	5555	1111	4433	1111	1111	5555	1111
429	4433	1111	4433	1111	1111	1111	1111
430	4444	4444	4433	1111	1111	1111	1111
431	5555	1111	4433	1111	1111	5555	1111
432	5555	1111	5533	1111	1111	5555	1111
433	5555	1111	4433	5555	1111	5555	1111
434	4433	1111	4433	1111	1111	3333	1111
435	5555	1111	1111	5555	1111	3333	1111
436	5555	1111	1111	5555	1111	5555	1111
437	5555	1111	5533	1111	1111	5555	1111
438	5555	1111	5533	1111	1111	5555	1111
439	5555	1111	5533	1111	1111	5555	1111
440	5555	1111	4432	1111	1111	5555	1111
441	4444	1111	1131	1111	1111	4444	1111
442	2222	1111	1111	2222	1111	1111	1111
443	2222	1111	1111	2222	1111	1111	1111
444	2222	1111	1111	2222	1111	1111	1111
445	2222	1111	1111	2222	1111	1111	1111
446	4422	1111	4422	2222	1111	1111	1111
447	4422	1111	4422	2222	1111	1111	1111
448	4422	1111	4422	2222	1111	1111	1111
449	4422	1111	4422	2222	1111	1111	1111
450	4422	1111	4422	2222	1111	1111	1111
451	4422	1111	4422	2222	1111	1111	1111
452	5555	4444	5544	2222	1111	5555	1111
453	5555	4444	5544	1111	2222	5555	1111
454	4444	2222	4444	1111	2222	4444	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
455	4433	2222	4433	1111	1111	3333	1111
456	4422	2222	4422	1111	1111	1111	1111
457	4433	1111	4422	1111	1111	3333	1111
458	4433	1111	4433	1111	1111	3333	1111
459	4433	1111	4433	1111	1111	3333	1111
460	4433	1111	4433	1111	1111	3333	1111
461	4433	1111	4433	1111	1111	3333	1111
462	4433	1111	4433	1111	1111	3333	1111
463	4433	1111	4433	1111	1111	3333	1111
464	4433	1111	4433	1111	2222	3333	1111
465	4433	1111	4433	1111	2222	3333	1111
466	4433	1111	4433	1111	1111	1111	1111
467	4433	1111	4433	1111	1111	3333	1111
468	4433	1111	4433	1111	1111	3333	1111
469	4433	1111	4433	1111	1111	1111	1111
470	4433	1111	4433	1111	2222	1111	1111
471	4433	1111	4433	1111	2222	2222	1111
472	4433	1111	4433	1111	2222	1111	1111
473	4444	1111	1111	1111	1111	4444	1111
474	4444	1111	1111	1111	1111	4444	1111
475	4444	1111	1111	1111	1111	4444	1111
476	5555	1111	4422	1111	1111	5555	1111
477	5555	1111	4422	1111	1111	5555	1111
478	5555	1111	4422	1111	1111	5555	1111
479	5555	1111	4422	1111	1111	5555	1111
480	4444	1111	4422	1111	1111	4444	1111
481	4433	1111	4422	1111	1111	3333	1111
482	5555	1111	4433	1111	1111	5555	1111
483	5555	1111	4433	1111	1111	5555	1111
494	5555	1111	5533	1111	1111	5555	1111
485	5555	1111	4433	1111	1111	5555	1111
496	5555	1111	4433	1111	1111	5555	1111
487	5555	1111	5533	1111	1111	5555	1111
488	5555	1111	4433	1111	1111	5555	1111
489	4433	1111	4433	1111	1111	1111	1111
490	4433	1111	4433	1111	1111	1111	1111
491	4433	1111	4433	1111	1111	1111	1111
492	4433	1111	4433	1111	1111	1111	1111
493	5555	1111	4433	5555	1111	5555	1111
494	5555	1111	4433	5555	1111	5555	1111
495	5555	1111	1111	5555	1111	3333	1111
496	5555	1111	1122	5555	1111	5555	1111
497	5555	1111	5533	1111	1111	5555	1111
498	5555	1111	5533	1111	1111	5555	1111
499	5555	2222	5533	1111	1111	5555	1111
500	5555	1111	4432	1111	1111	5555	1111
501	2222	1111	1111	2222	1111	1111	1111
502	2222	1111	1111	2222	1111	1111	1111
503	2222	1111	1111	2222	1111	1111	1111
504	2222	1111	1111	2222	1111	1111	1111
505	4422	1111	4422	2222	1111	1111	1111
506	4422	1111	4422	2222	1111	1111	1111
507	4422	1111	4422	2222	1111	1111	1111
508	4422	1111	4422	2222	1111	1111	1111
509	4422	1111	4422	2222	1111	1111	1111
510	4422	1111	4422	2222	1111	1111	1111
511	5544	4444	5544	2222	1111	2222	1111
512	5555	4444	5544	2222	2222	5555	1111
513	5555	4444	4433	1111	2222	5555	1111
514	5555	4444	4433	1111	1111	5555	1111
515	5555	4444	4433	1111	1111	5555	1111
516	4433	1111	4422	1111	1111	3333	1111
517	4433	1111	4433	1111	2222	3333	1111
518	5533	1111	5533	1111	2222	3333	1111
519	4433	1111	4433	1111	2222	3333	1111
520	4433	1111	4433	1111	2222	3333	1111
521	4433	1111	4433	1111	2222	3333	1111
522	4433	1111	4433	1111	2222	3333	1111
523	4433	1111	4433	1111	2222	3333	1111
524	4433	1111	4433	1111	2222	3333	1111
525	4433	1111	4433	1111	1111	1111	1111
526	4433	1111	4433	1111	1111	1111	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
527	4433	1111	4433	1111	1111	1111	1111
528	4433	1111	4433	1111	2222	1111	1111
529	4444	1111	4433	1111	2222	4444	1111
530	5533	1111	5533	1111	2222	3333	1111
531	4444	1111	4433	1111	2222	4444	1111
532	1111	1111	1111	1111	1111	1111	1111
533	1111	1111	1111	1111	1111	1111	1111
534	4444	1111	1111	1111	1111	4444	1111
535	5555	1111	4422	1111	1111	5555	1111
536	5555	1111	4422	1111	1111	5555	1111
537	5555	1111	4422	1111	1111	5555	1111
538	5555	1111	4433	1111	1111	5555	1111
539	5555	1111	4433	1111	1111	5555	1111
540	5555	1111	4432	1111	1111	5555	1111
541	5555	1111	4433	1111	1111	5555	1111
542	5555	1111	4433	1111	1111	5555	1111
543	5555	1111	4433	1111	1111	5555	1111
544	5555	1111	4433	1111	1111	5555	1111
545	5555	1111	4433	1111	1111	5555	1111
546	4433	1111	4433	1111	1111	1111	1111
547	4433	1111	4433	1111	1111	1111	1111
548	4433	1111	4433	1111	1111	1111	1111
549	4433	1111	4433	1111	1111	1111	1111
550	4433	1111	4433	1111	1111	1111	1111
551	4433	1111	4433	1111	1111	1111	1111
552	4433	1111	4433	1111	1111	3333	1111
553	5555	1111	4433	1111	1111	5555	1111
554	5555	1111	4433	5555	1111	5555	1111
555	5555	1111	4433	5555	1111	5555	1111
556	5555	1111	4433	5555	1111	5555	1111
557	5555	1111	5533	5555	1111	5555	1111
558	5555	1111	5533	5555	1111	5555	1111
559	4444	1111	4432	1111	1111	4444	1111
560	2222	1111	1111	2222	1111	1111	1111
561	2222	1111	1111	2222	1111	1111	1111
562	2222	1111	1111	2222	1111	1111	1111
563	4422	1111	4422	2222	1111	1111	1111
564	4422	1111	4422	2222	1111	1111	1111
565	4422	1111	4422	2222	1111	1111	1111
566	4422	1111	4422	2222	1111	1111	1111
567	4422	1111	4422	2222	1111	1111	1111
568	4422	1111	4422	2222	1111	1111	1111
569	4422	2222	4422	2222	1111	1111	1111
570	5544	4444	5544	2222	1111	2222	1111
571	5555	4444	4433	1111	1111	5555	1111
572	5555	4444	4433	1111	1111	5555	1111
573	4444	4444	4422	1111	1111	4444	1111
574	4444	4444	4422	1111	1111	3333	1111
575	4433	1111	4433	1111	2222	3333	1111
576	4433	1111	4433	1111	2222	3333	1111
577	4433	1111	4433	1111	2222	3333	1111
578	4433	1111	4433	1111	2222	3333	1111
579	4433	1111	4433	1111	2222	3333	1111
580	4433	1111	4433	1111	2222	3333	1111
581	4433	1111	4433	1111	2222	3333	1111
582	4433	1111	4433	1111	2222	3333	1111
583	4433	1111	4433	1111	2222	1111	1111
594	4433	1111	4433	1111	2222	1111	1111
585	4433	1111	4433	1111	2222	3333	1111
586	5555	1111	4433	1111	2222	5555	1111
587	5555	4444	4433	1111	1111	5555	1111
588	4433	1111	4433	1111	1111	3333	1111
589	5555	1111	4433	1111	1111	5555	1111
590	5555	1111	4433	1111	2222	5555	1111
591	4433	1111	4433	1111	1111	3333	1111
592	5555	1111	4433	1111	1111	5555	1111
593	5555	1111	4433	1111	1111	5555	1111
594	5555	1111	4433	1111	1111	5555	1111
595	5555	1111	4433	1111	1111	5555	1111
596	5555	1111	4433	1111	1111	5555	1111
597	5555	1111	4433	1111	1111	5555	1111
598	5555	1111	4433	1111	1111	5555	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
599	5555	1111	4433	1111	1111	5555	1111
600	5555	1111	4433	1111	1111	5555	1111
601	5555	1111	5533	5555	1111	5555	1111
602	5555	1111	5533	1111	1111	5555	1111
603	5555	1111	4433	1111	1111	5555	1111
604	5555	1111	4433	1111	1111	5555	1111
605	5555	1111	5533	1111	1111	5555	1111
606	5555	1111	4433	1111	1111	5555	1111
607	4433	1111	4433	1111	1111	1111	1111
608	4433	1111	4433	1111	1111	1111	1111
609	4433	1111	4433	1111	1111	1111	1111
610	4433	1111	4433	1111	1111	1111	1111
611	4433	1111	4433	1111	1111	1111	1111
612	5555	4444	5533	1111	1111	5555	1111
613	5555	1111	4433	1111	1111	5555	1111
614	5555	1111	1133	5555	1111	5555	1111
615	5555	1111	1133	5555	1111	5555	1111
616	5555	1111	5533	5555	1111	5555	1111
617	5544	2222	5533	1111	1111	4444	1111
618	1131	1111	1131	1111	1111	1111	1111
619	2222	1111	1111	2222	1111	1111	1111
620	2222	1111	1111	2222	1111	1111	1111
621	4422	1111	4422	2222	1111	1111	1111
622	4422	1111	4422	2222	1111	1111	1111
623	4422	1111	4422	2222	1111	1111	1111
624	4422	1111	4422	2222	1111	1111	1111
625	4422	1111	4422	2222	1111	1111	1111
626	4422	1111	4422	2222	1111	1111	1111
627	4422	1111	4422	2222	1111	1111	1111
628	5544	4444	5544	2222	1111	2222	1111
629	5544	4444	5544	1111	1111	2222	1111
630	4444	4444	4422	1111	1111	1111	1111
631	4444	4444	4422	1111	1111	1111	1111
632	4444	4444	4422	1111	1111	3333	1111
633	5555	4444	4433	1111	1111	5555	1111
634	4444	1111	4433	1111	1111	4444	1111
635	4433	1111	4433	1111	1111	3333	1111
636	4433	1111	4433	1111	1111	3333	1111
637	4433	1111	4433	1111	1111	3333	1111
638	4444	4444	4433	1111	2222	3333	1111
639	4444	4444	4433	1111	2222	3333	1111
640	4444	4444	4433	1111	1111	3333	1111
641	5555	4444	4433	1111	1111	5555	1111
642	5555	4444	4433	1111	1111	5555	1111
643	4444	4444	4433	1111	1111	4444	1111
644	5555	4444	4433	1111	1111	5555	1111
645	5555	1111	4433	1111	1111	5555	1111
646	5555	1111	5533	1111	1111	5555	1111
647	5555	1111	4433	1111	2222	5555	1111
648	5555	1111	4433	1111	2222	5555	1111
649	5555	1111	4433	1111	1111	5555	1111
650	5555	1111	4433	1111	1111	5555	1111
651	5555	1111	4433	1111	1111	5555	1111
652	5555	1111	4433	1111	1111	5555	1111
653	5555	1111	4433	1111	1111	5555	1111
654	5555	1111	4433	1111	1111	5555	1111
655	5555	1111	4433	1111	1111	5555	1111
656	5555	1111	4433	1111	1111	5555	1111
657	5555	1111	4433	1111	1111	5555	1111
658	5555	1111	5533	5555	1111	5555	1111
659	5555	1111	5533	5555	1111	5555	1111
660	5555	1111	4433	1111	1111	5555	1111
661	5555	1111	4433	1111	1111	5555	1111
662	4433	1111	4433	1111	1111	1111	1111
663	5555	4444	4433	1111	1111	5555	1111
664	5555	1111	4433	1111	1111	5555	1111
665	4433	1111	4433	1111	1111	1111	1111
666	4433	1111	4433	1111	1111	1111	1111
667	4433	1111	4433	1111	1111	1111	1111
668	4433	1111	4433	1111	1111	1111	1111
669	4433	1111	4433	1111	1111	1111	1111
670	5555	1111	4433	1111	1111	5555	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
671	5555	1111	4433	1111	1111	5555	1111
672	3333	1111	1133	1111	1111	3333	1111
673	5555	1111	1133	5555	1111	5555	1111
674	5555	1111	1133	5555	1111	5555	1111
675	5555	1111	1111	5555	1111	5555	1111
676	1131	1111	1131	1111	1111	1111	1111
677	1111	1111	1111	1111	1111	1111	1111
678	4444	1111	4433	1111	1111	4444	1111
679	4444	1111	4433	1111	1111	4444	1111
680	2222	1111	1111	2222	1111	1111	1111
681	2222	1111	1111	2222	1111	1111	1111
682	2222	1111	1111	2222	1111	1111	1111
683	2222	1111	1111	2222	1111	1111	1111
684	2222	1111	1111	2222	1111	1111	1111
685	2222	1111	1111	2222	1111	1111	1111
686	2222	1111	1111	2222	1111	1111	1111
687	2222	2222	1111	2222	1111	1111	1111
688	5544	4444	5544	2222	1111	2222	1111
689	4444	4444	1111	1111	1111	1111	1111
690	4444	4444	1111	1111	1111	1111	1111
691	4422	1111	4422	1111	1111	1111	1111
692	5555	1111	4433	1111	1111	5555	1111
693	5555	1111	4433	1111	1111	5555	1111
694	5555	1111	4433	1111	1111	5555	1111
695	4433	1111	4433	1111	1111	3333	1111
696	4433	1111	4433	1111	1111	3333	1111
697	4444	4444	4433	1111	1111	4444	1111
698	4444	1111	4433	1111	1111	4444	1111
699	4433	1111	4433	1111	1111	1111	1111
700	4433	1111	4433	1111	1111	1111	1111
701	4433	1111	4433	1111	1111	1111	1111
702	4433	1111	4433	1111	1111	1111	1111
703	4433	1111	4433	1111	1111	1111	1111
704	4433	1111	4433	1111	1111	1111	1111
705	5533	1111	5533	1111	1111	1111	1111
706	5555	1111	4433	1111	1111	5555	1111
707	5555	1111	4433	1111	1111	5555	1111
708	5555	1111	4433	1111	1111	5555	1111
709	5555	1111	4433	1111	1111	5555	1111
710	5555	1111	4433	1111	1111	5555	1111
711	5555	1111	4433	1111	1111	5555	1111
712	5555	1111	4433	1111	1111	5555	1111
713	5555	1111	4433	1111	1111	5555	1111
714	5555	1111	4433	1111	1111	5555	1111
715	5555	1111	4433	1111	1111	5555	1111
716	5555	1111	5533	1111	1111	5555	1111
717	5555	1111	4433	1111	1111	5555	1111
718	5555	4444	5533	5555	1111	5555	1111
719	5555	1111	4433	1111	1111	5555	1111
720	4433	1111	4433	1111	1111	1111	1111
721	4433	1111	4433	1111	1111	1111	1111
722	5555	1111	4433	1111	1111	5555	1111
723	5555	1111	4433	1111	1111	5555	1111
724	4433	1111	4433	1111	1111	1111	1111
725	4433	1111	4433	1111	1111	1111	1111
726	4433	1111	4433	1111	1111	1111	1111
727	4433	1111	4433	1111	1111	1111	1111
728	4433	1111	4433	1111	1111	1111	1111
729	1111	1111	1111	1111	1111	1111	1111
730	3333	1111	1133	1111	1111	3333	1111
731	5555	1111	1133	1111	1111	5555	1111
732	1133	1111	1133	1111	1111	1111	1111
733	5555	1111	1111	5555	1111	5555	1111
734	5555	1111	1111	5555	1111	5555	1111
735	5555	1111	1111	5555	1111	5555	1111
736	5555	1111	1111	1111	1111	5555	1111
737	1111	1111	1111	1111	1111	1111	1111
738	4433	1111	4433	1111	1111	2222	1111
739	4433	1111	4433	1111	1111	2222	1111
740	5555	1111	4433	1111	1111	5555	1111
741	5555	1111	5533	1111	1111	5555	1111
742	5555	1111	4433	1111	1111	5555	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
743	4444	1111	4433	1111	1111	4444	1111
744	4444	1111	4433	1111	1111	4444	1111
745	4444	1111	4433	1111	1111	4444	1111
746	4444	1111	4433	1111	1111	4444	1111
747	4444	1111	4433	1111	1111	4444	1111
748	4444	1111	4433	1111	1111	4444	1111
749	4444	1111	4433	1111	1111	4444	1111
750	4433	1111	4433	1111	1111	1111	1111
751	4444	1111	4433	1111	1111	4444	1111
752	2222	1111	1111	2222	1111	1111	1111
753	2222	1111	1111	2222	1111	1111	1111
754	2222	1111	1111	2222	1111	1111	1111
755	2222	1111	1111	2222	1111	1111	1111
756	2222	1111	1111	2222	1111	1111	1111
757	2222	1111	1111	2222	1111	1111	1111
758	5544	4444	5544	2222	1111	2222	1111
759	5544	4444	5544	1111	1111	1111	1111
760	4444	4444	1144	1111	1111	1111	1111
761	4444	1111	4444	1111	1111	1111	1111
762	4422	1111	4422	1111	1111	1111	1111
763	5555	1111	4422	1111	1111	5555	1111
764	5555	1111	4422	1111	1111	5555	1111
765	4444	1111	4422	1111	1111	4444	1111
766	4444	1111	4432	1111	1111	4444	1111
767	4444	1111	4432	1111	1111	4444	1111
768	5555	4444	4432	1111	1111	5555	1111
769	5555	4444	4432	1111	1111	5555	1111
770	5555	1111	4433	1111	1111	5555	1111
771	5555	1111	5533	1111	1111	5555	1111
772	5533	1111	5533	1111	1111	1111	1111
773	5522	1111	5522	1111	1111	1111	1111
774	4433	1111	4433	1111	1111	1111	1111
775	4444	4444	4433	1111	1111	4444	1111
776	5555	1111	4433	1111	1111	5555	1111
777	5555	1111	4433	1111	1111	5555	1111
778	5555	1111	4433	1111	1111	5555	1111
779	5555	1111	4433	1111	1111	5555	1111
780	5555	1111	4433	1111	1111	5555	1111
781	5555	1111	4433	1111	1111	5555	1111
782	5555	1111	4433	1111	1111	5555	1111
783	5555	1111	4433	1111	1111	5555	1111
784	5555	1111	5533	1111	1111	5555	1111
785	5555	1111	5533	1111	1111	5555	1111
786	4433	1111	4433	1111	1111	1111	1111
787	5555	1111	4433	1111	1111	5555	1111
788	5555	1111	4433	1111	1111	5555	1111
789	4433	1111	4433	1111	1111	1111	1111
790	4433	1111	4433	1111	1111	1111	1111
791	4433	1111	4433	1111	1111	1111	1111
792	5555	1111	4433	1111	1111	5555	1111
793	5555	1111	4433	1111	1111	5555	1111
794	4433	1111	4433	1111	1111	1111	1111
795	1111	1111	1111	1111	1111	1111	1111
796	4444	4444	1133	1111	1111	4444	1111
797	5555	1111	1133	1111	1111	5555	1111
798	4444	1111	1111	1111	1111	4444	1111
799	4444	1111	1111	1111	1111	4444	1111
800	5555	1111	1111	1111	1111	5555	1111
801	5555	1111	1111	1111	1111	5555	1111
802	5555	1111	4422	1111	1111	5555	1111
803	5555	1111	1111	1111	1111	5555	1111
804	1111	1111	1111	1111	1111	1111	1111
805	4433	1111	4433	1111	1111	1111	1111
806	4433	1111	4433	1111	1111	2222	1111
807	4433	1111	4433	1111	1111	2222	1111
808	4433	1111	4433	1111	1111	2222	1111
809	4444	1111	4433	1111	1111	4444	1111
810	5555	1111	4433	1111	1111	5555	1111
811	5555	1111	4433	1111	1111	5555	1111
812	5555	1111	4433	1111	1111	5555	1111
813	5555	1111	4433	1111	1111	5555	1111
814	5555	1111	4433	1111	1111	5555	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
815	4433	1111	4433	1111	1111	2222	1111
816	4433	1111	4433	1111	1111	2222	1111
817	4433	1111	4433	1111	1111	2222	1111
818	4433	2222	4433	1111	1111	3333	1111
819	4444	1111	4433	1111	1111	4444	1111
820	4444	1111	4433	1111	1111	4444	1111
821	4444	1111	4433	1111	1111	4444	1111
822	4444	1111	4433	1111	1111	4444	1111
823	2222	1111	1111	2222	1111	1111	1111
824	2222	1111	1111	2222	1111	1111	1111
825	2222	1111	1111	2222	1111	1111	1111
826	2222	1111	1111	2222	1111	1111	1111
827	2222	1111	1111	2222	1111	1111	1111
828	2222	1111	1111	2222	1111	1111	1111
829	5544	2222	5544	2222	1111	2222	1111
830	5544	4444	5544	2222	1111	2222	1111
831	4444	4444	1144	1111	1111	1111	1111
832	4444	1111	4444	1111	1111	1111	1111
833	5555	1111	4422	1111	1111	5555	1111
834	5555	2222	4422	1111	1111	5555	1111
835	5555	1111	4422	1111	1111	5555	1111
936	5555	1111	4422	1111	1111	5555	1111
837	5555	1111	4432	1111	1111	5555	1111
838	5555	1111	4432	1111	1111	5555	1111
839	4444	1111	4432	1111	1111	4444	1111
840	5555	4444	4432	1111	1111	5555	1111
841	5555	1111	4433	1111	1111	5555	1111
842	5555	1111	4433	1111	1111	5555	1111
843	5533	1111	5533	1111	1111	1111	1111
844	5522	1111	5522	1111	1111	1111	1111
845	4422	1111	4422	1111	1111	1111	1111
846	5555	1111	4422	1111	1111	5555	1111
847	4444	1111	4422	1111	2222	4444	1111
848	5555	1111	4422	1111	1111	5555	1111
849	5555	1111	4433	1111	1111	5555	1111
850	4433	1111	4433	1111	1111	1111	1111
851	5555	1111	4433	1111	1111	5555	1111
852	4433	1111	4433	1111	1111	1111	1111
853	5555	1111	4433	1111	1111	5555	1111
854	5555	1111	4433	1111	1111	5555	1111
855	5555	2222	4433	1111	1111	5555	1111
856	4433	1111	4433	1111	1111	1111	1111
857	4433	1111	4433	1111	1111	1111	1111
858	4433	1111	4433	1111	1111	1111	1111
859	4433	1111	4433	1111	1111	1111	1111
860	4433	1111	4433	1111	1111	1111	1111
861	4433	1111	4433	1111	1111	1111	1111
862	4433	1111	4433	1111	1111	1111	1111
863	4433	1111	4433	1111	1111	1111	1111
864	4433	1111	4433	1111	1111	1111	1111
865	4433	1111	4433	1111	1111	1111	1111
866	1111	1111	1111	1111	1111	1111	1111
867	1111	1111	1111	1111	1111	1111	1111
868	5555	1111	1111	1111	1111	5555	1111
869	5555	1111	4422	1111	1111	5555	1111
870	5555	1111	4422	1111	1111	5555	1111
871	4444	1111	1111	1111	1111	4444	1111
872	1111	1111	1111	1111	1111	1111	1111
873	5555	1111	4422	1111	1111	5555	1111
874	5555	1111	5533	1111	1111	5555	1111
875	5555	1111	1131	1111	1111	5555	1111
876	4433	1111	4433	1111	2222	1111	1111
877	4433	1111	4433	1111	1111	1111	1111
878	4444	1111	4433	1111	1111	4444	1111
879	4444	1111	4433	1111	1111	4444	1111
880	4444	1111	4433	1111	1111	4444	1111
881	4444	1111	4433	1111	1111	4444	1111
882	4433	1111	4433	1111	1111	1111	1111
883	4433	1111	4433	1111	1111	1111	1111
884	5555	1111	4433	1111	1111	5555	1111
885	5555	1111	4433	1111	1111	5555	1111
886	5555	1111	4433	1111	1111	5555	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
887	5555	1111	4433	1111	1111	5555	1111
888	4444	1111	4433	1111	1111	4444	1111
889	4444	1111	4433	1111	1111	4444	1111
890	4444	1111	4433	1111	1111	4444	1111
891	5555	1111	5533	1111	1111	5555	1111
892	5555	1111	5533	1111	1111	5555	1111
893	5555	1111	5533	1111	1111	5555	1111
894	4444	1111	4433	1111	1111	4444	1111
895	2222	1111	1111	2222	1111	1111	1111
896	2222	1111	1111	2222	1111	1111	1111
897	2222	1111	1111	2222	1111	1111	1111
898	2222	1111	1111	2222	1111	1111	1111
899	2222	1111	1111	2222	1111	1111	1111
900	2244	1111	1144	2222	1111	1111	1111
901	5544	4444	5544	2222	1111	2222	1111
902	1144	1111	1144	1111	1111	1111	1111
903	4444	4444	4444	1111	1111	1111	1111
904	4444	4444	4422	1111	1111	4444	1111
905	4422	1111	4422	1111	1111	1111	1111
906	4422	1111	4422	1111	1111	1111	1111
907	4422	1111	4422	1111	1111	1111	1111
908	4422	2222	4422	1111	1111	1111	1111
909	5555	4444	4422	1111	1111	5555	1111
910	5555	1111	4422	1111	1111	5555	1111
911	4432	1111	4432	1111	1111	1111	1111
912	5555	1111	4432	1111	1111	5555	1111
913	5555	1111	4432	1111	1111	5555	1111
914	5555	1111	4422	1111	2222	5555	1111
915	4422	1111	4422	1111	1111	1111	1111
916	4422	1111	4422	1111	1111	1111	1111
917	4422	1111	4422	1111	1111	1111	1111
918	4444	1111	4422	1111	1111	4444	1111
919	5555	1111	4422	1111	1111	5555	1111
920	5555	1111	1111	1111	1111	5555	1111
921	4433	1111	4433	1111	1111	1111	1111
922	5533	1111	5533	1111	1111	1111	1111
923	4433	1111	4433	1111	1111	1111	1111
924	1111	1111	1111	1111	1111	1111	1111
925	1111	1111	1111	1111	1111	1111	1111
926	1111	1111	1111	1111	1111	1111	1111
927	1111	1111	1111	1111	1111	1111	1111
928	4433	1111	4433	1111	1111	1111	1111
929	4433	1111	4433	1111	1111	1111	1111
930	1111	1111	1111	1111	1111	1111	1111
931	1111	1111	1111	1111	1111	1111	1111
932	1111	1111	1111	1111	1111	1111	1111
933	5555	1111	1111	1111	1111	5555	1111
934	5555	1111	4422	1111	1111	5555	1111
935	5555	1111	4422	1111	1111	5555	1111
936	4444	1111	1111	1111	1111	4444	1111
937	5555	1111	1111	5555	1111	1111	1111
938	5555	1111	5533	5555	1111	5555	1111
939	5555	1111	5533	1111	1111	5555	1111
940	4444	1111	4433	1111	2222	4444	1111
941	4444	1111	4433	1111	2222	4444	1111
942	4444	1111	4433	1111	1111	4444	1111
943	4444	1111	4433	1111	1111	4444	1111
944	4444	1111	4433	1111	1111	4444	1111
945	4444	1111	4433	1111	1111	4444	1111
946	4444	1111	4433	1111	1111	4444	1111
947	4444	1111	4433	1111	1111	4444	1111
948	4433	1111	4433	1111	1111	1111	1111
949	4433	1111	4433	1111	1111	1111	1111
950	4433	1111	4433	1111	1111	1111	1111
951	4444	1111	4433	1111	1111	4444	1111
952	4433	1111	4433	1111	1111	1111	1111
953	4433	1111	4433	1111	1111	1111	1111
954	4433	1111	4433	1111	1111	1111	1111
955	4433	1111	4433	1111	1111	1111	1111
956	4444	1111	4433	1111	1111	4444	1111
957	5555	1111	4433	1111	1111	5555	1111
958	5544	1111	5533	1111	1111	4444	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
959	5555	1111	5533	1111	1111	5555	1111
960	4433	1111	4433	1111	1111	1111	1111
961	2222	1111	1111	2222	1111	1111	1111
962	2222	1111	1111	2222	1111	1111	1111
963	2222	1111	1111	2222	1111	1111	1111
964	2222	1111	1111	2222	1111	1111	1111
965	2222	1111	1111	2222	1111	1111	1111
966	2222	1111	1111	2222	1111	1111	1111
967	5544	4444	5544	2222	1111	2222	1111
968	5544	4444	5544	1111	1111	1111	1111
969	4422	1111	4422	1111	1111	1111	1111
970	5533	1111	5533	1111	1111	1111	1111
971	4422	1111	4422	1111	1111	1111	1111
972	4422	1111	4422	1111	1111	1111	1111
973	4422	1111	4422	1111	1111	1111	1111
974	5555	1111	4422	1111	1111	5555	1111
975	5555	1111	4422	1111	1111	5555	1111
976	4422	1111	4422	1111	1111	1111	1111
977	4422	1111	4422	1111	1111	1111	1111
978	5555	1111	4432	1111	1111	5555	1111
979	5555	1111	4432	1111	1111	5555	1111
980	5555	4444	4432	1111	2222	5555	1111
981	5555	1111	4422	1111	1111	5555	1111
982	5555	1111	4422	1111	1111	5555	1111
983	4422	1111	4422	1111	1111	1111	1111
984	4422	1111	4422	1111	1111	1111	1111
985	4422	1111	4422	1111	1111	1111	1111
986	5555	1111	1111	1111	1111	5555	1111
987	4444	1111	4433	1111	1111	4444	1111
988	4433	1111	4433	1111	1111	1111	1111
989	4433	1111	4433	1111	1111	1111	1111
990	1111	1111	1111	1111	1111	1111	1111
991	1111	1111	1111	1111	1111	1111	1111
992	1111	1111	1111	1111	1111	1111	1111
993	1111	1111	1111	1111	1111	1111	1111
994	4433	1111	4433	1111	1111	1111	1111
995	4433	1111	4433	1111	1111	1111	1111
996	1111	1111	1111	1111	1111	1111	1111
997	1111	1111	1111	1111	1111	1111	1111
998	1111	1111	1111	1111	1111	1111	1111
999	1111	1111	1111	1111	1111	1111	1111
1000	5555	1111	1111	1111	1111	5555	1111
1001	5555	1111	4422	1111	1111	5555	1111
1002	4444	1111	1111	1111	1111	4444	1111
1003	5555	1111	5533	5555	1111	5555	1111
1004	5555	1111	5533	5555	1111	5555	1111
1005	5555	1111	5533	1111	1111	5555	1111
1006	5555	1111	4433	1111	2222	5555	1111
1007	4444	1111	4433	1111	2222	4444	1111
1008	4433	1111	4433	1111	2222	3333	1111
1009	4444	1111	4433	1111	1111	4444	1111
1010	4444	1111	4433	1111	1111	4444	1111
1011	4444	1111	4433	1111	1111	4444	1111
1012	4444	1111	4433	1111	1111	4444	1111
1013	5555	1111	4433	1111	1111	5555	1111
1014	4444	1111	4433	1111	1111	4444	1111
1015	4433	1111	4433	1111	1111	1111	1111
1016	4433	1111	4433	1111	1111	1111	1111
1017	4433	1111	4433	1111	1111	1111	1111
1018	4433	1111	4433	1111	1111	1111	1111
1019	5544	1111	5533	1111	1111	4444	1111
1020	5555	1111	4433	1111	1111	5555	1111
1021	4433	1111	4433	1111	1111	2222	1111
1022	4433	1111	4433	1111	1111	2222	1111
1023	4433	1111	4433	1111	1111	1111	1111
1024	2222	1111	1111	2222	1111	1111	1111
1025	2222	1111	1111	2222	1111	1111	1111
1026	2222	1111	1111	2222	1111	1111	1111
1027	2222	1111	1111	2222	1111	1111	1111
1028	2222	1111	1111	2222	1111	1111	1111
1029	2222	1111	1111	2222	1111	1111	1111
1030	2222	2222	1111	2222	1111	1111	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
1031	5544	4444	5544	2222	1111	2222	1111
1032	4422	1111	4422	1111	1111	1111	1111
1033	4422	1111	4422	1111	1111	1111	1111
1034	4422	1111	4422	1111	1111	1111	1111
1035	4422	1111	4422	1111	1111	1111	1111
1036	4422	1111	4422	1111	1111	1111	1111
1037	5555	4444	4422	1111	1111	5555	1111
1038	5555	1111	4422	1111	1111	5555	1111
1039	4422	1111	4422	1111	1111	1111	1111
1040	4422	1111	4422	1111	1111	1111	1111
1041	4432	1111	4432	1111	1111	1111	1111
1042	5555	1111	4432	1111	1111	5555	1111
1043	4432	1111	4432	1111	1111	1111	1111
1044	5555	1111	4432	1111	1111	5555	1111
1045	5555	1111	4422	1111	1111	5555	1111
1046	4422	1111	4422	1111	1111	1111	1111
1047	4422	1111	4422	1111	1111	1111	1111
1048	5555	1111	1111	1111	1111	5555	1111
1049	5555	1111	1111	1111	1111	5555	1111
1050	5555	1111	1111	5555	1111	5555	1111
1051	5555	1111	1111	5555	1111	5555	1111
1052	5555	1111	1111	5555	1111	2222	1111
1053	5555	1111	1111	5555	1111	5555	1111
1054	5555	1111	1111	5555	1111	5555	1111
1055	5555	1111	4433	5555	2222	5555	1111
1056	4433	1111	4433	1111	2222	2222	1111
1057	4444	1111	4433	1111	2222	4444	1111
1058	4444	1111	4433	1111	1111	4444	1111
1059	4444	1111	4433	1111	1111	4444	1111
1060	4444	1111	4433	1111	1111	4444	1111
1061	5555	1111	4433	1111	1111	5555	1111
1062	5555	1111	5533	1111	1111	5555	1111
1063	4433	1111	4433	1111	1111	1111	1111
1064	4433	1111	4433	1111	1111	1111	1111
1065	4433	1111	4433	1111	1111	1111	1111
1066	4433	1111	4433	1111	1111	1111	1111
1067	4444	1111	4433	1111	1111	4444	1111
1068	5555	1111	4433	1111	1111	5555	1111
1069	5555	1111	4433	1111	1111	5555	1111
1070	4444	1111	4433	1111	1111	4444	1111
1071	4433	1111	4433	1111	1111	2222	1111
1072	2222	1111	1111	2222	1111	1111	1111
1073	2222	1111	1111	2222	1111	1111	1111
1074	2222	1111	1111	2222	1111	1111	1111
1075	2222	1111	1111	2222	1111	1111	1111
1076	2222	1111	1111	2222	1111	1111	1111
1077	2222	1111	1111	2222	1111	1111	1111
1078	5544	2222	5544	2222	1111	2222	1111
1079	4422	1111	4422	1111	1111	1111	1111
1080	4422	1111	4422	1111	1111	1111	1111
1081	4422	1111	4422	1111	1111	1111	1111
1082	4422	1111	4422	1111	1111	1111	1111
1083	5555	1111	4422	1111	1111	5555	1111
1084	5555	1111	4422	1111	1111	5555	1111
1085	4422	1111	4422	1111	1111	1111	1111
1086	4422	1111	4422	1111	1111	1111	1111
1087	4422	1111	4422	1111	1111	1111	1111
1088	4444	1111	4432	1111	1111	4444	1111
1089	5555	1111	4432	1111	1111	5555	1111
1090	4432	1111	4432	1111	1111	1111	1111
1091	5555	1111	4422	1111	1111	5555	1111
1092	5555	1111	4422	1111	1111	5555	1111
1093	4422	1111	4422	1111	1111	1111	1111
1094	4422	1111	4422	1111	1111	1111	1111
1095	1111	1111	1111	1111	1111	1111	1111
1096	1111	1111	1111	1111	1111	1111	1111
1097	5555	1111	1111	1111	1111	5555	1111
1098	5555	4444	1111	1111	1111	5555	1111
1099	5555	1111	1111	5555	1111	4444	1111
1100	5555	1111	1111	5555	1111	1111	1111
1101	5555	1111	1111	5555	1111	1111	1111
1102	5555	1111	4433	5555	1111	1111	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
1103	4433	1111	4433	1111	1111	1111	1111
1104	4433	1111	4433	1111	1111	1111	1111
1105	4444	1111	4433	1111	1111	4444	1111
1106	4444	1111	4433	1111	1111	4444	1111
1107	4433	1111	4433	1111	1111	3333	1111
1108	5555	1111	4433	1111	1111	5555	1111
1109	5555	1111	4433	1111	1111	5555	1111
1110	4444	1111	4433	1111	1111	4444	1111
1111	4433	1111	4433	1111	1111	1111	1111
1112	4433	1111	4433	1111	1111	1111	1111
1113	4433	1111	4433	1111	1111	1111	1111
1114	5555	1111	4433	1111	1111	5555	1111
1115	5555	1111	4433	1111	1111	5555	1111
1116	5555	1111	4433	1111	1111	5555	1111
1117	4444	1111	4433	1111	1111	4444	1111
1118	4433	1111	4433	1111	1111	2222	1111
1119	4433	1111	4433	1111	1111	2222	1111
1120	2222	1111	1111	2222	1111	1111	1111
1121	2222	1111	1111	2222	1111	1111	1111
1122	2222	1111	1111	2222	1111	1111	1111
1123	2222	1111	1111	2222	1111	1111	1111
1124	2222	1111	1111	2222	1111	1111	1111
1125	2222	1111	1111	2222	1111	1111	1111
1126	5544	2222	5544	2222	1111	2222	1111
1127	5544	4444	5544	1111	1111	1111	1111
1128	4422	1111	4422	1111	1111	1111	1111
1129	4422	1111	4422	1111	1111	1111	1111
1130	4422	1111	4422	1111	1111	1111	1111
1131	4422	1111	4422	1111	1111	1111	1111
1132	5555	1111	4422	1111	1111	5555	1111
1133	5555	1111	4422	1111	1111	5555	1111
1134	4422	1111	4422	1111	1111	1111	1111
1135	4422	1111	4422	1111	1111	1111	1111
1136	4432	1111	4432	1111	1111	1111	1111
1137	5555	1111	4433	1111	1111	5555	1111
1138	5555	1111	4433	1111	2222	5555	1111
1139	5555	1111	4433	1111	1111	5555	1111
1140	5555	1111	4422	1111	1111	5555	1111
1141	4422	1111	4422	1111	1111	1111	1111
1142	4422	1111	4422	1111	1111	1111	1111
1143	1111	1111	1111	1111	1111	1111	1111
1144	1111	1111	1111	1111	1111	1111	1111
1145	1111	1111	1111	1111	1111	1111	1111
1146	1111	1111	1111	1111	1111	1111	1111
1147	1111	1111	1111	1111	1111	1111	1111
1148	1111	1111	1111	1111	1111	1111	1111
1149	1111	1111	1111	1111	1111	1111	1111
1150	4433	1111	4433	1111	1111	1111	1111
1151	4433	1111	4433	1111	1111	1111	1111
1152	4433	1111	4433	1111	1111	1111	1111
1153	4433	1111	4433	1111	1111	1111	1111
1154	4433	1111	4433	1111	1111	1111	1111
1155	4433	1111	4433	1111	1111	1111	1111
1156	4444	1111	4433	1111	1111	4444	1111
1157	4444	1111	4433	1111	1111	4444	1111
1158	4444	1111	4433	1111	1111	4444	1111
1159	4433	1111	4433	1111	1111	1111	1111
1160	4433	1111	4433	1111	1111	1111	1111
1161	4433	1111	4433	1111	1111	1111	1111
1162	4444	1111	4433	1111	1111	4444	1111
1163	4444	1111	4433	1111	1111	4444	1111
1164	4444	1111	4433	1111	1111	4444	1111
1165	4444	1111	4433	1111	1111	4444	1111
1166	5555	1111	4433	1111	1111	5555	1111
1167	4433	1111	4433	1111	1111	2222	1111
1168	4433	1111	4433	1111	1111	1111	1111
1169	4444	1111	4433	1111	1111	4444	1111
1170	4433	1111	4433	1111	1111	1111	1111
1171	4444	1111	4433	1111	1111	4444	1111
1172	2222	1111	1111	2222	1111	1111	1111
1173	2222	1111	1111	2222	1111	1111	1111
1174	2222	1111	1111	2222	1111	1111	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
1175	2222	1111	1111	2222	1111	1111	1111
1176	2222	1111	1111	2222	1111	1111	1111
1177	2222	1111	1111	2222	1111	1111	1111
1178	2222	2222	1111	2222	1111	2222	1111
1179	5544	2222	5544	2222	1111	2222	1111
1180	4422	1111	4422	1111	1111	1111	1111
1181	4422	1111	4422	1111	1111	1111	1111
1182	4422	1111	4422	1111	1111	1111	1111
1183	4422	1111	4422	1111	1111	1111	1111
1184	4422	1111	4422	1111	1111	1111	1111
1185	5555	1111	4422	1111	1111	5555	1111
1186	4422	1111	4422	1111	1111	1111	1111
1187	4422	1111	4422	1111	1111	1111	1111
1188	4432	1111	4432	1111	1111	1111	1111
1189	5555	1111	4433	1111	2222	5555	1111
1190	5555	1111	5533	1111	2222	5555	1111
1191	5555	1111	4433	1111	2222	5555	1111
1192	4422	1111	4422	1111	1111	1111	1111
1193	4422	1111	4422	1111	1111	1111	1111
1194	4422	1111	4422	1111	1111	1111	1111
1195	4422	1111	4422	1111	1111	1111	1111
1196	4433	1111	4433	1111	1111	1111	1111
1197	5555	1111	4433	1111	1111	5555	1111
1198	5555	1111	4433	1111	1111	5555	1111
1199	5555	1111	4433	1111	1111	5555	1111
1200	4433	1111	4433	1111	1111	1111	1111
1201	4433	1111	4433	1111	1111	1111	1111
1202	4433	1111	4433	1111	1111	1111	1111
1203	4433	1111	4433	1111	1111	1111	1111
1204	4433	1111	4433	1111	1111	1111	1111
1205	4444	1111	4433	1111	1111	4444	1111
1206	5555	2222	4433	1111	1111	5555	1111
1207	5555	1111	4433	1111	1111	5555	1111
1208	2222	1111	1111	2222	1111	1111	1111
1209	2222	1111	1111	2222	1111	1111	1111
1210	2222	1111	1111	2222	1111	1111	1111
1211	2222	1111	1111	2222	1111	1111	1111
1212	2222	1111	1111	2222	1111	1111	1111
1213	2222	2222	1111	2222	1111	1111	1111
1214	5544	4444	5544	2222	1111	2222	1111
1215	4444	4444	4422	1111	1111	1111	1111
1216	4422	1111	4422	1111	1111	1111	1111
1217	4422	1111	4422	1111	1111	1111	1111
1218	4422	1111	4422	1111	1111	1111	1111
1219	4422	1111	4422	1111	1111	1111	1111
1220	5555	1111	4422	1111	2222	5555	1111
1221	5555	1111	4422	1111	2222	5555	1111
1222	4422	1111	4422	1111	1111	1111	1111
1223	4432	1111	4432	1111	1111	1111	1111
1224	4433	1111	4433	1111	1111	1111	1111
1225	5555	1111	4433	1111	2222	5555	1111
1226	5555	1111	4433	1111	1111	5555	1111
1227	5555	1111	4432	1111	1111	5555	1111
1228	4422	1111	4422	1111	1111	1111	1111
1229	4422	1111	4422	1111	1111	1111	1111
1230	5555	1111	4433	1111	1111	5555	1111
1231	4433	1111	4433	1111	1111	2222	1111
1232	4433	1111	4433	1111	1111	1111	1111
1233	4433	1111	4433	1111	1111	1111	1111
1234	4433	2222	4433	1111	1111	1111	1111
1235	4444	1111	4433	1111	1111	4444	1111
1236	5555	1111	4433	1111	1111	5555	1111
1237	5555	1111	4433	1111	1111	5555	1111
1238	5555	1111	4433	1111	1111	5555	1111
1239	2222	1111	1111	2222	1111	1111	1111
1240	2222	1111	1111	2222	1111	1111	1111
1241	2222	1111	1111	2222	1111	1111	1111
1242	2222	1111	1111	2222	1111	1111	1111
1243	2222	1111	1111	2222	1111	1111	1111
1244	2222	1111	1111	2222	1111	1111	1111
1245	5544	2222	5544	2222	1111	2222	1111
1246	4444	4444	4422	1111	1111	1111	1111

APPENDIX 6. COLUMBIA RIVER ESTUARY RESOURCE SENSITIVITY RANKINGS BY SEASON

Grid-Cell#	FINAL (Sp,Su,F,W)	HUMAN USE (Sp,Su,F,W)	BIRD (Sp,Su,F,W)	MAMMAL (Sp,Su,F,W)	FISH (Sp,Su,F,W)	HABITAT (Sp,Su,F,W)	INVERT (Sp,Su,F,W)
1247	4444	4444	4422	1111	1111	1111	1111
1248	4422	1111	4422	1111	1111	1111	1111
1249	4422	1111	4422	1111	1111	1111	1111
1250	4422	1111	4422	1111	1111	1111	1111
1251	5555	1111	4422	1111	1111	5555	1111
1252	5555	1111	4422	1111	1111	5555	1111
1253	5555	1111	4422	1111	1111	5555	1111
1254	4422	1111	4422	1111	1111	1111	1111

[Statutory Authority: Chapter 90.48 RCW. 92-10-005 (Order 91-13), § 173-183-920, filed 4/23/92, effective 5/24/92.]

Chapter 173-184 WAC

VESSEL OIL TRANSFER ADVANCE NOTICE AND CONTAINMENT REQUIREMENTS

WAC

PART A: GENERAL REQUIREMENTS

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PART A: GENERAL REQUIREMENTS

WAC 173-184-010 Applicability of this chapter. (1) Except as provided in subsection (2) of this section, this chapter applies to all vessels delivering oil in bulk on or over the waters of the state to the following persons:

(a) Tank vessels;

(b) Cargo vessels;

(c) Passenger vessels;

(d) Any other nonrecreational vessels; or

(e) Class 1, 2, and 3 facilities.

(2) This chapter does not apply to:

(a) An oil spill recovery vessel that is engaged in spill response activities;

(b) Emergency lightering of vessels to mitigate further damage;

(c) A vessel's internal oil transfers;

(d) Vacuum trucks used to remove waste oil, bilge slops, contaminated ballast or fuel, or excess fuels intended for shoreside disposal;

(e) Public vessels; and

(f) Fuel transfers from tug to barge for operation of installed machinery.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-010, filed 9/25/06, effective 10/26/06.]

WAC 173-184-015 Purpose. (1) This chapter establishes minimum standards for safe oil transfers to meet a zero spill goal established by the legislature. This chapter emphasizes:

(a) Using a scaled approach that sets standards for safe oil transfers to protect people and the environment;

(b) That it is the obligation of vessel and facility owners and operators to adopt company policies that improve the safety of oil transfers;

(c) Minimizing the size and impacts of those oil spills which do occur.

(2) A second purpose of this chapter is the further implementation of chapter 88.46 RCW to regulate the transfer of oil on or over waters of the state.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-015, filed 9/25/06, effective 10/26/06.]

WAC 173-184-020 Authority. (1) The legislature granted ecology the authority to adopt and enforce these rules regulating the transfer of oil on or over waters of the state under RCW 88.46.160 and 88.46.165.

(2) The owner or operator of any vessel involved in an oil transfer over state waters must allow ecology access for the purposes of ensuring compliance with the requirements of this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-020, filed 9/25/06, effective 10/26/06.]

WAC 173-184-025 Definitions. Unless the context clearly requires otherwise, the definitions in chapter 317-05 WAC and the following apply to this chapter:

(1) "Boatyard" means a class 4 facility which builds, repairs, or refurbishes nonrecreational vessels under three hundred gross tons, regardless of fuel capacity.

(2) "Boom" means flotation boom or other effective barrier containment material suitable for containment of oil that is discharged onto the surface of the water.

(3) "Bulk" means material that is stored or transported in a loose, unpackaged liquid, powder, or granular form capable of being conveyed by a pipe, bucket, chute, or belt system.

(4) "Bunkering" means a bulk oil transfer operation to replenish a self-propelled vessel with fuel or lubricating oil.

(5) "Cargo vessel" means a self-propelled ship in commerce, other than a tank vessel or a passenger vessel, three hundred or more gross tons, including but not limited to, commercial fish processing vessels and freighters.

(6) "Class 1 facility" means a facility as defined in RCW 90.56.010 as:

(a) Any structure, group of structures, equipment, pipeline, or device, other than a vessel, located on or near the navigable waters of the state that transfers oil in bulk to or from a tank vessel or pipeline, that is used for producing, storing, handling, transferring, processing, or transporting oil in bulk.

(b) A facility does not include any:

(i) Railroad car, motor vehicle, or other rolling stock while transporting oil over the highways or rail lines of this state;

(ii) Underground storage tank regulated by ecology or a local government under chapter 90.76 RCW;

(iii) Motor vehicle motor fuel outlet;

(iv) Facility that is operated as part of an exempt agricultural activity as provided in RCW 82.04.330; or

(v) Marine fuel outlet that does not dispense more than three thousand gallons of fuel to a ship that is not a covered vessel, in a single transaction.

(7) "Class 2 facility" means a railroad car, motor vehicle, portable device or other rolling stock, while not transporting oil over the highways or rail lines of the state, used to transfer oil to a nonrecreational vessel.

(8) "Class 3 facility" means a structure that:

(a) Transfers to a nonrecreational vessel with a capacity of ten thousand five hundred or more gallons of oil whether the vessel's oil capacity is used for fuel, lubrication oil, bilge waste, or slops or other waste oils;

(b) Does not transfer oil in bulk to or from a tank vessel or pipeline; and

(c) Does not include any: Boatyard, railroad car, motor vehicle, or other rolling stock while transporting oil over the highways or rail lines of this state; underground storage tank regulated by ecology or a local government under chapter 90.76 RCW; or a motor vehicle motor fuel outlet; a facility that is operated as part of an exempt agricultural activity as provided in RCW 82.04.330.

(9) "Class 4 facility" means a structure that:

(a) Is a marina, boatyard, marine fueling outlet and other fueling installations that transfers to a nonrecreational vessel with a capacity to hold less than ten thousand five hundred gallons of oil whether the vessel's oil capacity is used for fuel, lubrication oil, bilge waste, or slops or other waste oil;

(b) Does not transfer oil in bulk to or from a tank vessel or pipeline; and

(c) Does not include any: Railroad car, motor vehicle, or other rolling stock while transporting oil over the highways or rail lines of this state; underground storage tank regulated by ecology or a local government under chapter 90.76 RCW; or a motor vehicle motor fuel outlet; or a facility that is operated as part of an exempt agricultural activity as provided in RCW 82.04.330.

(10) "Covered vessel" means a tank vessel, cargo vessel, or passenger vessel.

(11) "Discharge" means any spilling, leaking, pumping, pouring, emitting, emptying, or dumping regardless of quantity.

(12) "Ecology" means the department of ecology.

(13) "Gross ton" means a vessel's approximate volume as defined in Title 46, United States Code of Federal Regulations (CFR), Part 69.

(14) "Navigable waters of the state" means those waters of the state, and their adjoining shorelines, that are subject to the ebb and flow of the tide and/or are presently used, have been used in the past, or may be susceptible for use to transport intrastate, interstate, or foreign commerce.

(15) "Nonrecreational vessel" means any vessel that is not a recreational vessel as defined in this section.

(16) "Oil" or "oils" means oil of any kind that is liquid at atmospheric temperature and pressure and any fractionation thereof, including, but not limited to, crude oil, petroleum, gasoline, fuel oil, diesel oil, oil sludge, oil refuse, biological oils and blends, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under section 101(4) of the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by P.L. 99-499.

(17) "Owner" or "operator" means:

(a) In the case of a vessel, any person owning, operating, or chartering by demise, the vessel;

(b) In the case of an onshore or offshore facility, any person owning or operating the facility;

(c) In the case of an abandoned vessel, onshore, or offshore facility, the person who owned or operated the vessel or facility immediately before its abandonment; and

(d) "Operator" does not include any person who owns the land underlying a facility if the person is not involved in the operations of the facility.

(18) "Passenger vessel" means a ship of three hundred or more gross tons with a fuel capacity of at least six thousand gallons carrying passengers for compensation.

(19) "Person" means any political subdivision, government agency, municipality, industry, public or private corporation, co-partnership, association, firm, individual, ship, or any other entity whatsoever.

(20) "Person in charge" or "PIC" means a person qualified and designated as required under 33 CFR 155, for vessels, 33 CFR 154 for class 1, 2, or 3 facilities, or if not designated, the person with overall responsibility for oil transfer operations.

(21) "Personnel" means individuals employed by, or under contract with a facility or vessel.

(22) "Public vessel" means a vessel that is owned, or demise chartered, and is operated by the United States government, or a government of a foreign country, and is not engaged in commercial service.

(23) "Recreational vessel" means a vessel owned and operated only for pleasure with no monetary gain involved and if leased, rented, or chartered to another for recreational use is not used for monetary gain. This definition applies to vessels such as house boats, ski boats, and other small craft on a rental or lease agreement.

(24) "Ship" means any boat, ship, vessel, barge, or other floating craft of any kind.

(25) "Spill" means an unauthorized discharge of oil into the waters of the state.

(26) "State" means the state of Washington.

(27) "Tank vessel" means a ship that is constructed or adapted to carry, or that carries, oil in bulk as cargo or cargo residue, and that:

(a) Operates on the waters of the state; or

(b) Transfers oil in a port or place subject to the jurisdiction of this state.

(28) "Transfer" means any movement of oil in bulk to or from a nonrecreational vessel or transmission pipeline.

(29) "Waters of the state" includes lakes, rivers, ponds, streams, inland waters, underground water, salt waters, estuaries, tidal flats, beaches and lands adjoining the seacoast of the state, sewers, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

[Statutory Authority: Chapters 90.56, 88.46, 90.48 RCW. 07-22-119 (Order 07-14), § 173-184-025, filed 11/7/07, effective 12/8/07. Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-025, filed 9/25/06, effective 10/26/06.]

WAC 173-184-030 Inspections. (1) Ecology may verify compliance with this chapter by announced and unannounced inspections in accordance with chapter 88.46 RCW.

(2) To ensure compliance with this chapter, ecology may ask for documents required by this chapter.

(3) Ecology will provide an inspection report to the vessel at the conclusion of the inspection.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-030, filed 9/25/06, effective 10/26/06.]

WAC 173-184-035 Drill credit. The owner or operator may request that performance under applicable sections of this chapter be credited for portions of the contingency plan drill requirements.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-035, filed 9/25/06, effective 10/26/06.]

WAC 173-184-040 Noncompliance. Any violation of this chapter may be subject to enforcement and penalty sanctions of chapter 88.46 RCW.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-040, filed 9/25/06, effective 10/26/06.]

WAC 173-184-045 Owner and operator responsibilities. Owners and operators of delivering vessels conducting oil transfer operations must ensure that the requirements in this chapter are implemented and followed.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-045, filed 9/25/06, effective 10/26/06.]

WAC 173-184-050 Severability. If any provision of this chapter is held invalid, the remainder of the chapter is not affected.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-050, filed 9/25/06, effective 10/26/06.]

PART B: OIL TRANSFER REQUIREMENTS FOR ALL DELIVERING VESSELS

WAC 173-184-100 Advance notice of transfer. (1) The delivering vessel (or designee) involved in an oil transfer of more than one hundred gallons must provide prior notice of the oil transfer to ecology. The notice must be provided in the time frame set forth by the applicable Coast Guard captain of the port.

(2) The notice of transfer must be submitted to ecology on the Advanced Notice of Transfer form provided by ecology, a facsimile, or an equivalent form that contains the following information:

(a) Company name, address, contact person and telephone number of organization delivering the oil;

(b) Date of transfer operation, estimated starting time, and duration of the oil transfer operation;

(c) Name of delivering vessel and receiving vessel or class 1, 2, or 3 facility involved in the oil transfer, including Lloyd's Register/International Maritime Organization number or official number if available;

(d) City name and either the address or location/anchorage where the oil transfer operation will occur;

(e) Oil product type and quantity in gallons or barrels; and

(f) Whether or not prebooming will take place? (yes or no).

(3) Notification may be made by the delivering vessel's agent or other contracted representative.

(4) The notification form may be submitted via internet web site established by ecology, by e-mail, or by facsimile. The notification form and contact information are found on ecology's web site:

http://www.ecy.wa.gov/programs/spills/spills.html.

(5) Compliance schedule: All delivering vessels must begin submitting advance notice within thirty calendar days of the effective date of this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-100, filed 9/25/06, effective 10/26/06.]

WAC 173-184-105 Equivalent compliance plan. (1) Any owner or operator may submit a proposal for equivalent compliance for the alternative measures required in WAC 173-184-115 and 173-184-120. Any owner or operator who submits a proposal must preboom or meet the alternative measures until the equivalent compliance plan is approved.

(a) Rate A (see WAC 173-184-110) deliverers may only submit an equivalent compliance plan proposal for alternative measures found in WAC 173-184-115(7).

(b) Rate B deliverers may only submit an equivalent compliance plan proposal for alternative measures found in WAC 173-184-120(2).

(2) The proposal must contain the following and in the order presented:

(a) Cover sheet with name of company seeking equivalent compliance and point of contact information;

(b) Table of contents including supporting documents and appendices;

(c) Executive summary of the equivalent proposal;

(d) A detailed description of the equivalent proposal that includes, when appropriate, the equipment, personnel, operating procedures, and maintenance systems and any other alternatives that are being proposed;

(e) A detailed analysis of how the proposal offers equivalent or greater level of protection as compared to the requirements in this chapter. This includes:

(i) Methodology of the analysis;

(ii) Detailed results with supporting data, references, graphs, tables, pictures, and other relevant information; and

(iii) Technical feasibility of proposal versus current requirements.

(3) Submission timeline of proposed equivalent compliance plan. The owner or operator must submit the equivalent

compliance proposal to ecology at least one hundred twenty calendar days before planned operation under this section.

(a) Ecology will make the proposal available for a thirty-calendar-day public review and comment period;

(b) Ecology may request additional information regarding any aspect of the proposal such as site-specific meteorological, water current velocity, and other monitoring data to support the proposal;

(c) Ecology will respond to the owner or operator within ninety calendar days of receipt of the proposal with a letter approving, conditionally approving, or disapproving the proposal; and

(d) The approval will be valid for no more than five years from the date on the approval letter.

(4) Approval of proposed equivalent compliance plan. Ecology may approve the equivalent compliance proposal if, based upon the documents submitted and other information available to the agency, it finds that:

(a) The equivalent compliance proposal is complete and accurate; and

(b) The equivalent compliance proposal would provide an equivalent or greater level of environmental protection as the alternative measures required in WAC 173-184-115 and 173-184-120.

(5) Ecology may reconsider an approval, or conditional approval, at any time after a response to a significant oil spill by the company.

(6) The owner or operator must submit one paper copy and one electronic copy of the proposal to ecology:

The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Equivalent Compliance Review
P.O. Box 47600
Olympia, WA 98504-7600
Or
The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Equivalent Compliance Review
300 Desmond Drive
Lacey, WA 98503

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-105, filed 9/25/06, effective 10/26/06.]

WAC 173-184-110 Transfer containment and recovery requirements. (1) These standards apply to all oil transfers that involve any jet fuels, diesels, heating oils, and any other oils that are recoverable when spilled to water. These standards do not apply to vessels delivering gasoline, aviation gasoline, and other highly volatile products with similar characteristics.

(2) The deliverer must first determine the rate at which oil is to be transferred and then follow the applicable standards outlined in this chapter:

(a) Rate A: Oil transfer operations at a rate over five hundred gallons per minute. Rate A requirements are found in WAC 173-184-115.

(b) Rate B: Oil transfer operations at a rate of five hundred gallons per minute or less. Rate B requirements are found in WAC 173-184-120.

(3) To meet the requirements of this chapter, the deliverer must have personnel trained in the proper use and maintenance of boom and recovery equipment.

(4) All boom and associated equipment, including the equipment used to deploy the boom, must be of the appropriate size and design for the environmental conditions encountered in the transfer area based on the manufacturer's specifications.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-110, filed 9/25/06, effective 10/26/06.]

WAC 173-184-115 Rate A prebooming and Rate A alternative measures requirements. (1) The Rate A deliverer must preboom oil transfers when it is safe and effective to do so. When prebooming is not safe and effective, the deliverer must meet the alternative measure requirements found in subsection (7) of this section.

(2) The determination of safe and effective must be made prior to starting a transfer, or if conditions change, during a transfer. This safe and effective determination must use the following threshold values:

(a) Transfers at a class 1 facility must use the class 1 facility's values found in the facility's operations manual - see WAC 173-180-420.

(b) Transfers that do not occur at class 1 facilities must use the values found in the vessel's approved report submitted in accordance with WAC 173-184-130, the Safe and effective threshold determination report.

(3) When it is not safe and effective or when conditions develop during a preboomed transfer which requires removal of the boom, the Rate A deliverer must report this finding to ecology and meet the alternative measures found in subsection (7) of this section. The Ecology Boom Reporting form must be used for this purpose, and submitted by e-mail or facsimile prior to the transfer and/or immediately when conditions have changed.

(4) If multiple oil transfers are occurring simultaneously with a single vessel and one product transferred is not appropriate to preboom, then that portion of the transfer where it is unsuitable to preboom must meet the alternative measures found in subsection (7) of this section.

(5) For the purposes of this section, the deliverer must be able to quickly disconnect all boom in the event of an emergency.

(6) Rate A prebooming requirements.

(a) In order to preboom transfers, the deliverer must have access to boom four times the length of the largest vessel involved in the transfer or two thousand feet, whichever is less. The deliverer must deploy the boom such that it completely surrounds the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the portion of the vessel and transfer area that provides for maximum containment of any oil spilled.

(i) The boom must be deployed with a minimum stand-off of five feet away from the sides of a vessel measured at the waterline. This stand-off may be modified for short durations needed to meet a facility or ship's operational needs.

(ii) The deliverer must check the boom positioning periodically and adjust the boom as necessary throughout the duration of the transfer and specifically during tidal changes and significant wind or wave events.

(b) In addition to prebooming, the deliverer must have the following recovery equipment available on-site:

(i) Containers suitable for holding the recovered oil and oily water;

(ii) Nonsparking hand scoops, shovels, and buckets; and

(iii) Enough sorbent materials and storage capacity for a seven barrel oil spill appropriate for use on water or land.

(c) For preboomed transfers: Within one hour of being made aware of a spill the deliverer must be able to complete deployment of the remaining boom should it be necessary for containment, protection, or recovery purposes.

(7) Rate A alternative measures. Rate A deliverers must use these alternative measures when it is not safe and effective to meet the prebooming requirements:

(a) To meet the alternative measures requirements the deliverer must have access to boom four times the length of the largest vessel involved in the transfer or two thousand feet, whichever is less.

(b) In addition to the boom, the deliverer must have the following recovery equipment available on-site:

(i) Containers suitable for holding the recovered oil and oily water;

(ii) Nonsparking hand scoops, shovels, and buckets; and

(iii) Enough sorbent materials and storage capacity for a seven barrel oil spill appropriate for use on water or land.

(c) The deliverer must have the ability to safely track an oil spill in low visibility conditions. The tracking system must be on-scene within thirty minutes of being made aware of the spill.

(d) For alternative measures: Within one hour of being made aware of a spill the deliverer must be able to completely surround the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation or the portion of the vessel and transfer area that provides for maximum containment of any oil spilled.

(e) For alternative measures: Within two hours of being made aware of a spill, the deliverer must have the following:

(i) Additional boom four times the length of the largest vessel involved in the transfer or two thousand feet, whichever is less, available for containment, protection, or recovery; and

(ii) A skimming system must be on-site. The skimming system must be in stand-by status and be capable of fifty barrels recovery and one hundred barrels of storage.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-115, filed 9/25/06, effective 10/26/06.]

WAC 173-184-120 Rate B prebooming and alternative measures requirements. (1) Rate B prebooming requirements. The Rate B deliverer must choose to meet either the following prebooming requirements or the alternative measures found in subsection (2) of this section. If prebooming is chosen then:

(a) Prior to starting the oil transfer operation the deliverer must deploy boom so that it completely surrounds the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the deliverer may preboom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.

(i) The deliverer must deploy the boom with a minimum stand-off of five feet away from the sides of a vessel, measured at the waterline. This stand-off may be modified for short durations needed to meet a facility or ship's operational needs;

(ii) The deliverer must periodically check boom positioning and adjust the boom as necessary throughout the duration of the transfer and specifically during tidal changes and significant wind or wave events.

(b) In addition, the deliverer must have the following recovery equipment available on-site:

(i) Containers suitable for holding the recovered oil and oily water;

(ii) Nonsparking hand scoops, shovels, and buckets; and

(iii) Enough sorbent materials and storage capacity for a two barrel oil spill appropriate for use on water or land.

(c) For prebooming: Within one hour of being made aware of a spill, the deliverer must be able to completely deploy an additional five hundred feet of boom. This boom may be used for containment, recovery, or protection.

(2) The Rate B alternative measures requirements. If a Rate B deliverer chooses alternative measures, then:

(a) Prior to starting the oil transfer operation the deliverer must have access to boom sufficient to completely surround the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the deliverer may preboom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.

(b) In addition, the deliverer must have the following recovery equipment available on-site:

(i) Containers suitable for holding the recovered oil and oily water;

(ii) Nonsparking hand scoops, shovels, and buckets; and

(iii) Enough sorbent materials and storage capacity for a two barrel oil spill appropriate for use on water or land.

(c) For alternative measures: Within one hour of being made aware of a spill the deliverer must be able to complete deployment of an additional five hundred feet of boom for containment, protection or recovery.

(d) For alternative measures: Within two hours of being made aware of a spill, the deliverer must have an additional five hundred feet of boom available on-scene for containment, protection, or recovery.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-120, filed 9/25/06, effective 10/26/06.]

WAC 173-184-125 Compliance schedule for prebooming and alternative measures for Rate A and Rate B transfers. (1) Any delivering vessel conducting Rate A transfers must meet all the applicable requirements in WAC 173-184-110 and 173-184-115 except WAC 173-184-115(6) within one hundred twenty calendar days of the effective date of this chapter.

(2) All Rate A transfers must meet the requirements of WAC 173-184-115(6) within three hundred sixty-five calendar days from the effective date of the chapter.

(3) Any delivering vessel conducting Rate B transfers must meet all the applicable requirements in WAC 173-184-110 and 173-184-120 within one hundred twenty calendar days from the effective date of this chapter.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-125, filed 9/25/06, effective 10/26/06.]

WAC 173-184-130 Safe and effective threshold determination report. This section applies to delivering vessels conducting Rate A transfers at locations other than class 1 facilities.

(1) **Report requirements.** The report must include, at a minimum, the following in the order presented:

(a) Cover sheet with name of company submitting the report and point of contact information;

(b) Table of contents including supporting documents and appendices;

(c) Summary of safe and effective threshold values; and

(d) The body of the report must include the following:

(i) Information used to support these values must be based upon on-site environmental monitoring data recorded at specific times, dates, and locations; and

(ii) These values and the supporting data must address, at a minimum, the following site-specific information:

(A) Personnel safety;

(B) Sea state values in feet including typical wave periods;

(C) Water current velocity such as peak currents, sustained currents in hourly increments, and direction of flow, during typical oil transfer operations;

(D) Wind speed in knots, and prevailing directions; and

(E) Other conditions such as vessel traffic, fishing activities, and other factors that influence the oil transfer operation.

(iii) The owner or operators must provide a detailed analysis of the proposed threshold values for the transfer location including:

(A) Methodology of the analysis;

(B) Equipment used to measure data collected; and

(C) Supporting data, references, graphs, tables, pictures, and other relevant information.

(2) **Submittal requirements.** Owners or operators of delivering vessels that conduct Rate A transfers must submit a report to ecology for review and approval for each location at which a Rate A transfer occurs.

One paper and one electronic copy of the threshold determination report and appendices must be delivered to:

The Department of Ecology
Spill Prevention, Preparedness, and Response Program
Threshold Determination Report
P.O. Box 47600
Olympia, WA 98504-7600

(3) **Review and approval process.**

(a) When reviewing threshold determination reports, ecology must consider the following:

(i) Personnel safety;

(ii) Operating environment of the transfer location(s) such as site-specific meteorological, water current velocity, and other monitoring data to support the threshold determination;

(iii) Accepted industry standards regarding the performance of boom and associated response equipment in various operating environments;

(iv) Types of oil transfer operations including bunkering, cargo operations, transfer rates, and other factors that influence oil transfers.

(b) Ecology will make the report available for a thirty-calendar-day public review and comment period.

(c) Ecology will respond to the owner or operator within ninety calendar days of receipt of the threshold determination report with a letter approving, conditionally approving, or disapproving the report.

(d) The approval of this report will be valid for no more than five years from the date on the approval letter.

(e) Ecology may require a new review and approval process for this report after a spill by the vessel.

(4) **Compliance and submittal schedule.**

(a) Safe and effective threshold determination report must be submitted within one hundred eighty calendar days after the effective date of this chapter.

(b) Rate A deliverers that begin operating in Washington waters after the effective date of this chapter must submit the report at least one hundred twenty calendar days prior to the first oil transfer operation.

[Statutory Authority: RCW 88.46.160, 88.46.165, and chapter 90.56 RCW. 06-20-034 (Order 06-02), § 173-184-130, filed 9/25/06, effective 10/26/06.]

Chapter 173-200 WAC

WATER QUALITY STANDARDS FOR GROUND WATERS OF THE STATE OF WASHINGTON

WAC

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WAC 173-200-010 Introduction. (1) This chapter implements chapter 90.48 RCW, the Water Pollution Control Act and chapter 90.54 RCW, the Water Resources Act of 1971.

(2) This chapter applies to all ground waters of the state that occur in a saturated zone or stratum beneath the surface of land or below a surface water body.

(3) This chapter shall not apply to:

(a) Contaminant concentrations found in saturated soils where those contaminants are chemicals or nutrients that have been applied at agronomic rates for agricultural purpose if those contaminants will not cause pollution of any ground waters below the root zone.

(b) Contaminant concentrations found in saturated soils where those contaminants are constituents that have been applied at approved rates and under approved methods of land treatment if those contaminants will not cause pollution of any ground waters below the root zone.

(c) Clean up actions approved by the department under the Model Toxics Control Act, chapter 70.105D RCW, or approved by the United States Environmental Protection Agency under the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. 9601 et seq. Ground water cleanup standards for such sites shall be developed under WAC 173-340-720.

(4) The goal of this chapter is to maintain the highest quality of the state's ground waters and protect existing and future beneficial uses of the ground water through the reduction or elimination of the discharge of contaminants to the state's ground waters.

(5) To implement this goal, this chapter establishes ground water quality standards which, together with the state's technology-based treatment requirements, provide for the protection of the environment and human health and protection of existing and future beneficial uses of ground waters.

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-010, filed 10/31/90, effective 12/1/90.]

WAC 173-200-020 Definitions. As used in this chapter:

(1) "Activity" means any site, area, facility, structure, vehicle, installation, or discharge which may produce pollution.

(2) "Artificial ground water" means ground water that has been put in place through means, such as irrigation, other than natural recharge.

(3) "Background water quality" means the concentrations of chemical, physical, biological, or radiological constituents, or other characteristics in or of ground water at a particular point in time and upgradient of an activity that have not been affected by that activity.

(4) "Beneficial uses" means uses of waters of the state which include but are not limited to use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

(5) "Best management practices" or "BMPs" mean schedules of activities, prohibitions of practices, maintenance of procedures, and other management practices, to prevent or reduce the pollution of ground waters of the state. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or water disposal, or drainage from raw material storage.

(6) "Carcinogen" means any substance or agent that produces or tends to produce cancer in humans. For implementation of this chapter, the term carcinogen will apply to all substances on the United States Environmental Protection Agency Integrated Risk Information System, IRIS data base, of A (known human) and B1 and B2 (probable human) carcinogens for which IRIS listed an oral slope factor.

(7) "Contaminant" means any chemical, physical, biological, or radiological substance that does not occur naturally in ground water or that occurs at concentrations greater than those in the natural levels.

(8) "Criteria" means numerical values or narrative standards that represent the maximum allowable contaminant concentrations in the ground water.

(9) "Department" means the Washington state department of ecology.

(10) "Early warning value" means a concentration set in accordance with WAC 173-200-070 that is a percentage of a ground water quality enforcement limit.

(11) "Enforcement limit" means the value assigned to any contaminant for the purposes of regulating that contaminant.

(12) "Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

(13) "Human-caused pollution" means pollution resulting from human activity.

(14) "Isolated ground water" means ground water fully separated from other ground waters by an impermeable layer of rock or strata.

(15) "Maximum contaminant level" or "MCL" means the maximum concentration of a contaminant in water established by the Environmental Protection Agency under the Federal Safe Drinking Water Act (42 U.S.C. 300f et seq.) and published in 40 C.F.R. 141 as presently promulgated or as subsequently amended or repromulgated.

(16) "Maximum contaminant level goal" or "MCLG" means the maximum concentration of a contaminant established by the Environmental Protection Agency under the Federal Safe Drinking Water Act (42 U.S.C. 300f et seq.) and published in 40 C.F.R. 141 as presently promulgated or subsequently amended or repromulgated, for which no known or anticipated adverse effects on human health occur including an adequate margin of safety.

(17) "Natural ground water quality" means ground water quality that was present before any human-caused pollution.

(18) "Naturally nonpotable ground water" means ground water that is unsuitable for drinking water because of natural ground water quality and for which current treatment methods are considered unreasonable and impractical.

(19) "Permit" means a department authorization, license, or equivalent control document issued to a facility, activity, or entity authorized to treat, store, dispose, or discharge materials or wastes. This includes, but is not limited to, state waste discharge permits issued pursuant to chapter 173-216 WAC, permits for dangerous waste management facilities issued pursuant to chapter 173-303 WAC, and permits for ground water withdrawal issued pursuant to chapter 90.44 RCW.

(20) "Person" means any political subdivision, government agency, municipality, industry, public or private corporation, partnership, association, firm, individual, or any other entity whatsoever.

(21) "Point of compliance" means the location, set in accordance with WAC 173-200-060, where the ground water quality enforcement limit shall not be exceeded.

(22) "Pollution" means such contamination, or other alteration of the physical, chemical or biological properties, of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life.

(23) "Practical quantification level" or "PQL" means the lowest concentration of a substance that can be reliably achieved within specific limits of precision, accuracy, repre-

sentativeness, completeness, and comparability during routine laboratory operating conditions.

(24) "Root zone" means the zone that extends from the surface of the soil to the depth of the lowest root and is specific to a species of plant, group of plants, or crop.

(25) "Saturated zone" means the zone below the water table in which all interstices are filled with water.

(26) "Seasonal ground water" means ground water that exists for a temporary period of the year and is usually associated with a particular activity or phenomenon.

(27) "State waste discharge permit" means a permit issued in accordance with the state waste discharge permit program, chapter 173-216 WAC.

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-020, filed 10/31/90, effective 12/1/90.]

WAC 173-200-030 Antidegradation policy. (1) The antidegradation policy of the state of Washington, is generally guided by chapter 90.48 RCW, the Water Pollution Control Act, and chapter 90.54 RCW, the Water Resources Act of 1971. The goal of this policy is to ensure the purity of the state's ground waters and to protect the natural environment.

(2) The antidegradation policy is as follows:

(a) Existing and future beneficial uses shall be maintained and protected and degradation of ground water quality that would interfere with or become injurious to beneficial uses shall not be allowed.

(b) Degradation shall not be allowed of high quality ground waters constituting an outstanding national or state resource, such as waters of national and state parks and wildlife refuges, and waters of exceptional recreational or ecological significance.

(c) Whenever ground waters are of a higher quality than the criteria assigned for said waters, the existing water quality shall be protected, and contaminants that will reduce the existing quality thereof shall not be allowed to enter such waters, except in those instances where it can be demonstrated to the department's satisfaction that:

(i) An overriding consideration of the public interest will be served; and

(ii) All contaminants proposed for entry into said ground waters shall be provided with all known, available, and reasonable methods of prevention, control, and treatment prior to entry.

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-030, filed 10/31/90, effective 12/1/90.]

WAC 173-200-040 Criteria. (1) Ground waters in the state of Washington support many different beneficial uses. The purpose of these criteria is to establish maximum contaminant concentrations for the protection of a variety of beneficial uses of Washington's ground water.

(a) Drinking water is the beneficial use generally requiring the highest quality of ground water.

(b) Providing protection to the level of drinking water standards will protect a great variety of existing and future beneficial uses.

(c) Some ground waters of the state support environmental systems with existing and future beneficial uses requiring more stringent protection than that provided by human health based criteria. These ground waters and dependent uses will be protected by either or both of the following:

(i) Designation of an area and its associated ground water as a special protection area in accordance with WAC 173-200-090.

(ii) Establishment of enforcement limits as close to the natural ground water quality as possible for activities that may adversely affect those ground waters in accordance with WAC 173-200-050.

(d) The use of criteria based on drinking water quality shall in no way be interpreted to mean that all ground waters are used for drinking water or that all ground waters are presently suitable for drinking water.

(2) The following criteria shall apply to all ground waters in the state of Washington:

(a) Ground water concentrations shall not exceed the criteria listed in Table 1, except as described in WAC 173-200-050 (3)(b).

(b) For the primary and secondary contaminants and radionuclides listed in Table 1, the criteria shall be the most stringent concentration of the following and those listed in Table 1:

(i) Maximum contaminant level goals;

(ii) Maximum contaminant levels; and

(iii) State maximum contaminant levels published in chapter 248-54 WAC as presently promulgated or subsequently amended or repromulgated.

The criteria for primary and secondary contaminants and radionuclide contaminants in Table 1 shall be amended as the federal and state rules are amended and without amendment of this chapter.

(c) For carcinogens listed in Table 1, the criteria are the concentrations that are anticipated to result in a total incremental human cancer risk of less than 1 in 1,000,000, and were estimated using the following equation and standard exposure assumptions:

$$\text{Ground Water Criteria} = (\text{ug/1}) = \frac{\text{RISK} \times \text{BW} \times \text{LIFE} \times \text{UCF}}{\text{CPF} \times \text{DWIR} \times \text{DUR}}$$

Where:

RISK	=	Human cancer risk level (1 in 1,000,000)
BW	=	Body Weight (70 kg)
LIFE	=	Lifetime (70 years)
UCF	=	Unit conversion factor (1,000 ug/mg)
CPF	=	Cancer potency factor as published in the IRIS data base (1/mg/kg/day)
DWIR	=	Drinking water ingestion rate (2.0 liters/day)
DUR	=	Duration of exposure (30 years)

For volatile carcinogens, inhalation exposure from showering was incorporated into the criteria by doubling the drinking water ingestion rate.

(3) For contaminants for which no numeric criteria have been established, enforcement limits shall be established in accordance with WAC 173-200-050.

TABLE 1
GROUND WATER QUALITY CRITERIA

CONTAMINANT	CRITERION	
I. PRIMARY AND SECONDARY CONTAMINANTS AND RADIONUCLIDES		
A. PRIMARY CONTAMINANTS		
Barium*	1.0	milligrams/liter (mg/1)

CONTAMINANT		CRITERION	
	Cadmium*	0.01	mg/1
	Chromium*	0.05	mg/1
	Lead*	0.05	mg/1
	Mercury*	0.002	mg/1
	Selenium*	0.01	mg/1
	Silver*	0.05	mg/1
	Fluoride	4	mg/1
	Nitrate (as N)	10	mg/1
	Endrin	0.0002	mg/1
	Methoxychlor	0.1	mg/1
	1,1,1-Trichloroethane	0.20	mg/1
	2-4 D	0.10	mg/1
	2,4,5-TP Silvex	0.01	mg/1
	Total Coliform Bacteria	1/100	ml
B.	SECONDARY CONTAMINANTS		
	Copper*	1.0	mg/1
	Iron*	0.30	mg/1
	Manganese*	0.05	mg/1
	Zinc*	5.0	mg/1
	Chloride	250	mg/1
	Sulfate	250	mg/1
	Total Dissolved Solids	500	mg/1
	Foaming Agents	0.5	mg/1
	pH	6.5-8.5	
	Corrosivity	noncorrosive	
	Color	15 color units	
	Odor	3 threshold odor units	
C.	RADIONUCLIDES		
	Gross Alpha Particle Activity	15	pico Curie/ liter (pCi/1)
	Gross Beta Particle Radioactivity		
	Gross Beta Activity	50	pCi/l
	Tritium	20,000	pCi/l
	Strontium-90	8	pCi/l
	Radium 226 & 228	5	pCi/1
	Radium -226	3	pCi/1
II. CARCINOGENS			
	Acrylamide	0.02	micro-grams/ liter ug/1
	Acrylonitrile	0.07	ug/1
	Aldrin	0.005	ug/1
	Aniline	14	ug/1
	Aramite	3	ug/1
	Arsenic*	0.05	(ug/1)
	Azobenzene	0.7	ug/1
	Benzene	1.0	ug/1
	Benzidine	0.0004	ug/1
	Benzo(a)pyrene	0.008	ug/1
	Benzotrichloride	0.007	ug/1
	Benzyl chloride	0.5	ug/1
	Bis(chloroethyl)ether	0.07	ug/1
	Bis(chloromethyl)ether	0.0004	ug/1
	Bis(2-ethylhexyl) phthalate	6.0	ug/1
	Bromodichloromethane	0.3	ug/1
	Bromoform	5	ug/1
	Carbazole	5	ug/1
	Carbon tetrachloride	0.3	ug/1
	Chlordane	0.06	ug/1
	Chlorodibromomethane	0.5	ug/1
	Chloroform	7.0	ug/1
	4 Chloro-2-methyl aniline	0.1	ug/1
	4 Chloro-2-methyl analine hydrochloride	0.2	ug/1
	o-Chloronitrobenzene	3	ug/1
	p-Chloronitrobenzene	5	ug/1
	Chlorthalonil	30	ug/1
	Diallate	1	ug/1

CONTAMINANT		CRITERION	
	DDT (includes DDE and DDD)	0.3	ug/1
	1,2 Dibromoethane	0.001	ug/1
	1,4 Dichlorobenzene	4	ug/1
	3,3' Dichlorobenzidine	0.2	ug/1
	1,1 Dichloroethane	1.0	ug/1
	1,2 Dichloroethane (ethylene chloride)	0.5	ug/1
	1,2 Dichloropropane	0.6	ug/1
	1,3 Dichloropropene	0.2	ug/1
	Dichlorvos	0.3	ug/1
	Dieldrin	0.005	ug/1
	3,3' Dimethoxybenzidine	6	ug/1
	3,3 Dimethylbenzidine	0.007	
	1,2 Dimethylhydrazine	60	ug/1
	2,4 Dinitrotoluene	0.1	ug/1
	2,6 Dinitrotoluene	0.1	ug/1
	1,4 Dioxane	7.0	ug/1
	1,2 Diphenylhydrazine	0.09	ug/1
	Direct Black 38	0.009	ug/1
	Direct Blue 6	0.009	ug/1
	Direct Brown 95	0.009	ug/1
	Epichlorohydrin	8	ug/1
	Ethyl acrylate	2	ug/1
	Ethylene dibromide	0.001	ug/1
	Ethylene thiourea	2	ug/1
	Folpet	20	ug/1
	Furazolidone	0.02	ug/1
	Furium	0.002	ug/1
	Furmecyclox	3	ug/1
	Heptachlor	0.02	ug/1
	Heptachlor Epoxide	0.009	ug/1
	Hexachlorobenzene	0.05	ug/1
	Hexachlorocyclohexane (alpha)	0.001	ug/1
	Hexachlorocyclohexane (technical)	0.05	ug/1
	Hexachlorodibenzo-p-dioxin, mix	0.00001	ug/1
	Hydrazine/Hydrazine sulfate	0.03	ug/1
	Lindane	0.06	ug/1
	2 Methoxy-5-nitroaniline	2	ug/1
	2 Methylaniline	0.2	ug/1
	2 Methylaniline hydrochloride	0.5	ug/1
	4,4' Methylene bis(N,N'-dimethyl) aniline	2	ug/1
	Methylene chloride (dichloromethane)	5	ug/1
	Mirex	0.05	ug/1
	Nitrofurazone	0.06	ug/1
	N-Nitrosodiethanolamine	0.03	ug/1
	N-Nitrosodiethylamine	0.0005	ug/1
	N-Nitrosodimethylamine	0.002	ug/1
	N-Nitrosodiphenylamine	17	ug/1
	N-Nitroso-di-n-propylamine	0.01	ug/1
	N-Nitrosopyrrolidine	0.04	ug/1
	N-Nitroso-di-n-butylamine	0.02	ug/1
	N-Nitroso-N-methylethylamine	0.004	ug/1
	PAH	0.01	ug/1
	PBBs	0.01	ug/1
	PCBs	0.01	ug/1
	o-Phenylenediamine	0.005	ug/1
	Propylene oxide	0.01	ug/1
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.0000006	ug/1
	Tetrachloroethylene (perchloroethylene)	0.8	ug/1
	p,α,α,α-Tetrachlorotoluene	0.004	ug/1
	2,4 Toluenediamine	0.002	ug/1
	o-Toluidine	0.2	ug/1
	Toxaphene	0.08	ug/1
	Trichloroethylene	3	ug/1
	2,4,6-Trichlorophenol	4	ug/1
	Trimethyl phosphate	2	ug/1
	Vinyl chloride	0.02	ug/1

* metals are measured as total metals

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-040, filed 10/31/90, effective 12/1/90.]

WAC 173-200-050 Enforcement limit. (1) An enforcement limit is a value assigned to any contaminant for the purposes of regulating that contaminant to protect existing ground water quality and to prevent ground water pollution.

(2) Enforcement limits shall be defined on a case-by-case basis and shall be met at the point of compliance as defined in WAC 173-200-060. When the point of compliance is established at or in close proximity to the property boundary, enforcement limits shall be established sufficiently below criteria to provide an adequate margin of safety to ensure pollution does not extend beyond the property boundary.

(3) All enforcement limits shall, at a minimum, be based on all known, available, and reasonable methods of prevention, control, and treatment.

(a) The department shall consider all of the following in establishing enforcement limits:

(i) The antidegradation policy;

(ii) Establishment of an enforcement limit as near the natural ground water quality as practical;

(iii) Overall protection of human health and the environment;

(iv) Whether the potentially affected area has been designated as a special protection area;

(v) Protection of existing and future beneficial uses;

(vi) Effects of the presence of multiple chemicals, multiple exposure pathways in accordance with subsection (5) of this section, and toxicity of individual contaminants;

(vii) Federal, state, tribal, and local land use plans, policies, or ordinances including wellhead protection programs;

(viii) Pollution of other media such as soils or surface waters; and

(ix) Any other considerations the department deems pertinent to achieve the objectives of this chapter.

(b) Where a criterion is established for a given contaminant, the enforcement limit shall not exceed the criterion except as follows:

(i) When the natural ground water quality for a contaminant exceeds the criterion, the enforcement limit for that contaminant shall be equal to the natural level.

(ii) When the background ground water quality exceeds a criterion, the enforcement limit at the point of compliance shall not exceed the background ground water quality for that criterion. Enforcement limits based on elevated background ground water quality shall in no way be construed to allow continued pollution of the receiving ground water.

(iii) When a criterion is less than the practical quantification level, the enforcement limit shall be established in an alternate location to provide a realistic estimate that the criterion shall not be exceeded in the ground water. Evaluation for such enforcement limits shall be performed in accordance with WAC 173-200-080(5).

(iv) When naturally nonpotable ground water exceeds a secondary contaminant criterion, an enforcement limit for a secondary contaminant may exceed a criterion when it can be demonstrated to the department's satisfaction that:

(A) The environment is protected;

(B) Human health is protected in consultation with the Washington state department of health;

(C) Existing and future beneficial uses are not harmed; and

(D) All known, available, and reasonable methods of prevention, control, and treatment will not result in concentrations less than the secondary contaminant criteria.

(v) Enforcement limits may exceed criteria in isolated artificial or seasonal ground waters when all of the following conditions exist:

(A) The isolated artificial or seasonal ground waters are of insufficient quantity for use as a drinking water source;

(B) Established enforcement limits will not cause harm to existing and future beneficial uses including support of seasonal wetlands;

(C) Accumulation of contaminants will not cause adverse acute or chronic effects to human health as determined in consultation with the Washington state department of health;

(D) Accumulation of contaminants will not cause adverse acute or chronic effects to the environment.

(vi) In rare circumstances the department may allow an enforcement limit to exceed a criterion for an activity for a period not to exceed five years without reconsideration of the evidence presented in subitems (A), (B), and (C) of this subdivision, and if all of the following conditions are met:

(A) The permit holder or responsible person demonstrates to the department's satisfaction that an enforcement limit that exceeds a criterion is necessary to provide greater benefit to the environment as a whole and to protect other media such as air, surface water, soil, or sediments;

(B) The activity has been demonstrated to be in the overriding public interest of human health and the environment;

(C) The department selects, from a variety of control technologies available for reducing and eliminating contamination from each potentially affected media, the technologies that minimize impacts to all affected media; and

(D) The action has been approved by the director of the department or his/her designee.

(4) Where a criterion is not established for a contaminant, the enforcement limit in ground water shall not exceed the practical quantification level except:

(a) Where there is evidence that a lower concentration would better protect human health and the environment (based on published health advisories, risk assessments, and other available information), the department shall establish a more stringent enforcement limit;

(b) If clear and convincing evidence can be provided to the department that an alternative concentration will provide protection to human health and the environment, the department may establish an enforcement limit higher than the practical quantification level.

Protection of human health shall be determined in consultation with the Washington state department of health.

(5) For multiple contaminants and multiple routes of exposure, enforcement limits shall be addressed as follows:

(a) Estimated doses of individual contaminants from one or more routes of exposure are assumed to be additive unless evidence is available to suggest otherwise.

(b) Adverse effects of multiple contaminants with similar types of toxic responses are assumed to be additive unless evidence is available to suggest otherwise.

(c) Human cancer risks associated with multiple carcinogens are assumed to be additive unless evidence is available

to suggest otherwise and shall not exceed a total incremental human cancer risk of 1 in 1,000,000.

(6) The enforcement limit for a specific activity may be established through, but not limited to the following mechanisms: A state administrative rule, a state waste discharge permit, other department permit, or administrative order.

(7) The ground water quality at the point of compliance for an activity may temporarily exceed an enforcement limit while the activity is under an enforceable schedule of compliance.

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-050, filed 10/31/90, effective 12/1/90.]

WAC 173-200-060 Point of compliance. (1) The point of compliance is the location where the enforcement limit, set in accordance with WAC 173-200-050, shall be measured and shall not be exceeded.

(a) The department shall establish the point of compliance for an activity. The point of compliance shall be established in the ground water as near the source as technically, hydrogeologically, and geographically feasible.

(b) Compliance with the enforcement limits shall be maintained throughout the site from the uppermost level of the saturated zone extending vertically to the lowest depth that could potentially be affected by an activity.

(2) An alternative point of compliance, established at a location some distance from the source up to but not exceeding the property boundary, may be approved by the department as follows:

(a) An alternative point of compliance may be approved in the following situations:

(i) When all known, available, and reasonable methods of prevention, control, and treatment result in an exceedance of the criteria at the point of compliance.

(ii) When a point of compliance is defined in another state administrative rule including, but not limited to, Minimum functional standards for solid waste handling (chapter 173-304 WAC), Dangerous waste regulations (chapter 173-303 WAC), and Uranium and/or thorium mill operation and stabilization of mill tailing piles (chapter 402-52 WAC).

(b) In determining an alternative point of compliance, the department shall consider, at a minimum, the following factors:

(i) Effectiveness of all known, available, and reasonable methods of prevention, control, and treatment;

(ii) The contaminant volume, type, mobility, and characteristics;

(iii) Design and life span of the activity;

(iv) Existing and anticipated land and ground water uses; and

(v) Remedial options if an enforcement level is exceeded at the point of compliance.

(3) The department recognizes that evaluation of the impact of an activity at the designated point of compliance may be impractical, and the department may allow evaluation of that activity at some other point, in accordance with WAC 173-200-100 and 173-200-080(5).

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-060, filed 10/31/90, effective 12/1/90.]

WAC 173-200-070 Early warning value. (1) The purpose of an early warning value is to provide early detection of increasing contaminant concentrations that may approach or exceed enforcement limits.

(2) Whenever an enforcement limit is established above background ground water quality, an early warning value may be established, as appropriate.

(3) An early warning value shall be required when an alternative point of compliance is established unless technical constraints would prohibit establishment of an early warning value.

(4) An early warning value shall be established as a percentage of the enforcement limit upon consideration by the department of factors including, but not limited to, the following:

(a) The enforcement limit relative to background ground water quality;

(b) The availability, reliability, and reasonableness of analytical methods;

(c) The chemical, physical, and biological characteristics of the contaminants;

(d) The reliability of all known, available, and reasonable methods of prevention, control, and treatment;

(e) The anticipated increases in contaminant levels at the point of compliance; and

(f) The potential harm to existing and future beneficial uses.

(5) It shall not be considered a violation of these rules when contaminants are detected in concentrations exceeding an early warning value, but not exceeding an enforcement limit, unless there is failure to notify the department or respond as required in accordance with subsection (6) of this section.

(6) The following procedures apply when a contaminant is detected at a point of compliance or an alternative point of compliance and an early warning value is attained or exceeded.

(a) The permit holder or responsible person shall notify the department, in writing, within ten calendar days from detection of the early warning value, that the early warning value has been attained or exceeded. The notification shall contain, at a minimum, the following information:

(i) The concentrations of contaminants that attained or exceeded early warning values;

(ii) Concentrations of other contaminants monitored;

(iii) The location(s) and date(s) sampled; and

(iv) Concentrations of contaminants determined during previous sampling events.

(b) When notification is received, the department may require the permit holder or responsible person to perform one or more of the following:

(i) Take no action.

(ii) Resample to verify results.

(iii) Increase monitoring or modify the monitoring plan or evaluation procedures.

(iv) Develop and implement a trend analysis to determine the likelihood of exceeding the enforcement limit.

(v) Prepare and submit a report documenting the changes in ground water quality and discuss and propose alternative methods of operation that will reduce impacts to ground water.

(vi) Take such actions as the department deems necessary, if the department determines that there is a likelihood of exceeding an enforcement limit at the point of compliance.

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-070, filed 10/31/90, effective 12/1/90.]

WAC 173-200-080 Evaluation. (1) The purpose of this section is to establish minimum requirements for evaluating the impacts of an activity on the ground water quality to determine compliance with this chapter.

(2) If the department determines a potential to pollute the ground water exists, the department shall request a permit holder or responsible person to prepare and submit for departmental approval a ground water quality evaluation program for its activity. Each evaluation program shall be based on soil and hydrogeologic characteristics and be capable of assessing impacts on ground water at the point of compliance.

(3) A ground water evaluation program approved by the department may include, but not be limited to, any of the following:

(a) Ground water monitoring for a specific activity;

(b) Ground water monitoring at selected sites for a group of activities;

(c) Monitoring of the vadose zone;

(d) Evaluation and monitoring of effluent quality;

(e) Evaluation within a treatment process;

(f) Evaluation of management practices.

(4) In the evaluation program the permit holder or responsible person shall include information on the following:

(a) The chemical, physical, and biological characteristics of the contaminants;

(b) The availability and adequacy of analytical methods;

(c) The complexity and capability of assessing the hydrogeologic system;

(d) The reliability of all known, available, and reasonable methods of prevention, control, and treatment;

(e) The location of the point or points of compliance or alternative point of compliance; and

(f) Such other information that the department deems necessary to achieve the objectives of this chapter.

(5) When it is impractical to evaluate the impact of an activity at the designated point of compliance, for example when a criterion is less than the practical quantification limit, evaluation shall be designed and performed at an alternate location to provide a realistic estimate of conditions in the ground water at a point of compliance.

(6) These evaluation requirements pertain to activities that are not already covered by state regulation which have specific monitoring requirements such as chapter 173-303 WAC, Dangerous waste regulations, chapter 173-304 WAC, Minimum functional standards for solid waste handling, and chapter 402-52 WAC, Uranium and/or thorium mill operation and stabilization of mill tailing piles.

(7) For those activities for which the department has not issued permits and that have the potential to pollute the ground water, evaluation shall be conducted according to the following:

(a) Evaluation procedures shall be included in department guidelines, policies, and best management practices to ensure that an adequate determination of compliance with this chapter can be made;

(b) For those activities regulated by other agencies but not regulated by department rule, the department will pursue evaluation of the activity through a memorandum of understanding with the regulating agency.

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-080, filed 10/31/90, effective 12/1/90.]

WAC 173-200-090 Special protection areas. (1) The purpose of a special protection area is to identify and designate ground waters that require special consideration or increased protection because of one or more unique characteristics.

(2) The unique characteristics of a special protection area shall be considered by the department when regulating activities, developing regulations, guidelines, and policies, and when prioritizing department resources for ground water quality protection programs.

(3) The characteristics to guide designation of a special protection area shall include, but not be limited to, the following:

(a) Ground waters that support a beneficial use or an ecological system requiring more stringent criteria than drinking water standards;

(b) Ground waters, including, but not limited to, recharge areas and wellhead protection areas, that are vulnerable to pollution because of hydrogeologic characteristics; and

(c) Sole source aquifer status by federal designation.

(4) Special protection areas may be proposed for designation at any time by the department upon its own initiative or at the request of a federal agency, another state agency, an Indian tribe, or local government.

(a) The requestor of designation shall provide sufficient information for the department to determine if the proposed designation is in the best interest of the public. This information shall include, but not be limited to:

(i) A rationale for the proposed designation;

(ii) Supporting data for the proposed designation;

(iii) A description of the proposed area including geographic and hydrologic boundaries;

(iv) Documentation of coordination with affected state and local agencies, tribes, and water user groups; and

(v) Such other information as the department deems necessary.

(b) In coordination with the department, the initiator of the request for designation shall hold at least one public meeting and take written comment for the purpose of receiving comments from the public, affected local, state and federal agencies, tribes, and other persons. Documentation of the public review process and comments received shall be submitted to the department.

(c) The department shall review the request for designation, provide written notification to all affected local, state and federal governments, and tribes, and hold at least one public hearing within the county or counties containing the proposed special protection area.

(5) The department shall designate said ground waters as a special protection area if the department determines:

(a) The special protection area contains one or more of the characteristics described in subsection (2) of this section; and

(b) Such a designation is in the public interest.

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-090, filed 10/31/90, effective 12/1/90.]

WAC 173-200-100 Implementation and enforcement. (1) The requirements of this chapter shall be met for all ground waters to meet the requirements of this chapter at all places and at all times.

(2) No person shall engage in any activity that violates or causes the violation of this chapter.

(3) This chapter shall be enforced through all legal, equitable, and other methods available to the department including, but not limited to: Issuance of state waste discharge permits, other departmental permits, regulatory orders, court actions, review and approval of plans and specifications, evaluation of compliance with all known, available, and reasonable methods of prevention, control, and treatment of a waste prior to discharge, and pursuit of memoranda of understanding between the department and other regulatory agencies.

(4) Permits issued or reissued by the department shall be conditioned in such a manner as to authorize only activities that will not cause violations of this chapter.

(a) Any applicant for any departmental permit shall evaluate the potential impact of its proposed activity on the ground water quality.

(b) For reissued permits, the permit holder shall evaluate the impacts of its activities on ground water quality, and, if necessary to achieve compliance with ground water quality enforcement limits, determine a department approved schedule of compliance.

(5) For permit holders in compliance with the terms and conditions of a department permit and whose activity violates this chapter, the department is electing, from among the enforcement mechanisms available to it for the enforcement of WAC 173-200-040 and 173-200-050, to precede any civil or criminal penalty with a compliance order or permit modification.

(6) The department shall pursue memoranda of understanding with other state agencies to develop policies and rules that will require all known, available, and reasonable methods of prevention, control, and treatment to achieve compliance with this chapter. Departmental orders, memoranda of understanding, and best management practices shall be modified by the department whenever an activity authorized by such orders or BMPs or pursuant to such memoranda of understanding violates this chapter.

(7) The department shall pursue memoranda of understanding with other state agencies, federal agencies, and tribal authorities to coordinate ground water management activities.

(8) For persons whose activity violates this chapter but is in compliance with best management practices adopted by rule in chapter 248-96 WAC, WAC 173-304-300(4), RCW 15.58.150 (2)(c), WAC 16-228-180(1), or 16-228-185, the department is electing, from among the enforcement mechanisms available to it for the enforcement of WAC 173-200-040 and 173-200-050, to precede any civil or criminal penalty with a compliance order.

(9) When a distinction cannot be made among ground water, surface water, or sediments the applicable standard shall depend on which beneficial use is or could be adversely affected. If beneficial uses of more than one resource are affected, the most restrictive standard shall apply.

(10) The department shall give due consideration to the precision and accuracy of sampling and analytical methods used when determining compliance with this chapter.

(11) The analytical testing methods for determining compliance with this chapter shall be approved in writing by the department prior to the performance of analyses.

[Statutory Authority: RCW 90.48.035. 90-22-023, § 173-200-100, filed 10/31/90, effective 12/1/90.]

Chapter 173-201A WAC

WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF WASHINGTON

WAC

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(Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW.

173-201A-040 Toxic substances. [Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-040, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-040, filed 11/25/92, effective 12/26/92.] Amended and decodified by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW. Recodified as § 173-201A-240.

173-201A-050 Radioactive substances. [Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-050, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-050, filed 11/25/92, effective 12/26/92.] Decodified by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW. Recodified as § 173-201A-250.

173-201A-060 General considerations. [Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-060, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-060, filed 11/25/92, effective 12/26/92.] Repealed by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW.

173-201A-070 Antidegradation. [Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-070, filed 11/25/92, effective 12/26/92.] Repealed by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW.

173-201A-080 Outstanding resource waters. [Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-080, filed 11/25/92, effective 12/26/92.] Repealed by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW.

173-201A-100 Mixing zones. [Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-100, filed 11/25/92, effective 12/26/92.] Amended and decodified by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW. Recodified as § 173-201A-400.

173-201A-110 Short-term modifications. [Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-110, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-110, filed 11/25/92, effective 12/26/92.] Amended and decodified by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW. Recodified as § 173-201A-410.

173-201A-120 General classifications. [Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-120, filed 11/25/92, effective 12/26/92.] Repealed by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW.

173-201A-130 Specific classifications—Freshwater. [Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-130, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-130, filed 11/25/92, effective 12/26/92.] Repealed by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW.

173-201A-140 Specific classifications—Marine water. [Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-140, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-140, filed 11/25/92, effective 12/26/92.] Repealed by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW.

173-201A-150 Achievement considerations. [Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-150, filed 11/25/92, effective 12/26/92.] Decodified by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW. Recodified as § 173-201A-500.

173-201A-160 Implementation. [Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-160, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-160, filed 11/25/92, effective 12/26/92.] Amended and decodified by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW. Recodified as § 173-201A-510.

173-201A-170 Surveillance. [Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-170, filed 11/25/92, effective 12/26/92.] Amended and decodified by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW. Recodified as § 173-201A-520.

173-201A-180 Enforcement. [Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-180, filed 11/25/92, effective 12/26/92.] Decodified by 03-14-129 (Order 02-14), filed 7/1/03, effective 8/1/03. Statutory Authority: Chapters 90.48 and 90.54 RCW. Recodified as § 173-201A-530.

PART I - INTRODUCTION

WAC 173-201A-010 Purpose. (1) The purpose of this chapter is to establish water quality standards for surface waters of the state of Washington consistent with public health and public enjoyment of the waters and the propagation and protection of fish, shellfish, and wildlife, pursuant to the provisions of chapter 90.48 RCW. All actions must comply with this chapter. As part of this chapter:

(a) All surface waters are protected by narrative criteria, designated uses, and an antidegradation policy.

(b) Based on the use designations, numeric and narrative criteria are assigned to a water body to protect the existing and designated uses.

(c) Where multiple criteria for the same water quality parameter are assigned to a water body to protect different uses, the most stringent criteria for each parameter is to be applied.

(2) Surface waters of the state include lakes, rivers, ponds, streams, inland waters, saltwaters, wetlands, and all other surface waters and water courses within the jurisdiction of the state of Washington.

(3) This chapter will be reviewed periodically by the department and appropriate revisions will be undertaken.

(4) WAC 173-201A-200 through 173-201A-260 describe the designated water uses and criteria for the state of Washington. These criteria were established based on existing and potential water uses of the surface waters of the state. Consideration was also given to both the natural water quality potential and its limitations. Compliance with the surface water quality standards of the state of Washington requires compliance with chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington, chapter 173-204 WAC, Sediment management standards, and applicable federal rules.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-010, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-010, filed 11/25/92, effective 12/26/92.]

WAC 173-201A-020 Definitions. The following definitions are intended to facilitate the use of chapter 173-201A WAC:

"1-DMax" or **"1-day maximum temperature"** is the highest water temperature reached on any given day. This measure can be obtained using calibrated maximum/mini-

mum thermometers or continuous monitoring probes having sampling intervals of thirty minutes or less.

"7-DADMax" or **"7-day average of the daily maximum temperatures"** is the arithmetic average of seven consecutive measures of daily maximum temperatures. The 7-DADMax for any individual day is calculated by averaging that day's daily maximum temperature with the daily maximum temperatures of the three days prior and the three days after that date.

"Action value" means a total phosphorus (TP) value established at the upper limit of the trophic states in each ecoregion. Exceedance of an action value indicates that a problem is suspected. A lake-specific study may be needed to confirm if a nutrient problem exits.

"Actions" refers broadly to any human projects or activities.

"Acute conditions" are changes in the physical, chemical, or biologic environment which are expected or demonstrated to result in injury or death to an organism as a result of short-term exposure to the substance or detrimental environmental condition.

"AKART" is an acronym for "all known, available, and reasonable methods of prevention, control, and treatment." AKART shall represent the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge. The concept of AKART applies to both point and nonpoint sources of pollution. The term "best management practices," typically applied to nonpoint source pollution controls is considered a subset of the AKART requirement.

"Background" means the biological, chemical, and physical conditions of a water body, outside the area of influence of the discharge under consideration. Background sampling locations in an enforcement action would be up-gradient or outside the area of influence of the discharge. If several discharges to any water body exist, and enforcement action is being taken for possible violations to the standards, background sampling would be undertaken immediately up-gradient from each discharge.

"Best management practices (BMP)" means physical, structural, and/or managerial practices approved by the department that, when used singularly or in combination, prevent or reduce pollutant discharges.

"Biological assessment" is an evaluation of the biological condition of a water body using surveys of aquatic community structure and function and other direct measurements of resident biota in surface waters.

"Bog" means those wetlands that are acidic, peat forming, and whose primary water source is precipitation, with little, if any, outflow.

"Carcinogen" means any substance or agent that produces or tends to produce cancer in humans. For implementation of this chapter, the term carcinogen will apply to substances on the United States Environmental Protection Agency lists of A (known human) and B (probable human) carcinogens, and any substance which causes a significant increased incidence of benign or malignant tumors in a single, well conducted animal bioassay, consistent with the weight of evidence approach specified in the United States Environmental Protection Agency's Guidelines for Carcinogenic Risk Assessment as set forth in 51 FR 33992 et seq. as presently published or as subsequently amended or republished.

"Chronic conditions" are changes in the physical, chemical, or biologic environment which are expected or demonstrated to result in injury or death to an organism as a result of repeated or constant exposure over an extended period of time to a substance or detrimental environmental condition.

"Created wetlands" means those wetlands intentionally created from nonwetland sites to produce or replace natural wetland habitat.

"Critical condition" is when the physical, chemical, and biological characteristics of the receiving water environment interact with the effluent to produce the greatest potential adverse impact on aquatic biota and existing or designated water uses. For steady-state discharges to riverine systems the critical condition may be assumed to be equal to the 7Q10 flow event unless determined otherwise by the department.

"Damage to the ecosystem" means any demonstrated or predicted stress to aquatic or terrestrial organisms or communities of organisms which the department reasonably concludes may interfere in the health or survival success or natural structure of such populations. This stress may be due to, but is not limited to, alteration in habitat or changes in water temperature, chemistry, or turbidity, and shall consider the potential build up of discharge constituents or temporal increases in habitat alteration which may create such stress in the long term.

"Department" means the state of Washington department of ecology.

"Designated uses" are those uses specified in this chapter for each water body or segment, regardless of whether or not the uses are currently attained.

"Director" means the director of the state of Washington department of ecology.

"Drainage ditch" means that portion of a designed and constructed conveyance system that serves the purpose of transporting surplus water; this may include natural water courses or channels incorporated in the system design, but does not include the area adjacent to the water course or channel.

"Ecoregions" are defined using EPAs *Ecoregions of the Pacific Northwest* Document No. 600/3-86/033 July 1986 by Omernik and Gallant.

"Enterococci" refers to a subgroup of the fecal streptococci that includes *S. faecalis, S. faecium, S. gallinarum,* and *S. avium.* The enterococci are differentiated from other streptococci by their ability to grow in 6.5% sodium chloride, at pH 9.6, and at 10°C and 45°C.

"*E. coli*" or **"*Escherichia coli*"** is an aerobic and facultative gram negative nonspore forming rod shaped bacterium that can grow at 44.5 degrees Celsius that is ortho-nitrophenyl-B-D-galactopyranoside (ONPG) positive and Methylumbelliferyl glucuronide (MUG) positive.

"Existing uses" means those uses actually attained in fresh or marine waters on or after November 28, 1975, whether or not they are designated uses. Introduced species that are not native to Washington, and put-and-take fisheries comprised of nonself-replicating introduced native species, do not need to receive full support as an existing use.

"Extraordinary primary contact" means waters providing extraordinary protection against waterborne disease or that serve as tributaries to extraordinary quality shellfish harvesting areas.

"Fecal coliform" means that portion of the coliform group which is present in the intestinal tracts and feces of warm-blooded animals as detected by the product of acid or gas from lactose in a suitable culture medium within twenty-four hours at 44.5 plus or minus 0.2 degrees Celsius.

"Geometric mean" means either the nth root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.

"Ground water exchange" means the discharge and recharge of ground water to a surface water. Discharge is inflow from an aquifer, seeps or springs that increases the available supply of surface water. Recharge is outflow downgradient to an aquifer or downstream to surface water for base flow maintenance. Exchange may include ground water discharge in one season followed by recharge later in the year.

"Hardness" means a measure of the calcium and magnesium salts present in water. For purposes of this chapter, hardness is measured in milligrams per liter and expressed as calcium carbonate ($CaCO_3$).

"Irrigation ditch" means that portion of a designed and constructed conveyance system that serves the purpose of transporting irrigation water from its supply source to its place of use; this may include natural water courses or channels incorporated in the system design, but does not include the area adjacent to the water course or channel.

"Lakes" shall be distinguished from riverine systems as being water bodies, including reservoirs, with a mean detention time of greater than fifteen days.

"Lake-specific study" means a study intended to quantify existing nutrient concentrations, determine existing characteristic uses for lake class waters, and potential lake uses. The study determines how to protect these uses and if any uses are lost or impaired because of nutrients, algae, or aquatic plants. An appropriate study must recommend a criterion for total phosphorus (TP), total nitrogen (TN) in µg/l, or other nutrient that impairs characteristic uses by causing excessive algae blooms or aquatic plant growth.

"Mean detention time" means the time obtained by dividing a reservoir's mean annual minimum total storage by the thirty-day ten-year low-flow from the reservoir.

"Migration or translocation" means any natural movement of an organism or community of organisms from one locality to another locality.

"Mixing zone" means that portion of a water body adjacent to an effluent outfall where mixing results in the dilution of the effluent with the receiving water. Water quality criteria may be exceeded in a mixing zone as conditioned and provided for in WAC 173-201A-400.

"Natural conditions" or **"natural background levels"** means surface water quality that was present before any human-caused pollution. When estimating natural conditions in the headwaters of a disturbed watershed it may be necessary to use the less disturbed conditions of a neighboring or similar watershed as a reference condition. (See also WAC 173-201A-260(1).)

"New or expanded actions" mean human actions that occur or are regulated for the first time, or human actions expanded such that they result in an increase in pollution, after July 1, 2003, for the purpose of applying this chapter only.

"Nonpoint source" means pollution that enters any waters of the state from any dispersed land-based or water-based activities, including but not limited to atmospheric deposition, surface water runoff from agricultural lands, urban areas, or forest lands, subsurface or underground sources, or discharges from boats or marine vessels not otherwise regulated under the National Pollutant Discharge Elimination System program.

"Permit" means a document issued pursuant to chapter 90.48 RCW specifying the waste treatment and control requirements and waste discharge conditions.

"pH" means the negative logarithm of the hydrogen ion concentration.

"Pollution" means such contamination, or other alteration of the physical, chemical, or biological properties, of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety, or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life.

"Primary contact recreation" means activities where a person would have direct contact with water to the point of complete submergence including, but not limited to, skin diving, swimming, and water skiing.

"Secondary contact recreation" means activities where a person's water contact would be limited (e.g., wading or fishing) to the extent that bacterial infections of eyes, ears, respiratory or digestive systems, or urogenital areas would normally be avoided.

"Shoreline stabilization" means the anchoring of soil at the water's edge, or in shallow water, by fibrous plant root complexes; this may include long-term accretion of sediment or peat, along with shoreline progradation in such areas.

"Storm water" means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

"Storm water attenuation" means the process by which peak flows from precipitation are reduced and runoff velocities are slowed as a result of passing through a surface water body.

"Surface waters of the state" includes lakes, rivers, ponds, streams, inland waters, saltwaters, wetlands and all other surface waters and water courses within the jurisdiction of the state of Washington.

"Temperature" means water temperature expressed in degrees Celsius (°C).

"Treatment wetlands" means those wetlands intentionally constructed on nonwetland sites and managed for the primary purpose of wastewater or storm water treatment. Treatment wetlands are considered part of a collection and

treatment system, and generally are not subject to the criteria of this chapter.

"Trophic state" means a classification of the productivity of a lake ecosystem. Lake productivity depends on the amount of biologically available nutrients in water and sediments and may be based on total phosphorus (TP). Secchi depth and chlorophyll-a measurements may be used to improve the trophic state classification of a lake. Trophic states used in this rule include, from least to most nutrient rich, ultra-oligotrophic, oligotrophic, lower mesotrophic, upper mesotrophic, and eutrophic.

"Turbidity" means the clarity of water expressed as nephelometric turbidity units (NTU) and measured with a calibrated turbidimeter.

"Upwelling" means the natural process along Washington's Pacific Coast where the summer prevailing northerly winds produce a seaward transport of surface water. Cold, deeper more saline waters rich in nutrients and low in dissolved oxygen, rise to replace the surface water. The cold oxygen deficient water enters Puget Sound and other coastal estuaries at depth where it displaces the existing deep water and eventually rises to replace the surface water. Such surface water replacement results in an overall increase in salinity and nutrients accompanied by a depression in dissolved oxygen. Localized upwelling of the deeper water of Puget Sound can occur year-round under influence of tidal currents, winds, and geomorphic features.

"USEPA" means the United States Environmental Protection Agency.

"Wetlands" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands. (Water bodies not included in the definition of wetlands as well as those mentioned in the definition are still waters of the state.)

"Wildlife habitat" means waters of the state used by, or that directly or indirectly provide food support to, fish, other aquatic life, and wildlife for any life history stage or activity.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-020, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-020, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-020, filed 11/25/92, effective 12/26/92.]

PART II - DESIGNATED USES AND CRITERIA

WAC 173-201A-200 Fresh water designated uses and criteria. The following uses are designated for protection in fresh surface waters of the state. Use designations for water bodies are listed in WAC 173-201A-600 and 173-201A-602.

(1) **Aquatic life uses.** Aquatic life uses are designated based on the presence of, or the intent to provide protection for, the key uses identified in (a) of this subsection. It is required that all indigenous fish and nonfish aquatic species be protected in waters of the state in addition to the key species described below.

(a) The categories for aquatic life uses are:

(i) **Char spawning and rearing.** The key identifying characteristics of this use are spawning or early juvenile rearing by native char (bull trout and Dolly Varden), or use by other aquatic species similarly dependent on such cold water. Other common characteristic aquatic life uses for waters in this category include summer foraging and migration of native char; and spawning, rearing, and migration by other salmonid species.

(ii) **Core summer salmonid habitat.** The key identifying characteristics of this use are summer (June 15 - September 15) salmonid spawning or emergence, or adult holding; use as important summer rearing habitat by one or more salmonids; or foraging by adult and subadult native char. Other common characteristic aquatic life uses for waters in this category include spawning outside of the summer season, rearing, and migration by salmonids.

(iii) **Salmonid spawning, rearing, and migration.** The key identifying characteristic of this use is salmon or trout spawning and emergence that only occurs outside of the summer season (September 16 - June 14). Other common characteristic aquatic life uses for waters in this category include rearing and migration by salmonids.

(iv) **Salmonid rearing and migration only.** The key identifying characteristic of this use is use only for rearing or migration by salmonids (not used for spawning).

(v) **Non-anadromous interior redband trout.** For the protection of waters where the only trout species is a non-anadromous form of self-reproducing interior redband trout (*O. mykis*), and other associated aquatic life.

(vi) **Indigenous warm water species.** For the protection of waters where the dominant species under natural conditions would be temperature tolerant indigenous nonsalmonid species. Examples include dace, redside shiner, chiselmouth, sucker, and northern pikeminnow.

(b) **General criteria.** General criteria that apply to all aquatic life fresh water uses are described in WAC 173-201A-260 (2)(a) and (b), and are for:

(i) Toxic, radioactive, and deleterious materials; and

(ii) Aesthetic values.

(c) **Aquatic life temperature criteria.** Except where noted, water temperature is measured by the 7-day average of the daily maximum temperatures (7-DADMax). Table 200 (1)(c) lists the temperature criteria for each of the aquatic life use categories.

Table 200 (1)(c)
Aquatic Life Temperature Criteria in Fresh Water

Category	Highest 7-DADMax
Char Spawning	9°C (48.2°F)
Char Spawning and Rearing	12°C (53.6°F)
Salmon and Trout Spawning	13°C (55.4°F)

Category	Highest 7-DADMax
Core Summer Salmonid Habitat	16°C (60.8°F)
Salmonid Spawning, Rearing, and Migration	17.5°C (63.5°F)
Salmonid Rearing and Migration **Only**	17.5°C (63.5°F)
Non-anadromous Interior Redband Trout	18°C (64.4°F)
Indigenous Warm Water Species	20°C (68°F)

(i) When a water body's temperature is warmer than the criteria in Table 200 (1)(c) (or within 0.3°C (0.54°F) of the criteria) and that condition is due to natural conditions, then human actions considered cumulatively may not cause the 7-DADMax temperature of that water body to increase more than 0.3°C (0.54°F).

(ii) When the background condition of the water is cooler than the criteria in Table 200 (1)(c), the allowable rate of warming up to, but not exceeding, the numeric criteria from human actions is restricted as follows:

(A) Incremental temperature increases resulting from individual point source activities must not, at any time, exceed 28/(T+7) as measured at the edge of a mixing zone boundary (where "T" represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge); and

(B) Incremental temperature increases resulting from the combined effect of all nonpoint source activities in the water body must not, at any time, exceed 2.8°C (5.04°F).

(iii) Temperatures are not to exceed the criteria at a probability frequency of more than once every ten years on average.

(iv) Spawning and incubation protection. The department has identified waterbodies, or portions thereof, which require special protection for spawning and incubation in ecology publication 06-10-038 (also available on ecology's web site at www.ecy.wa.gov). This publication indicates where and when the following criteria are to be applied to protect the reproduction of native char, salmon, and trout:

• Maximum 7-DADMax temperatures of 9°C (48.2°F) at the initiation of spawning and at fry emergence for char; and

• Maximum 7-DADMax temperatures of 13°C (55.4°F) at the initiation of spawning for salmon and at fry emergence for salmon and trout.

The two criteria above are protective of incubation as long as human actions do not significantly disrupt the normal patterns of fall cooling and spring warming that provide significantly colder temperatures over the majority of the incubation period.

(v) For lakes, human actions considered cumulatively may not increase the 7-DADMax temperature more than 0.3°C (0.54°F) above natural conditions.

(vi) Temperature measurements should be taken to represent the dominant aquatic habitat of the monitoring site. This typically means samples should:

(A) Be taken from well mixed portions of rivers and streams; and

(B) Not be taken from shallow stagnant backwater areas, within isolated thermal refuges, at the surface, or at the water's edge.

(vii) The department will incorporate the following guidelines on preventing acute lethality and barriers to migration of salmonids into determinations of compliance with the narrative requirements for use protection established in this chapter (e.g., WAC 173-201A-310(1), 173-201A-400(4), and 173-201A-410 (1)(c)). The following site-level considerations do not, however, override the temperature criteria established for waters in subsection (1)(c) of this section or WAC 173-201A-602:

(A) Moderately acclimated (16-20°C, or 60.8-68°F) adult and juvenile salmonids will generally be protected from acute lethality by discrete human actions maintaining the 7-DADMax temperature at or below 22°C (71.6°F) and the 1-day maximum (1-DMax) temperature at or below 23°C (73.4°F).

(B) Lethality to developing fish embryos can be expected to occur at a 1-DMax temperature greater than 17.5°C (63.5°F).

(C) To protect aquatic organisms, discharge plume temperatures must be maintained such that fish could not be entrained (based on plume time of travel) for more than two seconds at temperatures above 33°C (91.4°F) to avoid creating areas that will cause near instantaneous lethality.

(D) Barriers to adult salmonid migration are assumed to exist any time the 1-DMax temperature is greater than 22°C (71.6°F) and the adjacent downstream water temperatures are 3°C (5.4°F) or more cooler.

(viii) Nothing in this chapter shall be interpreted to prohibit the establishment of effluent limitations for the control of the thermal component of any discharge in accordance with 33 U.S.C. 1326 (commonly known as section 316 of the Clean Water Act).

(d) **Aquatic life dissolved oxygen (D.O.) criteria.** The D.O. criteria are measured in milligrams per liter (mg/L). Table 200 (1)(d) lists the 1-day minimum D.O. for each of the aquatic life use categories.

Table 200 (1)(d)
Aquatic Life Dissolved Oxygen Criteria in Fresh Water

Category	Lowest 1-Day Minimum
Char Spawning and Rearing	9.5 mg/L
Core Summer Salmonid Habitat	9.5 mg/L
Salmonid Spawning, Rearing, and Migration	8.0 mg/L
Salmonid Rearing and Migration **Only**	6.5 mg/L
Non-anadromous Interior Redband Trout	8.0 mg/L
Indigenous Warm Water Species	6.5 mg/L

(i) When a water body's D.O. is lower than the criteria in Table 200 (1)(d) (or within 0.2 mg/L of the criteria) and that condition is due to natural conditions, then human actions considered cumulatively may not cause the D.O. of that water body to decrease more than 0.2 mg/L.

(ii) For lakes, human actions considered cumulatively may not decrease the dissolved oxygen concentration more than 0.2 mg/L below natural conditions.

(iii) Concentrations of D.O. are not to fall below the criteria in the table at a probability frequency of more than once every ten years on average.

(iv) D.O. measurements should be taken to represent the dominant aquatic habitat of the monitoring site. This typically means samples should:

(A) Be taken from well mixed portions of rivers and streams; and

(B) Not be taken from shallow stagnant backwater areas, within isolated thermal refuges, at the surface, or at the water's edge.

(e) **Aquatic life turbidity criteria.** Turbidity is measured in "nephelometric turbidity units" or "NTUs." Table 200 (1)(e) lists the maximum turbidity criteria for each of the aquatic life use categories.

Table 200 (1)(e)
Aquatic Life Turbidity Criteria in Fresh Water

Category	NTUs
Char Spawning and Rearing	Turbidity shall not exceed: • 5 NTU over background when the background is 50 NTU or less; or • A 10 percent increase in turbidity when the background turbidity is more than 50 NTU.
Core Summer Salmonid Habitat	Same as above.
Salmonid Spawning, Rearing, and Migration	Same as above.
Salmonid Rearing and Migration **Only**	Turbidity shall not exceed: • 10 NTU over background when the background is 50 NTU or less; or • A 20 percent increase in turbidity when the background turbidity is more than 50 NTU.
Non-anadromous Interior Redband Trout	Turbidity shall not exceed: • 5 NTU over background when the background is 50 NTU or less; or • A 10 percent increase in turbidity when the background turbidity is more than 50 NTU.
Indigenous Warm Water Species	Turbidity shall not exceed: • 10 NTU over background when the background is 50 NTU or less; or • A 20 percent increase in turbidity when the background turbidity is more than 50 NTU.

(i) The turbidity criteria established under WAC 173-201A-200 (1)(e) shall be modified, without specific written authorization from the department, to allow a temporary area of mixing during and immediately after necessary in-water construction activities that result in the disturbance of in-place sediments. This temporary area of mixing is subject to the constraints of WAC 173-201A-400 (4) and (6) and can occur only after the activity has received all other necessary local and state permits and approvals, and after the implementation of appropriate best management practices to avoid or minimize disturbance of in-place sediments and exceedances of the turbidity criteria. A temporary area of mixing shall be as follows:

(A) For waters up to 10 cfs flow at the time of construction, the point of compliance shall be one hundred feet downstream from the activity causing the turbidity exceedance.

(B) For waters above 10 cfs up to 100 cfs flow at the time of construction, the point of compliance shall be two hundred feet downstream of the activity causing the turbidity exceedance.

(C) For waters above 100 cfs flow at the time of construction, the point of compliance shall be three hundred feet downstream of the activity causing the turbidity exceedance.

(D) For projects working within or along lakes, ponds, wetlands, estuaries, marine waters or other nonflowing waters, the point of compliance shall be at a radius of one hundred fifty feet from the activity causing the turbidity exceedance.

(f) **Aquatic life total dissolved gas (TDG) criteria.** TDG is measured in percent saturation. Table 200 (1)(f) lists the maximum TDG criteria for each of the aquatic life use categories.

Table 200 (1)(f)
Aquatic Life Total Dissolved Gas Criteria in Fresh Water

Category	Percent Saturation
Char Spawning and Rearing	Total dissolved gas shall not exceed 110 percent of saturation at any point of sample collection.
Core Summer Salmonid Habitat	Same as above.
Salmonid Spawning, Rearing, and Migration	Same as above.
Salmonid Rearing and Migration **Only**	Same as above.
Non-anadromous Interior Redband Trout	Same as above.
Indigenous Warm Water Species	Same as above.

(i) The water quality criteria established in this chapter for TDG shall not apply when the stream flow exceeds the seven-day, ten-year frequency flood.

(ii) The TDG criteria may be adjusted to aid fish passage over hydroelectric dams when consistent with a department approved gas abatement plan. This plan must be accompanied by fisheries management and physical and biological monitoring plans. The elevated TDG levels are intended to allow increased fish passage without causing more harm to fish populations than caused by turbine fish passage. The fol-

lowing special fish passage exemptions for the Snake and Columbia rivers apply when spilling water at dams is necessary to aid fish passage:

• TDG must not exceed an average of one hundred fifteen percent as measured in the forebays of the next downstream dams and must not exceed an average of one hundred twenty percent as measured in the tailraces of each dam (these averages are measured as an average of the twelve highest consecutive hourly readings in any one day, relative to atmospheric pressure); and

• A maximum TDG one hour average of one hundred twenty-five percent must not be exceeded during spillage for fish passage.

(g) **Aquatic life pH criteria.** Measurement of pH is expressed as the negative logarithm of the hydrogen ion concentration. Table 200 (1)(g) lists the pH levels for each of the aquatic life use categories.

Table 200 (1) (g)
Aquatic Life pH Criteria in Fresh Water

Use Category	pH Units
Char Spawning and Rearing	pH shall be within the range of 6.5 to 8.5, with a human-caused variation within the above range of less than 0.2 units.
Core Summer Salmonid Habitat	Same as above.
Salmonid Spawning, Rearing, and Migration	pH shall be within the range of 6.5 to 8.5 with a human-caused variation within the above range of less than 0.5 units.
Salmonid Rearing and Migration **Only**	Same as above.
Non-anadromous Interior Redband Trout	Same as above.
Indigenous Warm Water Species	Same as above.

(2) **Recreational uses.** The recreational uses are extraordinary primary contact recreation, primary contact recreation, and secondary contact recreation.

(a) **General criteria.** General criteria that apply to fresh water recreational uses are described in WAC 173-201A-260 (2)(a) and (b), and are for:

(i) Toxic, radioactive, and deleterious materials; and

(ii) Aesthetic values.

(b) **Water contact recreation bacteria criteria.** Table 200 (2)(b) lists the bacteria criteria to protect water contact recreation in fresh waters.

Table 200 (2)(b)
Water Contact Recreation Bacteria Criteria in Fresh Water

Category	Bacteria Indicator
Extraordinary Primary Contact Recreation	Fecal coliform organism levels must not exceed a geometric mean value of 50 colonies/100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 100 colonies/100 mL.
Primary Contact Recreation	Fecal coliform organism levels must not exceed a geometric mean value of 100 colonies /100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 200 colonies /100 mL.
Secondary Contact Recreation	Fecal coliform organism levels must not exceed a geometric mean value of 200 colonies/100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 400 colonies /100 mL.

(i) When averaging bacteria sample data for comparison to the geometric mean criteria, it is preferable to average by season and include five or more data collection events within each period. Averaging of data collected beyond a thirty-day period, or beyond a specific discharge event under investigation, is not permitted when such averaging would skew the data set so as to mask noncompliance periods. The period of averaging should not exceed twelve months, and should have sample collection dates well distributed throughout the reporting period.

(ii) When determining compliance with the bacteria criteria in or around small sensitive areas, such as swimming beaches, it is recommended that multiple samples are taken throughout the area during each visit. Such multiple samples should be arithmetically averaged together (to reduce concerns with low bias when the data is later used in calculating a geometric mean) to reduce sample variability and to create a single representative data point.

(iii) As determined necessary by the department, more stringent bacteria criteria may be established for rivers and streams that cause, or significantly contribute to, the decertification or conditional certification of commercial or recreational shellfish harvest areas, even when the preassigned bacteria criteria for the river or stream are being met.

(iv) Where information suggests that sample results are due primarily to sources other than warm-blooded animals (e.g., wood waste), alternative indicator criteria may be established on a site-specific basis by the department.

(3) **Water supply uses.** The water supply uses are domestic, agricultural, industrial, and stock watering.

General criteria. General criteria that apply to the water supply uses are described in WAC 173-201A-260 (2)(a) and (b), and are for:

(a) Toxic, radioactive, and deleterious materials; and

(b) Aesthetic values.

(4) **Miscellaneous uses.** The miscellaneous fresh water uses are wildlife habitat, harvesting, commerce and navigation, boating, and aesthetics.

General criteria. General criteria that apply to miscellaneous fresh water uses are described in WAC 173-201A-260 (2)(a) and (b), and are for:

(a) Toxic, radioactive, and deleterious materials; and

(b) Aesthetic values.

[Statutory Authority: RCW 90.48.035. 06-23-117 (Order 06-04), § 173-201A-200, filed 11/20/06, effective 12/21/06. Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-200, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-210 Marine water designated uses and criteria. The following uses are designated for protection in marine surface waters of the state of Washington. Use designations for specific water bodies are listed in WAC 173-201A-612.

(1) **Aquatic life uses.** Aquatic life uses are designated using the following general categories. It is required that all indigenous fish and nonfish aquatic species be protected in waters of the state.

(a) **The categories for aquatic life uses are:**

(i) **Extraordinary quality** salmonid and other fish migration, rearing, and spawning; clam, oyster, and mussel rearing and spawning; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing and spawning.

(ii) **Excellent quality** salmonid and other fish migration, rearing, and spawning; clam, oyster, and mussel rearing and spawning; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing and spawning.

(iii) **Good quality** salmonid migration and rearing; other fish migration, rearing, and spawning; clam, oyster, and mussel rearing and spawning; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing and spawning.

(iv) **Fair quality** salmonid and other fish migration.

(b) **General criteria.** General criteria that apply to aquatic life marine water uses are described in WAC 173-201A-260 (2)(a) and (b), and are for:

(i) Toxic, radioactive, and deleterious materials; and

(ii) Aesthetic values.

(c) **Aquatic life temperature criteria.** Except where noted, temperature is measured as a 1-day maximum temperature (1-DMax). Table 210 (1)(c) lists the temperature criteria for each of the aquatic life use categories.

Table 210 (1)(c)
Aquatic Life Temperature Criteria in Marine Water

Category	Highest 1-DMax
Extraordinary quality	13°C (55.4°F)
Excellent quality	16°C (60.8°F)
Good quality	19°C (66.2°F)
Fair quality	22°C (71.6°F)

(i) When a water body's temperature is warmer than the criteria in Table 210 (1)(c) (or within 0.3°C (0.54°F) of the criteria) and that condition is due to natural conditions, then human actions considered cumulatively may not cause the 7-DADMax temperature of that water body to increase more than 0.3°C (0.54°F).

(ii) When the natural condition of the water is cooler than the criteria in Table 210 (1)(c), the allowable rate of warming up to, but not exceeding, the numeric criteria from human actions is restricted as follows:

(A) Incremental temperature increases resulting from individual point source activities must not, at any time, exceed 12/(T-2) as measured at the edge of a mixing zone boundary (where "T" represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge); and

(B) Incremental temperature increases resulting from the combined effect of all nonpoint source activities in the water body must not, at any time, exceed 2.8°C (5.04°F).

(iii) Temperatures are not to exceed the criteria at a probability frequency of more than once every ten years on average.

(iv) Temperature measurements should be taken to represent the dominant aquatic habitat of the monitoring site. This typically means samples should not be taken from shallow stagnant backwater areas, within isolated thermal refuges, at the surface, or at the water's edge.

(v) The department will incorporate the following guidelines on preventing acute lethality and barriers to migration of salmonids into determinations of compliance with the narrative requirements for use protection established in this chapter (e.g., WAC 173-201A-310(1), 173-201A-400(4), and 173-201A-410 (1)(c)). The following site-level considerations do not, however, override the temperature criteria established for waters in subsection (1)(c) of this subsection or WAC 173-201A-612:

(A) Moderately acclimated (16-20°C, or 60.8-68°F) adult and juvenile salmonids will generally be protected from acute lethality by discrete human actions maintaining the 7-DADMax temperature at or below 22°C (71.6°F) and the 1-DMax temperature at or below 23°C (73.4°F).

(B) Lethality to developing fish embryos can be expected to occur at a 1-DMax temperature greater than 17.5°C (63.5°F).

(C) To protect aquatic organisms, discharge plume temperatures must be maintained such that fish could not be entrained (based on plume time of travel) for more than two seconds at temperatures above 33°C (91.4°F) to avoid creating areas that will cause near instantaneous lethality.

(D) Barriers to adult salmonid migration are assumed to exist any time the 1-DMax temperature is greater than 22°C (71.6°F) and the adjacent downstream water temperatures are 3°C (5.4°F) or more cooler.

(vi) Nothing in this chapter shall be interpreted to prohibit the establishment of effluent limitations for the control of the thermal component of any discharge in accordance with 33 U.S.C. 1326 (commonly known as section 316 of the Clean Water Act).

(d) **Aquatic life dissolved oxygen (D.O.) criteria.** Except where noted, D.O. concentrations are measured as a 1-day minimum in milligrams per liter. Table 210 (1)(d) lists the D.O. criteria for each of the aquatic life use categories.

Table 210 (1)(d)
Aquatic Life Dissolved Oxygen Criteria in Marine Water

Category	Lowest 1-Day Minimum
Extraordinary quality	7.0 mg/L
Excellent quality	6.0 mg/L
Good quality	5.0 mg/L
Fair quality	4.0 mg/L

(i) When a water body's D.O. is lower than the criteria in Table 210 (1)(d) (or within 0.2 mg/L of the criteria) and that condition is due to natural conditions, then human actions considered cumulatively may not cause the D.O. of that water body to decrease more than 0.2 mg/L.

(ii) Concentrations of D.O. are not to fall below the criteria in the table at a probability frequency of more than once every ten years on average.

(iii) D.O. measurements should be taken to represent the dominant aquatic habitat of the monitoring site. This typically means samples should not be taken from shallow stagnant backwater areas, within isolated thermal refuges, at the surface, or at the water's edge.

(e) **Aquatic life turbidity criteria.** Turbidity is measured in "nephelometric turbidity units" or "NTUs." Table 210 (1)(e) lists the one-day maximum turbidity allowed as a result of human actions for each of the aquatic life use categories.

Table 210 (1) (e)
Aquatic Life Turbidity Criteria in Marine Water

Category	NTUs
Extraordinary quality	Turbidity must not exceed: • 5 NTU over background when the background is 50 NTU or less; or • A 10 percent increase in turbidity when the background turbidity is more than 50 NTU.
Excellent quality	Same as above.
Good quality	Turbidity must not exceed: • 10 NTU over background when the background is 50 NTU or less; or • A 20 percent increase in turbidity when the background turbidity is more than 50 NTU.
Fair quality	Same as above.

(i) The turbidity criteria established under WAC 173-201A-210 (1)(e) shall be modified, without specific written authorization from the department, to allow a temporary area of mixing during and immediately after necessary in-water construction activities that result in the disturbance of in-place sediments. This temporary area of mixing is subject to the constraints of WAC 173-201A-400 (4) and (6) and can occur only after the activity has received all other necessary local and state permits and approvals, and after the implementation of appropriate best management practices to avoid or minimize disturbance of in-place sediments and exceedances of the turbidity criteria. A temporary area of mixing shall be as follows:

(A) For waters up to 10 cfs flow at the time of construction, the point of compliance shall be one hundred feet downstream from the activity causing the turbidity exceedance.

(B) For waters above 10 cfs up to 100 cfs flow at the time of construction, the point of compliance shall be two hundred feet downstream of the activity causing the turbidity exceedance.

(C) For waters above 100 cfs flow at the time of construction, the point of compliance shall be three hundred feet downstream of the activity causing the turbidity exceedance.

(D) For projects working within or along lakes, ponds, wetlands, estuaries, marine waters or other nonflowing waters, the point of compliance shall be at a radius of one hundred fifty feet from the activity causing the turbidity exceedance.

(f) **Aquatic life pH criteria.** Measurement of pH is expressed as the negative logarithm of the hydrogen ion concentration. Table 210 (1)(f) lists the pH levels allowed as a result of human actions for each of the aquatic life use categories.

Table 210 (1)(f)
Aquatic Life pH Criteria in Marine Water

Use Category	pH Units
Extraordinary quality	pH must be within the range of 7.0 to 8.5 with a human-caused variation within the above range of less than 0.2 units.
Excellent quality	pH must be within the range of 7.0 to 8.5 with a human-caused variation within the above range of less than 0.5 units.
Good quality	Same as above.
Fair quality	pH must be within the range of 6.5 to 9.0 with a human-caused variation within the above range of less than 0.5 units.

(2) **Shellfish harvesting.**

(a) General criteria. General criteria that apply to shellfish harvesting uses for marine water are described in WAC 173-201A-260 (2)(a) and (b), and are for:

(i) Toxic, radioactive, and deleterious materials; and

(ii) Aesthetic values.

(b) **Shellfish harvesting bacteria criteria.** To protect shellfish harvesting, fecal coliform organism levels must not exceed a geometric mean value of 14 colonies/100 mL, and not have more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 43 colonies/100 mL.

(i) Shellfish growing areas approved for unconditional harvest by the state department of health are fully supporting the shellfish harvest goals of this chapter, even when comparison with the criteria contained in this chapter suggest otherwise.

(ii) When averaging bacteria sample data for comparison to the geometric mean criteria, it is preferable to average by season and include five or more data collection events within

each period. Averaging of data collected beyond a thirty-day period, or beyond a specific discharge event under investigation, is not permitted when such averaging would skew the data set so as to mask noncompliance periods. The period of averaging should not exceed twelve months, and should have sample collection dates well distributed throughout the reporting period.

(iii) When determining compliance with the bacteria criteria in or around small sensitive areas, it is recommended that multiple samples are taken throughout the area during each visit. Such multiple samples should be arithmetically averaged together (to reduce concerns with low bias when the data is later used in calculating a geometric mean) to reduce sample variability and to create a single representative data point.

(iv) As determined necessary by the department, more stringent bacteria criteria may be established for waters that cause, or significantly contribute to, the decertification or conditional certification of commercial or recreational shellfish harvest areas, even when the preassigned bacteria criteria for the water is being met.

(v) Where information suggests that sample results are due primarily to sources other than warm-blooded animals (e.g., wood waste), alternative indicator criteria may be established on a site-specific basis by the department.

(3) **Recreational uses.** The recreational uses are primary contact recreation and secondary contact recreation.

(a) **General criteria.** General criteria that apply to water contact uses for marine water are described in WAC 173-201A-260 (2)(a) and (b), and are for:

(i) Toxic, radioactive, and deleterious materials; and

(ii) Aesthetic values.

(b) **Water contact recreation bacteria criteria.** Table 210 (3)(b) lists the bacteria criteria to protect water contact recreation in marine water.

Table 210 (3)(b)
Water Contact Recreation Bacteria Criteria in Marine Water

Category	Bacteria Indicator
Primary Contact Recreation	Fecal coliform organism levels must not exceed a geometric mean value of 14 colonies/100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 43 colonies/100 mL.
Secondary Contact Recreation	Enterococci organism levels must not exceed a geometric mean value of 70 colonies/100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 208 colonies/100 mL.

(i) When averaging bacteria sample data for comparison to the geometric mean criteria, it is preferable to average by season and include five or more data collection events within each period. Averaging of data collected beyond a thirty-day period, or beyond a specific discharge event under investigation, is not permitted when such averaging would skew the data set so as to mask noncompliance periods. The period of averaging should not exceed twelve months, and should have sample collection dates well distributed throughout the reporting period.

(ii) When determining compliance with the bacteria criteria in or around small sensitive areas, such as swimming beaches, it is recommended that multiple samples are taken throughout the area during each visit. Such multiple samples should be arithmetically averaged together (to reduce concerns with low bias when the data is later used in calculating a geometric mean) to reduce sample variability and to create a single representative data point.

(iii) As determined necessary by the department, more stringent bacteria criteria may be established for waters that cause, or significantly contribute to, the decertification or conditional certification of commercial or recreational shellfish harvest areas, even when the preassigned bacteria criteria for the water is being met.

(iv) Where information suggests that sample results are due primarily to sources other than warm-blooded animals (e.g., wood waste), alternative indicator criteria may be established on a site-specific basis by the department.

(4) **Miscellaneous uses.** The miscellaneous marine water uses are wildlife habitat, harvesting, commerce and navigation, boating, and aesthetics.

General criteria. General criteria that apply in miscellaneous marine water uses are described in WAC 173-201A-260 (2)(a) and (b), and are for:

(a) Toxic, radioactive, and deleterious materials; and

(b) Aesthetic values.

[Statutory Authority: RCW 90.48.035. 06-23-117 (Order 06-04), § 173-201A-210, filed 11/20/06, effective 12/21/06. Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-210, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-230 Establishing lake nutrient criteria. (1) The following table shall be used to aid in establishing nutrient criteria:

(Table 230(1)) The ecoregional and trophic-state action values for establishing nutrient criteria:

Coast Range, Puget Lowlands, and Northern Rockies Ecoregions:			
Trophic State	**If Ambient TP (µg/l) Range of Lake is:**		**Then criteria should be set at:**
Ultra-oligotrophic	0-4		4 or less
Oligotrophic	>4-10		10 or less
Lower mesotrophic	>10-20		20 or less
	Action value		
	>20	. . .	lake specific study may be initiated.
Cascades Ecoregion:			
Trophic State	**If Ambient TP (µg/l) Range of Lake is:**		**Then criteria should be set at:**
Ultra-oligotrophic	0-4		4 or less
Oligotrophic	>4-10		10 or less
	Action value		
	>10	. . .	lake specific study may be initiated.
Columbia Basin Ecoregion:			
Trophic State	**If Ambient TP (µg/l) Range of Lake is:**		**Then criteria should be set at:**
Ultra-oligotrophic	0-4		4 or less
Oligotrophic	>4-10		10 or less
Lower mesotrophic	>10-20		20 or less
Upper mesotrophic	>20-35		35 or less

Coast Range, Puget Lowlands, and Northern Rockies Ecoregions:			
	Action value		
	>35	. . .	lake specific study may be initiated.

Lakes in the Willamette, East Cascade Foothills, or Blue Mountain ecoregions do not have recommended values and need to have lake-specific studies in order to receive criteria as described in subsection (3) of this section.

(2) The following actions are recommended if ambient monitoring of a lake shows the epilimnetic total phosphorus concentration, as shown in Table 1 of this section, is below the action value for an ecoregion:

(a) Determine trophic status from existing or newly gathered data. The recommended minimum sampling to determine trophic status is calculated as the mean of four or more samples collected from the epilimnion between June through September in one or more consecutive years. Sampling must be spread throughout the season.

(b) Propose criteria at or below the upper limit of the trophic state; or

(c) Conduct lake-specific study to determine and propose to adopt appropriate criteria as described in subsection (3) of this section.

(3) The following actions are recommended if ambient monitoring of a lake shows total phosphorus to exceed the action value for an ecoregion shown in Table 1 of this section or where recommended ecoregional action values do not exist:

(a) Conduct a lake-specific study to evaluate the characteristic uses of the lake. A lake-specific study may vary depending on the source or threat of impairment. Phytoplankton blooms, toxic phytoplankton, or excessive aquatic plants, are examples of various sources of impairment. The following are examples of quantitative measures that a study may describe: Total phosphorus, total nitrogen, chlorophyll-a, dissolved oxygen in the hypolimnion if thermally stratified, pH, hardness, or other measures of existing conditions and potential changes in any one of these parameters.

(b) Determine appropriate total phosphorus concentrations or other nutrient criteria to protect characteristic lake uses. If the existing total phosphorus concentration is protective of characteristic lake uses, then set criteria at existing total phosphorus concentration. If the existing total phosphorus concentration is not protective of the existing characteristic lake uses, then set criteria at a protective concentration. Proposals to adopt appropriate total phosphorus criteria to protect characteristic uses must be developed by considering technical information and stakeholder input as part of a public involvement process equivalent to the Administrative Procedure Act (chapter 34.05 RCW).

(c) Determine if the proposed total phosphorus criteria necessary to protect characteristic uses is achievable. If the recommended criterion is not achievable and if the characteristic use the criterion is intended to protect is not an existing use, then a higher criterion may be proposed in conformance with 40 CFR part 131.10.

(4) The department will consider proposed lake-specific nutrient criteria during any water quality standards rule making that follows development of a proposal. Adoption by rule formally establishes the criteria for that lake.

(5) Prioritization and investigation of lakes by the department will be initiated by listing problem lakes in a watershed needs assessment, and scheduled as part of the water quality program's watershed approach to pollution control. This prioritization will apply to lakes identified as warranting a criteria based on the results of a lake-specific study, to lakes warranting a lake-specific study for establishing criteria, and to lakes requiring restoration and pollution control measures due to exceedance of an established criterion. The adoption of nutrient criteria are generally not intended to apply to lakes or ponds with a surface area smaller than five acres; or to ponds wholly contained on private property owned and surrounded by a single landowner; and nutrients do not drain or leach from these lakes or private ponds to the detriment of other property owners or other water bodies; and do not impact designated uses in the lake. However, if the landowner proposes criteria the department may consider adoption.

(6) The department may not need to set a lake-specific criteria or further investigate a lake if existing water quality conditions are naturally poorer (higher TP) than the action value and uses have not been lost or degraded, per WAC 173-201A-260(1).

[Statutory Authority: RCW 90.48.035. 06-23-117 (Order 06-04), § 173-201A-230, filed 11/20/06, effective 12/21/06. Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-230, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-240 Toxic substances. (1) Toxic substances shall not be introduced above natural background levels in waters of the state which have the potential either singularly or cumulatively to adversely affect characteristic water uses, cause acute or chronic toxicity to the most sensitive biota dependent upon those waters, or adversely affect public health, as determined by the department.

(2) The department shall employ or require chemical testing, acute and chronic toxicity testing, and biological assessments, as appropriate, to evaluate compliance with subsection (1) of this section and to ensure that aquatic communities and the existing and characteristic beneficial uses of waters are being fully protected.

(3) The following criteria, found in Table 240(3), shall be applied to all surface waters of the state of Washington for the protection of aquatic life. The department may revise the following criteria on a statewide or water body-specific basis as needed to protect aquatic life occurring in waters of the state and to increase the technical accuracy of the criteria being applied. The department shall formally adopt any appropriate revised criteria as part of this chapter in accordance with the provisions established in chapter 34.05 RCW, the Administrative Procedure Act. The department shall ensure there are early opportunities for public review and comment on proposals to develop revised criteria. Values are µg/L for all substances except Ammonia and Chloride which are mg/L:

Table 240(3)
Toxics Substances Criteria

	Freshwater		Marine Water	
Substance	Acute	Chronic	Acute	Chronic
Aldrin/Dieldrin e	2.5a	0.0019b	0.71a	0.0019b
Ammonia	f,c	g,d	0.233h,c	0.035h,d
(un-ionized NH3) hh				
Arsenic dd	360.0c	190.0d	69.0c,ll	36.0d,cc,ll
Cadmium dd	i,c	j,d	42.0c	9.3d
Chlordane	2.4a	0.0043b	0.09a	0.004b
Chloride (Dissolved) k	860.0h,c	230.0h,d	-	-
Chlorine (Total Residual)	19.0c	11.0d	13.0c	7.5d
Chlorpyrifos	0.083c	0.041d	0.011c	0.0056d
Chromium (Hex) dd	15.0c,l,ii	10.0d,jj	1,100.0c,l,ll	50.0d,ll
Chromium (Tri) gg	m,c	n,d	-	-
Copper dd	o,c	p,d	4.8c,ll	3.1d,ll
Cyanide ee	22.0c	5.2d	1.0c,mm	d,mm
DDT (and metabolites)	1.1a	0.001b	0.13a	0.001b
Dieldrin/Aldrin e	2.5a	0.0019b	0.71a	0.0019b
Endosulfan	0.22a	0.056b	0.034a	0.0087b
Endrin	0.18a	0.0023b	0.037a	0.0023b
Heptachlor	0.52a	0.0038b	0.053a	0.0036b
Hexachlorocyclohexane (Lindane)	2.0a	0.08b	0.16a	-
Lead dd	q,c	r,d	210.0c,ll	8.1d,ll
Mercury s	2.1c,kk,dd	0.012d,ff	1.8c,ll,dd	0.025d,ff
Nickel dd	t,c	u,d	74.0c,ll	8.2d,ll
Parathion	0.065c	0.013d	-	-
Pentachlorophenol (PCP)	w,c	v,d	13.0c	7.9d
Polychlorinated				
Biphenyls (PCBs)	2.0b	0.014b	10.0b	0.030b
Selenium	20.0c,ff	5.0d,ff	290c,ll,dd	71.0d, x,ll,dd
Silver dd	y,a	-	1.9a,ll	-
Toxaphene	0.73c,z	0.0002d	0.21c,z	0.0002d
Zinc dd	aa,c	bb,d	90.0c,ll	81.0d,ll

Notes to Table 240(3):

a. An instantaneous concentration not to be exceeded at any time.
b. A 24-hour average not to be exceeded.
c. A 1-hour average concentration not to be exceeded more than once every three years on the average.
d. A 4-day average concentration not to be exceeded more than once every three years on the average.
e. Aldrin is metabolically converted to Dieldrin. Therefore, the sum of the Aldrin and Dieldrin concentrations are compared with the Dieldrin criteria.
f. Shall not exceed the numerical value in total ammonia nitrogen (mg N/L) given by:

For salmonids present: $$\frac{0.275}{1 + 10^{7.204\text{-pH}}} + \frac{39.0}{1 + 10^{\text{pH-}7.204}}$$

For salmonids absent: $$\frac{0.411}{1 + 10^{7.204\text{-pH}}} + \frac{58.4}{1 + 10^{\text{pH-}7.204}}$$

g. Shall not exceed the numerical concentration calculated as follows:
Unionized ammonia concentration for waters where salmonid habitat is an existing or designated use:

$$0.80 \div (FT)(FPH)(RATIO)$$

where: RATIO = 13.5; $7.7 \le pH \le 9$
RATIO = $(20.25 \times 10^{(7.7\text{-pH})}) \div (1 + 10^{(7.4\text{-pH})})$; $6.5 \le pH \le 7.7$
FT = 1.4; $15 \le T \le 30$
FT = $10^{[0.03(20\text{-}T)]}$; $0 \le T \le 15$
FPH = 1; $8 \le pH \le 9$
FPH = $(1 + 10^{(7.4\text{-pH})}) \div 1.25$; $6.5 \le pH \le 8.0$

Total ammonia concentrations for waters where salmonid habitat is not an existing or designated use and other fish early life stages are absent:

$$\text{Chronic Criterion} = \left(\frac{0.0577}{1+10^{7.688\text{-pH}}} + \frac{2.487}{1+10^{\text{pH-}7.688}} \right) \times (1.45 \times 10^{0.028(25\text{-}A)})$$

where: A = the greater of either T (temperature in degrees Celsius) or 7.

Applied as a thirty-day average concentration of total ammonia nitrogen (in mg N/L) not to be exceeded more than once every three years on average. The highest four-day average within the thirty-day period should not exceed 2.5 times the chronic criterion.

Total ammonia concentration for waters where salmonid habitat is not an existing or designated use and other fish early life stages are present:

$$\text{Chronic Criterion} = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}} \right) \times B$$

where: B = the lower of either 2.85, or $1.45 \times 10^{0.028 \times (25-T)}$. T = temperature in degrees Celsius.

Applied as a thirty-day average concentration of total ammonia nitrogen (in mg N/L) not to be exceeded more than once every three years on the average. The highest four-day average within the thirty-day period should not exceed 2.5 times the chronic criterion.

h. Measured in milligrams per liter rather than micrograms per liter.

i. ≤ (0.944)(e(1.128[ln(hardness)]-3.828)) at hardness = 100. Conversion factor (CF) of 0.944 is hardness dependent. CF is calculated for other hardnesses as follows: CF = 1.136672 - [(ln hardness) (0.041838)].

j. ≤ (0.909)(e(0.7852[ln(hardness)]-3.490)) at hardness = 100. Conversions factor (CF) of 0.909 is hardness dependent. CF is calculated for other hardnesses as follows: CF = 1.101672 - [(ln hardness) (0.041838)].

k. Criterion based on dissolved chloride in association with sodium. This criterion probably will not be adequately protective when the chloride is associated with potassium, calcium, or magnesium, rather than sodium.

l. Salinity dependent effects. At low salinity the 1-hour average may not be sufficiently protective.

m. $\leq (0.316)e^{(0.8190[\ ln(hardness)] + 3.688)}$

n. $\leq (0.860)e^{(0.8190[\ ln(hardness)] + 1.561)}$

o. $\leq (0.960)(e^{(0.9422[\ ln(hardness)] - 1.464)})$

p. $\leq (0.960)(e^{(0.8545[\ ln(hardness)] - 1.465)})$

q. $\leq (0.791)(e^{(1.273[\ ln(hardness)] - 1.460)})$ at hardness = 100. Conversion factor (CF) of 0.791 is hardness dependent. CF is calculated for other hardnesses as follows: CF = 1.46203 - [(ln hardness)(0.145712)].

r. $\leq (0.791)(e^{(1.273[\ ln(hardness)] - 4.705)})$ at hardness = 100. Conversion factor (CF) of 0.791 is hardness dependent. CF is calculated for other hardnesses as follows: CF = 1.46203 - [(ln hardness)(0.145712)].

s. If the four-day average chronic concentration is exceeded more than once in a three-year period, the edible portion of the consumed species should be analyzed. Said edible tissue concentrations shall not be allowed to exceed 1.0 mg/kg of methylmercury.

t. $\leq (0.998)(e^{(0.8460[\ ln(hardness)] + 3.3612)})$

u. $\leq (0.997)(e^{(0.8460[\ ln(hardness)] + 1.1645)})$

v. $\leq e^{[1.005(pH) - 5.290]}$

w. $\leq e^{[1.005(pH) - 4.830]}$

x. The status of the fish community should be monitored whenever the concentration of selenium exceeds 5.0 ug/ l in salt water.

y. $\leq (0.85)(e^{(1.72[ln(hardness)] - 6.52)})$

z. Channel Catfish may be more acutely sensitive.

aa. $\leq (0.978)(e^{(0.8473[ln(hardness)] + 0.8604)})$

bb. $\leq (0.986)(e^{(0.8473[ln(hardness)] + 0.7614)})$

cc. Nonlethal effects (growth, C-14 uptake, and chlorophyll production) to diatoms (*Thalassiosira aestivalis* and *Skeletonema costatum*) which are common to Washington's waters have been noted at levels below the established criteria. The importance of these effects to the diatom populations and the aquatic system is sufficiently in question to persuade the state to adopt the USEPA National Criteria value (36 µg/L) as the state threshold criteria, however, wherever practical the ambient concentrations should not be allowed to exceed a chronic marine concentration of 21 µg/L.

dd. These ambient criteria in the table are for the dissolved fraction. The cyanide criteria are based on the weak acid dissociable method. The metals criteria may not be used to calculate total recoverable effluent limits unless the seasonal partitioning of the dissolved to total metals in the ambient water are known. When this information is absent, these metals criteria shall be applied as total recoverable values, determined by back-calculation, using the conversion factors incorporated in the criterion equations. Metals criteria may be adjusted on a site-specific basis when data are made available to the department clearly demonstrating the effective use of the water effects ratio approach established by USEPA, as generally guided by the procedures in USEPA Water Quality Standards Handbook, December 1983, as supplemented or replaced by USEPA or ecology. Information which is used to develop effluent limits based on applying metals partitioning studies or the water effects ratio approach shall be identified in the permit fact sheet developed pursuant to WAC 173-220-060 or 173-226-110, as appropriate, and shall be made available for the public comment period required pursuant to WAC 173-220-050 or 173-226-130(3), as appropriate. Ecology has developed supplemental guidance for conducting water effect ratio studies.

ee. The criteria for cyanide is based on the weak acid dissociable method in the 17th Ed. Standard Methods for the Examination of Water and Wastewater, 4500-CN I, and as revised (see footnote dd, above).

ff. These criteria are based on the total-recoverable fraction of the metal.

gg. Where methods to measure trivalent chromium are unavailable, these criteria are to be represented by total-recoverable chromium.

hh. The listed fresh water criteria are based on unionized or total ammonia concentrations, while those for marine water are based on total ammonia concentrations. Tables for the conversion of total ammonia to un-ionized ammonia for freshwater can be found in the USEPA's Quality Criteria for Water, 1986. Criteria concentrations based on total ammonia for marine water can be found in USEPA Ambient Water Quality Criteria for Ammonia (Saltwater)-1989, EPA440/5-88-004, April 1989.

ii. The conversion factor used to calculate the dissolved metal concentration was 0.982.

jj. The conversion factor used to calculate the dissolved metal concentration was 0.962.

kk. The conversion factor used to calculate the dissolved metal concentration was 0.85.

ll. Marine conversion factors (CF) which were used for calculating dissolved metals concentrations are given below. Conversion factors are applicable to both acute and chronic criteria for all metals except mercury. The CF for mercury was applied to the acute criterion only and is not applicable to the chronic criterion. Conversion factors are already incorporated into the criteria in the table. Dissolved criterion = criterion x CF

Metal	CF
Arsenic	1.000
Cadmium	0.994
Chromium (VI)	0.993
Copper	0.83
Lead	0.951
Mercury	0.85
Nickel	0.990
Selenium	0.998
Silver	0.85
Zinc	0.946

mm. The cyanide criteria are: 2.8µg/l chronic and 9.1µg/l acute and are applicable only to waters which are east of a line from Point Roberts to Lawrence Point, to Green Point to Deception Pass; and south from Deception Pass and of a line from Partridge Point to Point Wilson. The chronic criterion applicable to the remainder of the marine waters is l µg/L.

(4) USEPA Quality Criteria for Water, 1986, as revised, shall be used in the use and interpretation of the values listed in subsection (3) of this section.

(5) Concentrations of toxic, and other substances with toxic propensities not listed in subsection (3) of this section shall be determined in consideration of USEPA Quality Criteria for Water, 1986, and as revised, and other relevant information as appropriate. Human health-based water quality cri-

teria used by the state are contained in 40 CFR 131.36 (known as the National Toxics Rule).

(6) Risk-based criteria for carcinogenic substances shall be selected such that the upper-bound excess cancer risk is less than or equal to one in one million.

[Statutory Authority: RCW 90.48.035. 06-23-117 (Order 06-04), § 173-201A-240, filed 11/20/06, effective 12/21/06. Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), amended and recodified as § 173-201A-240, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-040, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-040, filed 11/25/92, effective 12/26/92.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-201A-250 Radioactive substances. (1) Deleterious concentrations of radioactive materials for all classes shall be as determined by the lowest practicable concentration attainable and in no case shall exceed:

(a) 1/12.5 of the values listed in WAC 246-221-290 (Column 2, Table II, effluent concentrations, rules and regulations for radiation protection); or

(b) USEPA Drinking Water Regulations for radionuclides, as published in the Federal Register of July 9, 1976, or subsequent revisions thereto.

(2) Nothing in this chapter shall be interpreted to be applicable to those aspects of governmental regulation of radioactive waters which have been preempted from state regulation by the Atomic Energy Act of 1954, as amended, as interpreted by the United States Supreme Court in the cases of *Northern States Power Co. v. Minnesota 405 U.S. 1035 (1972) and Train v. Colorado Public Interest Research Group, 426 U.S. 1 (1976).*

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), recodified as § 173-201A-250, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-050, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-050, filed 11/25/92, effective 12/26/92.]

WAC 173-201A-260 Natural conditions and other water quality criteria and applications. (1) **Natural and irreversible human conditions.**

(a) It is recognized that portions of many water bodies cannot meet the assigned criteria due to the natural conditions of the water body. When a water body does not meet its assigned criteria due to natural climatic or landscape attributes, the natural conditions constitute the water quality criteria.

(b) When a water body does not meet its assigned criteria due to human structural changes that cannot be effectively remedied (as determined consistent with the federal regulations at 40 CFR 131.10), then alternative estimates of the attainable water quality conditions, plus any further allowances for human effects specified in this chapter for when natural conditions exceed the criteria, may be used to establish an alternative criteria for the water body (see WAC 173-201A-440).

(2) **Toxics and aesthetics criteria.** The following narrative criteria apply to all existing and designated uses for fresh and marine water:

(a) Toxic, radioactive, or deleterious material concentrations must be below those which have the potential, either singularly or cumulatively, to adversely affect characteristic water uses, cause acute or chronic conditions to the most sensitive biota dependent upon those waters, or adversely affect public health (see WAC 173-201A-240, toxic substances, and 173-201A-250, radioactive substances).

(b) Aesthetic values must not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste (see WAC 173-201A-230 for guidance on establishing lake nutrient standards to protect aesthetics).

(3) **Procedures for applying water quality criteria.** In applying the appropriate water quality criteria for a water, the department will use the following procedure:

(a) The department will establish water quality requirements for water bodies, in addition to those specifically listed in this chapter, on a case-specific basis where determined necessary to provide full support for designated and existing uses.

(b) Upstream actions must be conducted in manners that meet downstream water body criteria. Except where and to the extent described otherwise in this chapter, the criteria associated with the most upstream uses designated for a water body are to be applied to headwaters to protect nonfish aquatic species and the designated downstream uses.

(c) Where multiple criteria for the same water quality parameter are assigned to a water body to protect different uses, the most stringent criterion for each parameter is to be applied.

(d) At the boundary between water bodies protected for different uses, the more stringent criteria apply.

(e) In brackish waters of estuaries, where different criteria for the same use occurs for fresh and marine waters, the decision to use the fresh water or the marine water criteria must be selected and applied on the basis of vertically averaged daily maximum salinity, referred to below as "salinity."

(i) The fresh water criteria must be applied at any point where ninety-five percent of the salinity values are less than or equal to one part per thousand, except that the fresh water criteria for bacteria applies when the salinity is less than ten parts per thousand; and

(ii) The marine water criteria must apply at all other locations where the salinity values are greater than one part per thousand, except that the marine criteria for bacteria applies when the salinity is ten parts per thousand or greater.

(f) Numeric criteria established in this chapter are not intended for application to human created waters managed primarily for the removal or containment of pollution. This special provision also includes private farm ponds created from upland sites that did not incorporate natural water bodies.

(i) Waters covered under this provision must be managed so that:

(A) They do not create unreasonable risks to human health or uses of the water; and

(B) Discharges from these systems meet down gradient surface and ground water quality standards.

(ii) This provision does not apply to waterways designed and managed primarily to convey or transport water from one location to another, rather than to remove pollution en route.

(g) When applying the numeric criteria established in this chapter, the department will give consideration to the precision and accuracy of the sampling and analytical methods used, as well as the existing conditions at the time.

(h) The analytical testing methods for these numeric criteria must be in accordance with the "*Guidelines Establishing Test Procedures for the Analysis of Pollutants*" (*40 CFR Part 136*) or superseding methods published. The department may also approve other methods following consultation with adjacent states and with the approval of the USEPA.

(i) The primary means for protecting water quality in wetlands is through implementing the antidegradation procedures described in Part III of this chapter.

(i) In addition to designated uses, wetlands may have existing beneficial uses that are to be protected that include ground water exchange, shoreline stabilization, and storm water attenuation.

(ii) Water quality in wetlands is maintained and protected by maintaining the hydrologic conditions, hydrophytic vegetation, and substrate characteristics necessary to support existing and designated uses.

(iii) Wetlands must be delineated using the *Washington State Wetlands Identification and Delineation Manual*, in accordance with WAC 173-22-035.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-260, filed 7/1/03, effective 8/1/03.]

PART III - ANTIDEGRADATION

WAC 173-201A-300 Description. (1) The antidegradation policy is guided by chapter 90.48 RCW, Water Pollution Control Act, chapter 90.54 RCW, Water Resources Act of 1971, and 40 CFR 131.12.

(2) The purpose of the antidegradation policy is to:

(a) Restore and maintain the highest possible quality of the surface waters of Washington;

(b) Describe situations under which water quality may be lowered from its current condition;

(c) Apply to human activities that are likely to have an impact on the water quality of a surface water;

(d) Ensure that all human activities that are likely to contribute to a lowering of water quality, at a minimum, apply all known, available, and reasonable methods of prevention, control, and treatment (AKART); and

(e) Apply three levels of protection for surface waters of the state, as generally described below:

(i) Tier I is used to ensure existing and designated uses are maintained and protected and applies to all waters and all sources of pollution.

(ii) Tier II is used to ensure that waters of a higher quality than the criteria assigned in this chapter are not degraded unless such lowering of water quality is necessary and in the overriding public interest. Tier II applies only to a specific list of polluting activities.

(iii) Tier III is used to prevent the degradation of waters formally listed in this chapter as "outstanding resource waters," and applies to all sources of pollution.

(3) **Habitat restoration.** Both temporary harm and permanent loss of existing uses may be allowed by the department where determined necessary to secure greater ecological benefits through major habitat restoration projects designed to return the natural physical structure and associated uses to a water body where the structure has been altered through human action.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-300, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-310 Tier I—Protection and maintenance of existing and designated uses. (1) Existing and designated uses must be maintained and protected. No degradation may be allowed that would interfere with, or become injurious to, existing or designated uses, except as provided for in this chapter.

(2) For waters that do not meet assigned criteria, or protect existing or designated uses, the department will take appropriate and definitive steps to bring the water quality back into compliance with the water quality standards.

(3) Whenever the natural conditions of a water body are of a lower quality than the assigned criteria, the natural conditions constitute the water quality criteria. Where water quality criteria are not met because of natural conditions, human actions are not allowed to further lower the water quality, except where explicitly allowed in this chapter.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-310, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-320 Tier II—Protection of waters of higher quality than the standards. (1) Whenever a water quality constituent is of a higher quality than a criterion designated for that water under this chapter, new or expanded actions within the categories identified in subsection (2) of this section that are expected to cause a measurable change in the quality of the water (see subsection (3) of this section) may not be allowed unless the department determines that the lowering of water quality is necessary and in the overriding public interest (see subsection (4) of this section).

(2) A Tier II review will only be conducted for new or expanded actions conducted under the following authorizations. Public involvement with the Tier II review will be conducted in accordance with the public involvement processes associated with these actions.

(a) National Pollutant Discharge Elimination System (NPDES) waste discharge permits;

(b) State waste discharge permits to surface waters;

(c) Federal Clean Water Act Section 401 water quality certifications; and

(d) Other water pollution control programs authorized, implemented, or administered by the department.

(3) **Definition of measurable change.** To determine that a lowering of water quality is necessary and in the overriding public interest, an analysis must be conducted for new or expanded actions when the resulting action has the potential to cause a measurable change in the physical, chemical, or biological quality of a water body. Measurable changes will be determined based on an estimated change in water quality at a point outside the source area, after allowing for mixing consistent with WAC 173-201A-400(7). In the context of this regulation, a measurable change includes a:

(a) Temperature increase of 0.3°C or greater;

(b) Dissolved oxygen decrease of 0.2 mg/L or greater;

(c) Bacteria level increase of 2 cfu/100 mL or greater;

(d) pH change of 0.1 units or greater;

(e) Turbidity increase of 0.5 NTU or greater; or

(f) Any detectable increase in the concentration of a toxic or radioactive substance.

(4) **Necessary and overriding public interest determinations.** Once an activity has been determined to cause a measurable lowering in water quality, then an analysis must be conducted to determine if the lowering of water quality is necessary and in the overriding public interest. Information to conduct the analysis must be provided by the applicant seeking the authorization, or by the department in developing a general permit or pollution control program, and must include:

(a) A statement of the benefits and costs of the social, economic, and environmental effects associated with the lowering of water quality. This information will be used by the department to determine if the lowering of water quality is in the overriding public interest. Examples of information that can assist in this determination include:

(i) Economic benefits such as creating or expanding employment, increasing median family income, or increasing the community tax base;

(ii) Providing or contributing to necessary social services;

(iii) The use and demonstration of innovative pollution control and management approaches that would allow a significant improvement in AKART for a particular industry or category of action;

(iv) The prevention or remediation of environmental or public health threats;

(v) The societal and economic benefits of better health protection;

(vi) The preservation of assimilative capacity for future industry and development; and

(vii) The benefits associated with high water quality for uses such as fishing, recreation, and tourism.

(b) Information that identifies and selects the best combination of site, structural, and managerial approaches that can be feasibly implemented to prevent or minimize the lowering of water quality. This information will be used by the department to determine if the lowering of water quality is necessary. Examples that may be considered as alternatives include:

(i) Pollution prevention measures (such as changes in plant processes, source reduction, and substitution with less toxic substances);

(ii) Recycle/reuse of waste by-products or production materials and fluids;

(iii) Application of water conservation methods;

(iv) Alternative or enhanced treatment technology;

(v) Improved operation and maintenance of existing treatment systems;

(vi) Seasonal or controlled discharge options to avoid critical conditions of water quality;

(vii) Establishing buffer areas with effective limits on activities;

(viii) Land application or infiltration to capture pollutants and reduce surface runoff, on-site treatment, or alternative discharge locations;

(ix) Water quality offsets as described in WAC 173-201A-450.

(5) The department retains the discretion to require that the applicant examine specific alternatives, or that additional information be provided to conduct the analysis.

(6) General permit and water pollution control programs are developed for a category of dischargers that have similar processes and pollutants. New or reissued general permits or other water pollution control programs authorized, implemented, or administered by the department will undergo an analysis under Tier II at the time the department develops and approves the general permit or program.

(a) Individual activities covered under these general permits or programs will not require a Tier II analysis.

(b) The department will describe in writing how the general permit or control program meets the antidegradation requirements of this section.

(c) The department recognizes that many water quality protection programs and their associated control technologies are in a continual state of improvement and development. As a result, information regarding the existence, effectiveness, or costs of control practices for reducing pollution and meeting the water quality standards may be incomplete. In these instances, the antidegradation requirements of this section can be considered met for general permits and programs that have a formal process to select, develop, adopt, and refine control practices for protecting water quality and meeting the intent of this section. This adaptive process must:

(i) Ensure that information is developed and used expeditiously to revise permit or program requirements;

(ii) Review and refine management and control programs in cycles not to exceed five years or the period of permit reissuance; and

(iii) Include a plan that describes how information will be obtained and used to ensure full compliance with this chapter. The plan must be developed and documented in advance of permit or program approval under this section.

(7) All authorizations under this section must still comply with the provisions of Tier I (WAC 173-201A-310).

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-320, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-330 Tier III—Protection of outstanding resource waters. Where a high quality water is designated as an outstanding resource water, the water quality and uses of those waters must be maintained and protected. As part of the public process, a qualifying water body may be designated as Tier III(A) which prohibits any and all future degradation, or Tier III(B) which allows for de minimis (below measurable amounts) degradation from well-controlled activities.

(1) To be eligible for designation as an outstanding resource water in Washington, one or more of the following must apply:

(a) The water is in a relatively pristine condition (largely absent human sources of degradation) or possesses exceptional water quality, and also occurs in federal and state parks, monuments, preserves, wildlife refuges, wilderness areas, marine sanctuaries, estuarine research reserves, or wild and scenic rivers;

(b) The water has unique aquatic habitat types (for example, peat bogs) that by conventional water quality parameters (such as dissolved oxygen, temperature, or sediment) are not

considered high quality, but that are unique and regionally rare examples of their kind;

(c) The water has both high water quality and regionally unique recreational value;

(d) The water is of exceptional statewide ecological significance; or

(e) The water has cold water thermal refuges critical to the long-term protection of aquatic species. For this type of outstanding resource water, the nondegradation protection would apply only to temperature and dissolved oxygen.

(2) Any water or portion thereof that meets one or more of the conditions described in subsection (1) of this section may be designated for protection as an outstanding resource water. A request for designation may be made by the department or through public nominations that are submitted to the department in writing and that include sufficient information to show how the water body meets the appropriate conditions identified in this section.

(3) After receiving a request for outstanding resource water designation, the department will:

(a) Respond within sixty days of receipt with a decision on whether the submitted information demonstrates that the water body meets the eligibility requirements for an outstanding resource water. If the submitted information demonstrates that the water body meets the eligibility requirements, the department will schedule a review of the nominated water for designation as an outstanding resource water. The review will include a public process and consultation with recognized tribes in the geographic vicinity of the water.

(b) In determining whether or not to designate an outstanding resource water, the department will consider factors relating to the difficulty of maintaining the current quality of the water body. Outstanding resource waters should not be designated where substantial and imminent social or economic impact to the local community will occur, unless local public support is overwhelmingly in favor of the designation. The department will carefully weigh the level of support from the public and affected governments in assessing whether or not to designate the water as an outstanding resource water.

(c) After considering public comments and weighing public support for the proposal, the department will make a final determination on whether a nominated water body should be adopted into this chapter as an outstanding resource water.

(4) A designated outstanding resource water will be maintained and protected from all degradation, except for the following situations:

(a) Temporary actions that are necessary to protect the public interest as approved by the department.

(b) Treatment works bypasses for sewage, waste, and stormwater are allowed where such a bypass is unavoidable to prevent the loss of life, personal injury, or severe property damage, and no feasible alternatives to the bypass exist.

(c) Response actions taken in accordance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), as amended, or similar federal or state authorities, to alleviate a release into the environment of substances which may pose an imminent and substantial danger to public health or welfare.

(d) The sources of degradation are from atmospheric deposition.

(5) Outstanding resources waters can be designated for either Tier III(A) or Tier III(B) protection.

(a) Tier III(A) is the highest level of protection and allows no further degradation after the waters have been formally designated Tier III(A) under this chapter.

(b) Tier III(B) is the second highest level of protection for outstanding resource waters and conditionally allows minor degradation to occur due to highly controlled actions. The requirements for Tier III(B) are as follows:

(i) To meet the goal for maintaining and protecting the quality of Tier III(B) waters, sources of pollution, considered individually and cumulatively, are not to cause measurable degradation of the water body.

(ii) Regardless of the quality of the water body, all new or expanded point sources of pollution in Tier III(B) waters must use applicable advanced waste treatment and control techniques that reasonably represent the state of the art and must minimize the degradation of water quality to nonmeasurable levels where total elimination is not feasible. Nonpoint sources must use all applicable structural and nonstructural BMPs with the goal of reducing the degradation of water quality to nonmeasurable levels where total elimination is not feasible.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-330, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-400 Mixing zones. (1) The allowable size and location of a mixing zone and the associated effluent limits shall be established in discharge permits, general permits, or orders, as appropriate.

(2) A discharger shall be required to fully apply AKART prior to being authorized a mixing zone.

(3) Mixing zone determinations shall consider critical discharge conditions.

(4) No mixing zone shall be granted unless the supporting information clearly indicates the mixing zone would not have a reasonable potential to cause a loss of sensitive or important habitat, substantially interfere with the existing or characteristic uses of the water body, result in damage to the ecosystem, or adversely affect public health as determined by the department.

(5) Water quality criteria shall not be violated outside of the boundary of a mixing zone as a result of the discharge for which the mixing zone was authorized.

(6) The size of a mixing zone and the concentrations of pollutants present shall be minimized.

(7) The maximum size of a mixing zone shall comply with the following:

(a) In rivers and streams, mixing zones, singularly or in combination with other mixing zones, shall comply with the most restrictive combination of the following (this size limitation may be applied to estuaries having flow characteristics that resemble rivers):

(i) Not extend in a downstream direction for a distance from the discharge port(s) greater than three hundred feet plus the depth of water over the discharge port(s), or extend upstream for a distance of over one hundred feet;

(ii) Not utilize greater than twenty-five percent of the flow; and

(iii) Not occupy greater than twenty-five percent of the width of the water body.

(b) In estuaries, mixing zones, singularly or in combination with other mixing zones, shall:

(i) Not extend in any horizontal direction from the discharge port(s) for a distance greater than two hundred feet plus the depth of water over the discharge port(s) as measured during mean lower low water; and

(ii) Not occupy greater than twenty-five percent of the width of the water body as measured during mean lower low water. For the purpose of this section, areas to the east of a line from Green Point (Fidalgo Island) to Lawrence Point (Orcas Island) are considered estuarine, as are all of the Strait of Georgia and the San Juan Islands north of Orcas Island. To the east of Deception Pass, and to the south and east of Admiralty Head, and south of Point Wilson on the Quimper Peninsula, is Puget Sound proper, which is considered to be entirely estuarine. All waters existing within bays from Point Wilson westward to Cape Flattery and south to the North Jetty of the Columbia River shall also be categorized as estuarine.

(c) In oceanic waters, mixing zones, singularly or in combination with other mixing zones, shall not extend in any horizontal direction from the discharge port(s) for a distance greater than three hundred feet plus the depth of water over the discharge port(s) as measured during mean lower low water. For the purpose of this section, all marine waters not classified as estuarine in (b)(ii) of this subsection shall be categorized as oceanic.

(d) In lakes, and in reservoirs having a mean detention time greater than fifteen days, mixing zones shall not be allowed unless it can be demonstrated to the satisfaction of the department that:

(i) Other siting, technological, and managerial options that would avoid the need for a lake mixing zone are not reasonably achievable;

(ii) Overriding considerations of the public interest will be served; and

(iii) All technological and managerial methods available for pollution reduction and removal that are economically achievable would be implemented prior to discharge. Such methods may include, but not be limited to, advanced waste treatment techniques.

(e) In lakes, and in reservoirs having a mean detention time greater than fifteen days, mixing zones, singularly or in combination with other mixing zones, shall comply with the most restrictive combination of the following:

(i) Not exceed ten percent of the water body volume;

(ii) Not exceed ten percent of the water body surface area (maximum radial extent of the plume regardless of whether it reaches the surface); and

(iii) Not extend beyond fifteen percent of the width of the water body.

(8) Acute criteria are based on numeric criteria and toxicity tests approved by the department, as generally guided under WAC 173-201A-240 (1) through (5), and shall be met as near to the point of discharge as practicably attainable. Compliance shall be determined by monitoring data or calibrated models approved by the department utilizing representative dilution ratios. A zone where acute criteria may be exceeded is allowed only if it can be demonstrated to the department's satisfaction the concentration of, and duration and frequency of exposure to the discharge, will not create a barrier to the migration or translocation of indigenous organisms to a degree that has the potential to cause damage to the ecosystem. A zone of acute criteria exceedance shall singularly or in combination with other such zones comply with the following maximum size requirements:

(a) In rivers and streams, a zone where acute criteria may be exceeded shall comply with the most restrictive combination of the following (this size limitation may also be applied to estuaries having flow characteristics resembling rivers):

(i) Not extend beyond ten percent of the distance towards the upstream and downstream boundaries of an authorized mixing zone, as measured independently from the discharge port(s);

(ii) Not utilize greater than two and one-half percent of the flow; and

(iii) Not occupy greater than twenty-five percent of the width of the water body.

(b) In oceanic and estuarine waters a zone where acute criteria may be exceeded shall not extend beyond ten percent of the distance established in subsection (7)(b) of this section as measured independently from the discharge port(s).

(9) Overlap of mixing zones.

(a) Where allowing the overlap of mixing zones would result in a combined area of water quality criteria nonattainment which does not exceed the numeric size limits established under subsection (7) of this section, the overlap may be permitted if:

(i) The separate and combined effects of the discharges can be reasonably determined; and

(ii) The combined effects would not create a barrier to the migration or translocation of indigenous organisms to a degree that has the potential to cause damage to the ecosystem.

(b) Where allowing the overlap of mixing zones would result in exceedance of the numeric size limits established under subsection (7) of this section, the overlap may be allowed only where:

(i) The overlap qualifies for exemption under subsections (12) and (13) of this section; and

(ii) The overlap meets the requirements established in (a) of this subsection.

(10) Storm water:

(a) Storm water discharge from any "point source" containing "process wastewater" as defined in 40 C.F.R. Part 122.2 shall fully conform to the numeric size criteria in subsections (7) and (8) of this section and the overlap criteria in subsection (9) of this section.

(b) Storm water discharges not described by (a) of this subsection may be granted an exemption to the numeric size criteria in subsections (7) and (8) of this section and the overlap criteria in subsection (9) of this section, provided the discharger clearly demonstrates to the department's satisfaction that:

(i) All appropriate best management practices established for storm water pollutant control have been applied to the discharge.

(ii) The proposed mixing zone shall not have a reasonable potential to result in a loss of sensitive or important habitat, substantially interfere with the existing or characteristic

uses of the water body, result in damage to the ecosystem, or adversely affect public health as determined by the department; and

(iii) The proposed mixing zone shall not create a barrier to the migration or translocation of indigenous organisms to a degree that has the potential to cause damage to the ecosystem.

(c) All mixing zones for storm water discharges shall be based on a volume of runoff corresponding to a design storm approved by the department. Exceedances from the numeric size criteria in subsections (7) and (8) of this section and the overlap criteria in subsection (9) of this section due to precipitation events greater than the approved design storm may be allowed by the department, if it would not result in adverse impact to existing or characteristic uses of the water body or result in damage to the ecosystem, or adversely affect public health as determined by the department.

(11) Combined sewer overflows complying with the requirements of chapter 173-245 WAC, may be allowed an average once per year exemption to the numeric size criteria in subsections (7) and (8) of this section and the overlap criteria in subsection (9) of this section, provided the discharge complies with subsection (4) of this section.

(12) Exceedances from the numeric size criteria in subsections (7) and (8) of this section and the overlap criteria in subsection (9) of this section may be considered by the department in the following cases:

(a) For discharges existing prior to November 24, 1992, (or for proposed discharges with engineering plans formally approved by the department prior to November 24, 1992);

(b) Where altering the size configuration is expected to result in greater protection to existing and characteristic uses;

(c) Where the volume of water in the effluent is providing a greater benefit to the existing or characteristic uses of the water body due to flow augmentation than the benefit of removing the discharge, if such removal is the remaining feasible option; or

(d) Where the exceedance is clearly necessary to accommodate important economic or social development in the area in which the waters are located.

(13) Before an exceedance from the numeric size criteria in subsections (7) and (8) of this section and the overlap criteria in subsection (9) of this section may be allowed under subsection (12) of this section, it must clearly be demonstrated to the department's satisfaction that:

(a) AKART appropriate to the discharge is being fully applied;

(b) All siting, technological, and managerial options which would result in full or significantly closer compliance that are economically achievable are being utilized; and

(c) The proposed mixing zone complies with subsection (4) of this section.

(14) Any exemptions granted to the size criteria under subsection (12) of this section shall be reexamined during each permit renewal period for changes in compliance capability. Any significant increase in capability to comply shall be reflected in the renewed discharge permit.

(15) The department may establish permit limits and measures of compliance for human health based criteria (based on lifetime exposure levels), independent of this section.

(16) Sediment impact zones authorized by the department pursuant to chapter 173-204 WAC, Sediment management standards, do not satisfy the requirements of this section.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), amended and recodified as § 173-201A-400, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-100, filed 11/25/92, effective 12/26/92.]

WAC 173-201A-410 Short-term modifications. The criteria and special conditions established in WAC 173-201A-200 through 173-201A-260, 173-201A-320, 173-201A-602 and 173-201A-612 may be modified for a specific water body on a short-term basis (e.g., actual periods of nonattainment would generally be limited to hours or days rather than weeks or months) when necessary to accommodate essential activities, respond to emergencies, or to otherwise protect the public interest, even though such activities may result in a temporary reduction of water quality conditions.

(1) A short-term modification will:

(a) Be authorized in writing by the department, and conditioned, timed, and restricted in a manner that will minimize degradation of water quality, existing uses, and designated uses;

(b) Be valid for the duration of the activity requiring modification of the criteria and special conditions in WAC 173-201A-200 through 173-201A-260, 173-201A-602 or 173-201A-612, as determined by the department;

(c) Allow degradation of water quality if the degradation does not significantly interfere with or become injurious to existing or designated water uses or cause long-term harm to the environment; and

(d) In no way lessen or remove the proponent's obligations and liabilities under other federal, state, and local rules and regulations.

(2) The department may authorize a longer duration where the activity is part of an ongoing or long-term operation and maintenance plan, integrated pest or noxious weed management plan, water body or watershed management plan, or restoration plan. Such a plan must be developed through a public involvement process consistent with the Administrative Procedure Act (chapter 34.05 RCW) and be in compliance with SEPA, chapter 43.21C RCW, in which case the standards may be modified for the duration of the plan, or for five years, whichever is less. Such long-term plans may be renewed by the department after providing for another opportunity for public and intergovernmental involvement and review.

(3) The department may allow a major watershed restoration activity that will provide greater benefits to the health of the aquatic system in the long-term (examples include removing dams or reconnecting meander channels) that, in the short term, may cause significant impacts to existing or designated uses as a result of the activities to restore the water body and environmental conditions. Authorization will be given in accordance with subsection (2) of this section.

(4) A short-term modification may be issued in writing by the director or his/her designee to an individual or entity proposing the aquatic application of pesticides, including but not limited to those used for control of federally or state listed noxious and invasive species, and excess populations of

native aquatic plants, mosquitoes, burrowing shrimp, and fish, subject to the following terms and conditions:

(a) A request for a short-term modification shall be made to the department on forms supplied by the department. Such request shall be made at least thirty days prior to initiation of the proposed activity, and after the project proponent has complied with the requirements of the State Environmental Policy Act (SEPA);

(b) Appropriate public notice as determined and prescribed by the director or his/her designee shall be given, identifying the pesticide, applicator, location where the pesticide will be applied, proposed timing and method of application, and any water use restrictions specified in USEPA label provisions;

(c) The pesticide application shall be made at times so as to:

(i) Minimize public water use restrictions during weekends; and

(ii) Avoid public water use restrictions during the opening week of fishing season, Memorial Day weekend, Independence Day weekend, and Labor Day weekend;

(d) Any additional conditions as may be prescribed by the director or his/her designee.

(5) A short-term modification may be issued for the control or eradication of noxious weeds identified as such in accordance with the state noxious weed control law, chapter 17.10 RCW, and Control of spartina and purple loosestrife, chapter 17.26 RCW. Short-term modifications for noxious weed control shall be included in a water quality permit issued in accordance with RCW 90.48.445, and the following requirements:

(a) The department may issue water quality permits for noxious weed control to the Washington state department of agriculture (WSDA) for the purposes of coordinating and conducting noxious weed control activities consistent with WSDA's responsibilities under chapters 17.10 and 17.26 RCW. Coordination may include noxious weed control activities identified in a WSDA integrated noxious weed management plan and conducted by individual landowners or land managers.

(b) The department may also issue water quality permits to individual landowners or land managers for noxious weed control activities where such activities are not covered by a WSDA integrated noxious weed management plan.

[Statutory Authority: RCW 90.48.035. 06-23-117 (Order 06-04), § 173-201A-410, filed 11/20/06, effective 12/21/06. Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), amended and recodified as § 173-201A-410, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-110, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-110, filed 11/25/92, effective 12/26/92.]

PART IV - TOOLS FOR APPLICATION OF CRITERIA AND USES

WAC 173-201A-420 Variance. (1) The criteria established in WAC 173-201A-200 through 173-201A-260 may be modified for individual facilities, or stretches of waters, through the use of a variance. Variances may be approved by the department when:

(a) The modification is consistent with the requirements of federal law (currently 40 CFR 131.10(g) and 131.10(h));

(b) The water body is assigned variances for specific criteria and all other applicable criteria must be met; and

(c) Reasonable progress is being made toward meeting the original criteria.

(2) The decision to approve a variance is subject to a public and intergovernmental involvement process.

(3) The department may issue a variance for up to five years, and may renew the variance after providing for another opportunity for public and intergovernmental involvement and review.

(4) Variances are not in effect until they have been incorporated into this chapter and approved by the USEPA.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-420, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-430 Site-specific criteria. (1) Where the attainable condition of existing and designated uses for the water body would be fully protected using an alternative criterion, site-specific criteria may be adopted.

(a) The site-specific criterion must be consistent with the federal regulations on designating and protecting uses (currently 40 CFR 131.10 and 131.11); and

(b) The decision to approve a site-specific criterion must be subject to a public involvement and intergovernmental coordination process.

(2) The site-specific analyses for the development of a new water quality criterion must be conducted in a manner that is scientifically justifiable and consistent with the assumptions and rationale in "*Guidelines for Deriving National Water Quality Criteria for the Protection of Aquatic Organisms and their Uses*," EPA 1985; and conducted in accordance with the procedures established in the "*Water Quality Standards Handbook*," EPA 1994, as revised.

(3) The decision to approve the site-specific criterion must be based on a demonstration that it will protect the existing and attainable uses of the water body.

(4) Site-specific criteria are not in effect until they have been incorporated into this chapter and approved by the USEPA.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-430, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-440 Use attainability analysis. (1) Removal of a designated use for a water body assigned in this chapter must be based on a use attainability analysis (UAA). A UAA is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors. A use can only be removed through a UAA if it is not existing or attainable.

(2) A UAA proposing to remove a designated use on a water body must be submitted to the department in writing and include sufficient information to demonstrate that the use is neither existing nor attainable.

(3) A UAA must be consistent with the federal regulations on designating and protecting uses (currently 40 CFR 131.10).

(4) Subcategories of use protection that reflect the lower physical potential of the water body for protecting designated

uses must be based upon federal regulations (currently 40 CFR 131.10(c)).

(5) Allowing for seasonal uses where doing so would not harm existing or designated uses occurring in that or another season must be based upon federal regulations (currently 40 CFR 131.10(f)).

(6) After receiving a proposed UAA, the department will respond within sixty days of receipt with a decision on whether to proceed toward rule making.

(7) The decision to approve a UAA is subject to a public involvement and intergovernmental coordination process, including tribal consultation.

(8) The department will maintain a list of federally recognized tribes in the state of Washington. During all stages of development and review of UAA proposals, the department will provide notice and consult with representatives of the interested affected Indian tribes on a government-to-government basis, and carefully consider their recommendations.

(9) The results of a UAA are not in effect until they have been incorporated into this chapter and approved by the USEPA.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-440, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-450 Water quality offsets. (1) A water quality offset occurs where a project proponent implements or finances the implementation of controls for point or nonpoint sources to reduce the levels of pollution for the purpose of creating sufficient assimilative capacity to allow new or expanded discharges. The purpose of water quality offsets is to sufficiently reduce the pollution levels of a water body so that a proponent's actions do not cause or contribute to a violation of the requirements of this chapter and so that they result in a net environmental benefit. Water quality offsets may be used to assist an entity in meeting load allocations targeted under a pollution reduction analysis (such as a total maximum daily load) as established by the department. Water quality offsets may be used to reduce the water quality effect of a discharge to levels that are unmeasurable and in compliance with the water quality antidegradation Tier II analysis (WAC 173-201A-320).

(2) Water quality offsets may be allowed by the department when all of the following conditions are met:

(a) Water quality offsets must target specific water quality parameters.

(b) The improvements in water quality associated with creating water quality offsets for any proposed new or expanded actions must be demonstrated to have occurred in advance of the proposed action.

(c) The technical basis and methodology for the water quality offsets is documented through a technical analysis of pollutant loading, and that analysis is made available for review by the department. The methodology must incorporate the uncertainties associated with any proposed point or nonpoint source controls as well as variability in effluent quality for sources, and must demonstrate that an appropriate margin of safety is included. The approach must clearly account for the attenuation of the benefits of pollution controls as the water moves to the location where the offset is needed.

(d) Point or nonpoint source pollution controls must be secured using binding legal instruments between any involved parties for the life of the project that is being offset. The proponent remains solely responsible for ensuring the success of offsetting activities for both compliance and enforcement purposes.

(e) Only the proportion of the pollution controls which occurs beyond existing requirements for those sources can be included in the offset allowance.

(f) Water quality offsets must meet antidegradation requirements in WAC 173-201A-300 through 173-201A-330 and federal antibacksliding requirements in CFR 122.44(l).

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-450, filed 7/1/03, effective 8/1/03.]

PART V - IMPLEMENTATION OF STANDARDS

WAC 173-201A-500 Achievement considerations. To fully achieve and maintain the foregoing water quality in the state of Washington, it is the intent of the department to apply the various implementation and enforcement authorities at its disposal, including participation in the programs of the federal Clean Water Act (33 U.S.C. 1251 et seq.) as appropriate. It is also the intent that cognizance will be taken of the need for participation in cooperative programs with other state agencies and private groups with respect to the management of related problems. The department's planned program for water pollution control will be defined and revised annually in accordance with section 106 of said federal act. Further, it shall be required that all activities which discharge wastes into waters within the state, or otherwise adversely affect the quality of said waters, be in compliance with the waste treatment and discharge provisions of state or federal law.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), recodified as § 173-201A-500, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-150, filed 11/25/92, effective 12/26/92.]

WAC 173-201A-510 Means of implementation. (1) **Permitting.** The primary means to be used for controlling municipal, commercial, and industrial waste discharges shall be through the issuance of waste discharge permits, as provided for in RCW 90.48.160, 90.48.162, and 90.48.260. Waste discharge permits, whether issued pursuant to the National Pollutant Discharge Elimination System or otherwise, must be conditioned so the discharges authorized will meet the water quality standards. No waste discharge permit can be issued that causes or contributes to a violation of water quality criteria, except as provided for in this chapter.

(a) Persons discharging wastes in compliance with the terms and conditions of permits are not subject to civil and criminal penalties on the basis that the discharge violates water quality standards.

(b) Permits must be modified by the department when it is determined that the discharge causes or contributes to a violation of water quality standards. Major modification of permits is subject to review in the same manner as the originally issued permits.

(2) **Miscellaneous waste discharge or water quality effect sources.** The director shall, through the issuance of regulatory permits, directives, and orders, as are appropriate,

control miscellaneous waste discharges and water quality effect sources not covered by subsection (1) of this section.

(3) **Nonpoint source and storm water pollution.**

(a) Activities which generate nonpoint source pollution shall be conducted so as to comply with the water quality standards. The primary means to be used for requiring compliance with the standards shall be through best management practices required in waste discharge permits, rules, orders, and directives issued by the department for activities which generate nonpoint source pollution.

(b) Best management practices shall be applied so that when all appropriate combinations of individual best management practices are utilized, violation of water quality criteria shall be prevented. If a discharger is applying all best management practices appropriate or required by the department and a violation of water quality criteria occurs, the discharger shall modify existing practices or apply further water pollution control measures, selected or approved by the department, to achieve compliance with water quality criteria. Best management practices established in permits, orders, rules, or directives of the department shall be reviewed and modified, as appropriate, so as to achieve compliance with water quality criteria.

(c) Activities which contribute to nonpoint source pollution shall be conducted utilizing best management practices to prevent violation of water quality criteria. When applicable best management practices are not being implemented, the department may conclude individual activities are causing pollution in violation of RCW 90.48.080. In these situations, the department may pursue orders, directives, permits, or civil or criminal sanctions to gain compliance with the standards.

(d) Activities which cause pollution of storm water shall be conducted so as to comply with the water quality standards. The primary means to be used for requiring compliance with the standards shall be through best management practices required in waste discharge permits, rules, orders, and directives issued by the department for activities which generate storm water pollution. The consideration and control procedures in (b) and (c) of this subsection apply to the control of pollutants in storm water.

(4) **General allowance for compliance schedules.**

(a) Permits, orders, and directives of the department for existing discharges may include a schedule for achieving compliance with water quality criteria contained in this chapter. Such schedules of compliance shall be developed to ensure final compliance with all water quality-based effluent limits in the shortest practicable time. Decisions regarding whether to issue schedules of compliance will be made on a case-by-case basis by the department. Schedules of compliance may not be issued for new discharges. Schedules of compliance may be issued to allow for: (i) Construction of necessary treatment capability; (ii) implementation of necessary best management practices; (iii) implementation of additional storm water best management practices for discharges determined not to meet water quality criteria following implementation of an initial set of best management practices; (iv) completion of necessary water quality studies; or (v) resolution of a pending water quality standards' issue through rule-making action.

(b) For the period of time during which compliance with water quality criteria is deferred, interim effluent limitations shall be formally established, based on the best professional judgment of the department. Interim effluent limitations may be numeric or nonnumeric (e.g., construction of necessary facilities by a specified date as contained in an ecology order or permit).

(c) Prior to establishing a schedule of compliance, the department shall require the discharger to evaluate the possibility of achieving water quality criteria via nonconstruction changes (e.g., facility operation, pollution prevention). Schedules of compliance may in no case exceed ten years, and shall generally not exceed the term of any permit.

(5) **Compliance schedules for dams:**

(a) All dams in the state of Washington must comply with the provisions of this chapter.

(b) For dams that cause or contribute to a violation of the water quality standards, the dam owner must develop a water quality attainment plan that provides a detailed strategy for achieving compliance. The plan must include:

(i) A compliance schedule that does not exceed ten years;

(ii) Identification of all reasonable and feasible improvements that could be used to meet standards, or if meeting the standards is not attainable, then to achieve the highest attainable level of improvement;

(iii) Any department-approved gas abatement plan as described in WAC 173-201A-200 (1)(f)(ii);

(iv) Analytical methods that will be used to evaluate all reasonable and feasible improvements;

(v) Water quality monitoring, which will be used by the department to track the progress in achieving compliance with the state water quality standards; and

(vi) Benchmarks and reporting sufficient for the department to track the applicant's progress toward implementing the plan within the designated time period.

(c) The plan must ensure compliance with all applicable water quality criteria, as well as any other requirements established by the department (such as through a total maximum daily load, or TMDL, analysis).

(d) If the department is acting on an application for a water quality certification, the approved water quality attainment plan may be used by the department in its determination that there is reasonable assurance that the dam will not cause or contribute to a violation of the water quality standards.

(e) When evaluating compliance with the plan, the department will allow the use of models and engineering estimates to approximate design success in meeting the standards.

(f) If reasonable progress toward implementing the plan is not occurring in accordance with the designated time frame, the department may declare the project in violation of the water quality standards and any associated water quality certification.

(g) If an applicable water quality standard is not met by the end of the time provided in the attainment plan, or after completion of all reasonable and feasible improvements, the owner must take the following steps:

(i) Evaluate any new reasonable and feasible technologies that have been developed (such as new operational or structural modifications) to achieve compliance with the

standards, and develop a new compliance schedule to evaluate and incorporate the new technology;

(ii) After this evaluation, if no new reasonable and feasible improvements have been identified, then propose an alternative to achieve compliance with the standards, such as site specific criteria (WAC 173-201A-430), a use attainability analysis (WAC 173-201A-440), or a water quality offset (WAC 173-201A-450).

(h) New dams, and any modifications to existing facilities that do not comply with a gas abatement or other pollution control plan established to meet criteria for the water body, must comply with the water quality standards at the time of project completion.

(i) Structural changes made as a part of a department approved gas abatement plan to aid fish passage, described in WAC 173-201A-200 (1)(f)(ii), may result in system performance limitations in meeting water quality criteria for that parameter at other times of the year.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), amended and recodified as § 173-201A-510, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), § 173-201A-160, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-160, filed 11/25/92, effective 12/26/92.]

WAC 173-201A-520 Monitoring and compliance. A continuing surveillance program, to ascertain whether the regulations, waste disposal permits, orders, and directives promulgated and/or issued by the department are being complied with, will be conducted by the department staff as follows:

(1) Inspecting treatment and control facilities.

(2) Monitoring and reporting waste discharge characteristics.

(3) Monitoring receiving water quality.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), Amended and recodified as § 173-201A-520, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-170, filed 11/25/92, effective 12/26/92.]

WAC 173-201A-530 Enforcement. To insure that the provisions of chapter 90.48 RCW, the standards for water quality promulgated herein, the terms of waste disposal permits, and other orders and directives of the department are fully complied with, the following enforcement tools will be relied upon by the department, in cooperation with the attorney general as it deems appropriate:

(1) Issuance of notices of violation and regulatory orders as provided for in RCW 90.48.120.

(2) Initiation of actions requesting injunctive or other appropriate relief in the various courts of the state as provided for in RCW 90.48.037.

(3) Levying of civil penalties as provided for in RCW 90.48.144.

(4) Initiation of a criminal proceeding by the appropriate county prosecutor as provided for in RCW 90.48.140.

(5) Issuance of regulatory orders or directives as provided for in RCW 90.48.240.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), recodified as § 173-201A-530, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), § 173-201A-180, filed 11/25/92, effective 12/26/92.]

PART VI - USE DESIGNATIONS FOR WATERS OF THE STATE

WAC 173-201A-600 Use designations—Fresh waters. (1) **All surface waters of the state not named in Table 602 are to be protected for the designated uses of: Salmonid spawning, rearing, and migration; primary contact recreation; domestic, industrial, and agricultural water supply; stock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values.**

(a) **Additionally, the following waters are also to be protected for the designated uses of: Core summer salmonid habitat; and extraordinary primary contact recreation:**

(i) **All surface waters lying within national parks, national forests, and/or wilderness areas;**

(ii) **All lakes and all feeder streams to lakes (reservoirs with a mean detention time greater than fifteen days are to be treated as a lake for use designation);**

(iii) **All surface waters that are tributaries to waters designated core summer salmonid habitat; or extraordinary primary contact recreation; and**

(iv) **All fresh surface waters that are tributaries to extraordinary quality marine waters (WAC 173-201A-610 through 173-201A-612).**

(2) The water quality standards for surface waters for the state of Washington do not apply to segments of waters that are on Indian reservations.

Table 600 (Key to Table 602)

Abbreviation	General Description
Aquatic Life Uses:	(see WAC 173-201A-200(1))
Char Spawning/Rearing	**Char spawning and rearing.** The key identifying characteristics of this use are spawning or early juvenile rearing by native char (bull trout and Dolly Varden), or use by other aquatic species similarly dependent on such cold water. Other common characteristic aquatic life uses for waters in this category include summer foraging and migration of native char; and spawning, rearing, and migration by other salmonid species.
Core Summer Habitat	**Core summer salmonid habitat.** The key identifying characteristics of this use are summer (June 15 - September 15) salmonid spawning or emergence, or adult holding; use as important summer rearing habitat

Table 600 (Key to Table 602)

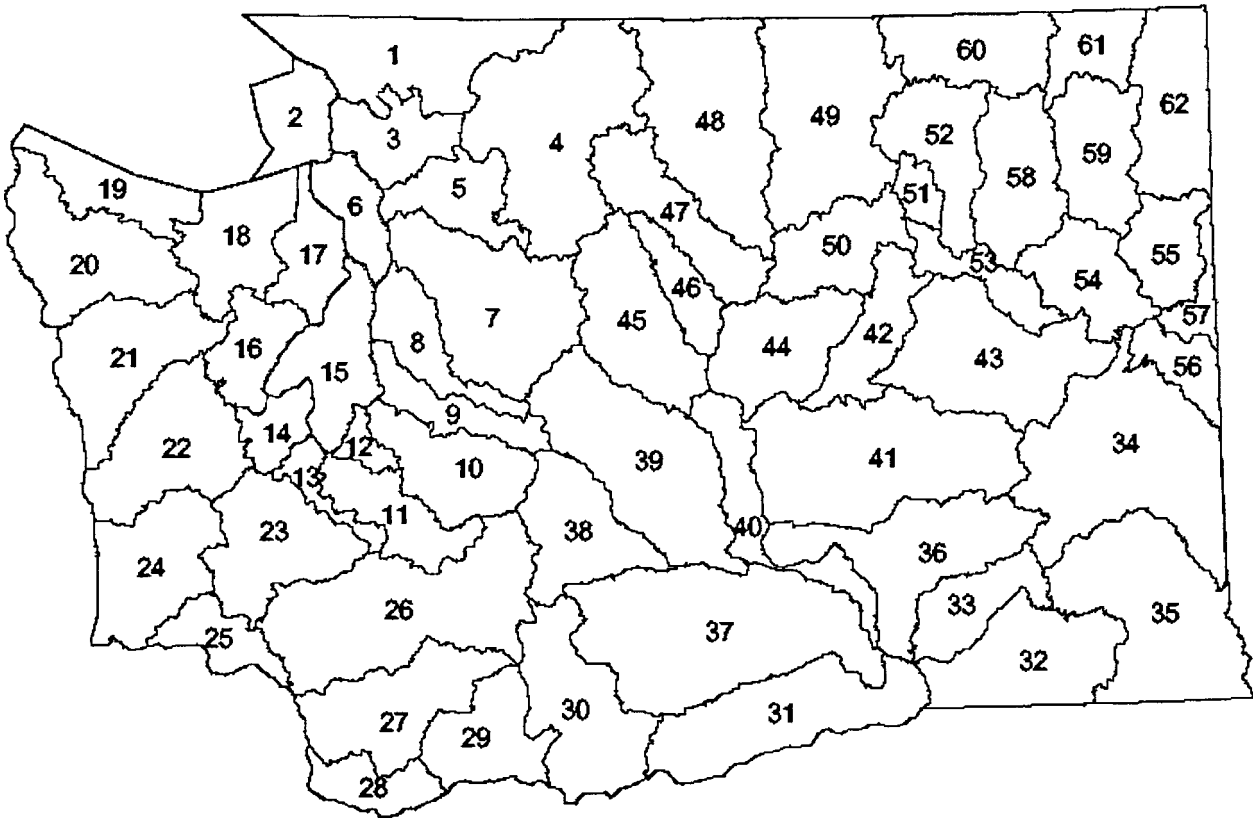
Abbreviation	General Description
	by one or more salmonids; or foraging by adult and subadult native char. Other common characteristic aquatic life uses for waters in this category include spawning outside of the summer season, rearing, and migration by salmonids.
Spawning/Rearing	**Salmonid spawning, rearing, and migration.** The key identifying characteristic of this use is salmon or trout spawning and emergence that only occurs outside of the summer season (September 16 - June 14). Other common characteristic aquatic life uses for waters in this category include rearing and migration by salmonids.
Rearing/Migration Only	**Salmonid rearing and migration only.** The key identifying characteristic of this use is use only for rearing or migration by salmonids (not used for spawning).
Redband Trout	**Non-anadromous interior redband trout.** For the protection of waters where the only trout species is a non-anadromous form of self-reproducing interior redband trout (*O. mykis*), and other associated aquatic life.
Warm Water Species	**Indigenous warm water species.** For the protection of waters where the dominant species under natural conditions would be temperature tolerant indigenous nonsalmonid species. Examples include dace, redside shiner, chiselmouth, sucker, and northern pikeminnow.
Recreational Uses:	(see WAC 173-201A-200(2))
Extraordinary Primary Cont.	Extraordinary quality primary contact waters. Waters providing extraordinary protection against waterborne disease or that serve as tributaries to extraordinary quality shellfish harvesting areas.
Primary Cont.	Primary contact recreation.
Secondary Cont.	Secondary contact recreation.
Water Supply Uses:	(see WAC 173-201A-200(3))
Domestic Water	Domestic water supply.
Industrial Water	Industrial water supply.
Agricultural Water	Agricultural water supply.
Stock Water	Stock watering.
Miscellaneous Uses:	(see WAC 173-201A-200(4))
Wildlife Habitat	Wildlife habitat.
Harvesting	Fish harvesting.
Commerce/Navigation	Commerce and navigation.
Boating	Boating.
Aesthetics	Aesthetic values.

[Statutory Authority: RCW 90.48.035. 06-23-117 (Order 06-04), § 173-201A-600, filed 11/20/06, effective 12/21/06. Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-600, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-602 Table 602—Use designations for fresh waters by water resource inventory area (WRIA). (1) Table 602 lists uses for fresh waters. All surface waters of the state have designated uses assigned to them for protection under this chapter. Table 602 lists use designations for specific fresh waters. Fresh waters not assigned designated uses in Table 602 have their designated uses assigned in accordance with WAC 173-201A-600 and 173-201A-260(3). In Table 602, the Columbia River is listed first, followed by other water bodies listed by WRIA. Only the uses with the most stringent criteria are listed. The criteria notes in Table 602 take precedence over the criteria in WAC 173-201A-200 for same parameter.

(2) Table 602 is necessary to determine and fully comply with the requirements of this chapter. If you are viewing a paper copy of the rule from the office of the code reviser or are using their web site, Table 602 may be missing (it will instead say "place illustration here"). In this situation, you may view Table 602 at the department of ecology's web site at www.ecy.wa.gov, or request a paper copy of the rule with Table 602 from the department of ecology or the office of the code reviser.

Illustration 1: Water Resources Inventory Area Map



Key:			
1. Nooksack	21. Queets/Quinault	41. Lower Crab	61. Upper Lake Roosevelt
2. San Juan	22. Lower Chehalis	42. Grand Coulee	62. Pend Oreille
3. Lower Skagit/Samish	23. Upper Chehalis	43. Upper Crab/Wilson	
4. Upper Skagit	24. Willapa	44. Moses Coulee	
5. Stillaguamish	25. Grays/Elochoman	45. Wenatchee	
6. Island	26. Cowlitz	46. Entiat	
7. Snohomish	27. Lewis	47. Chelan	
8. Cedar/Sammamish	28. Salmon/Washougal	48. Methow	
9. Duwamish/Green	29. Wind/White Salmon	49. Okanogan	
10. Puyallup/White	30. Klickitat	50. Foster	
11. Nisqually	31. Rock/Glade	51. Nespelem	
12. Chambers/Clover	32. Walla Walla	52. Sanpoil	
13. Deschutes	33. Lower Snake	53. Lower Lake Roosevelt	
14. Kennedy/Goldsborough	34. Palouse	54. Lower Spokane	
15. Kitsap	35. Middle Snake	55. Little Spokane	
16. Skokomish/ Dosewallips	36. Esquatzel Coulee	56. Hangman	
17. Quilcene/Snow	37. Lower Yakima	57. Middle Spokane	
18. Elwha/Dungeness	38. Naches	58. Middle Lake Roosevelt	
19. Lyre/Hoko	39. Upper Yakima	59. Colville	
20. Soleduck/Hoh	40. Alkaki/Squilchuck	60. Kettle	

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
COLUMBIA RIVER																		
Columbia River from mouth to the Washington-Oregon border (river mile 309.3).[1]			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Columbia River from Washington-Oregon border (river mile 309.3) to Grand Coulee Dam (river mile 596.6).[2,3]			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Columbia River from Grand Coulee Dam (river mile 596.6) to Canadian border (river mile 745.0).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for Columbia River:																		
1. Temperature shall not exceed a 1-day maximum (1-DMax) of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed 0.3°C due to any single source or 1.1°C due to all such activities combined. Dissolved oxygen shall exceed 90 percent of saturation. Special condition - special fish passage exemption as described in WAC 173-201A-200 (1)(f).																		
2. From Washington-Oregon border (river mile 309.3) to Priest Rapids Dam (river mile 397.1). Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed $t = 34/(T + 9)$.																		
3. From Washington-Oregon border (river mile 309.3) to Grand Coulee Dam (river mile 596.6). Special condition - special fish passage exemption as described in WAC 173-201A-200 (1)(f).																		
WRIA 1 - Nooksack																		
Bertrand Creek from mouth to Canadian border		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Breckenridge Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Chilliwack River and Little Chilliwack River: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Chuckanut Creek from mouth to headwaters		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Colony Creek and tributaries from mouth to headwaters		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dakota Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dale Creek		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Deer Creek (tributary to Barrett Lake) and tributaries		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Depot Creek and tributaries	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Fishtrap Creek from mouth to Canadian border		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hutchinson Creek and tributaries.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Johnson Creek, unnamed tributary just north of Pangborn Road watershed		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Nooksack River mainstem from mouth to Anderson Creek.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Nooksack River and tributaries [except where otherwise designated Char] from and including Anderson Creek (latitude 48.8675 longitude -122.3210) to junction with South Fork.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Nooksack River, North Fork, and all tributaries, upstream to the junction with Maple creek (RM 49.7) .		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Nooksack River, North Fork, and all tributaries above and including Maple Creek (RM 49.7) and tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Nooksack River, Middle Fork, and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Nooksack River, South Fork, from mouth to Skookum Creek (river mile 14.3).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Nooksack River, South Fork, from Skookum Creek (river mile 14.3) to Fobes Creek.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Nooksack River, South Fork, and all tributaries above the junction at Fobes Creek.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Padden Creek and tributaries from mouth to headwaters		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Pepin Creek from mouth to Canadian border		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Saar Creek from latitude 48.9490 longitude -122.2252 to headwaters		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Silesia Creek and all tributaries south of Canadian border.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Skookum Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Squaw Creek		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Squalicum Creek, unnamed tributary from latitude 48.7862 longitude -122.4864 to headwaters		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stickney Creek (Slough) and Kamm Ditch from confluence with mainstem Nooksack River to headwaters.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

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TABLE 602	Aquatic Life Uses							Recreation Uses		Water Supply Uses				Misc. Uses			
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Sumas River from Canadian border (river mile 12) to headwaters (river mile 23) except where designated otherwise.			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Tennile Creek below Barrett Lake		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Tomyhoi Creek and tributaries from Canadian border to headwaters.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Whatcom Creek and tributaries from mouth to outlet of Lake Whatcom.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 2 San Juan																			
There are no specific waterbody entries for this WRIA.																			
WRIA 3 Lower Skagit-Samish																			
Fisher Creek and tributaries.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hansen Creek and tributaries.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Nookachamps Creek and tributaries (except where designated char).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Nookachamps Creek, East Fork, and unnamed creek at latitude 48.4103 longitude -122.1657: All waters (including tributaries) above the junction.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Samish River and tributaries above latitude 48.5472 longitude -122.3378 (Sect 18 T36 R4E).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Skagit River mainstem from mouth to Skiyou Slough-lower end (river mile 25.6).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Skagit River, all tributaries to the mainstem from the mouth to Skiyou Slough-lower end (river mile 25.6); except where designated otherwise.			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Skagit River and tributaries from Skiyou Slough-lower end, (river mile 25.6) to the boundary of WRIA 3 and 4, except the other waters listed for this WRIA.[1]		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Walker Creek and unnamed creek at latitude 48.3813 longitude -122.1639: All waters (including tributaries) above the junction.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 3:																			
1. Skagit River (Gorge by-pass reach) from Gorge Dam (river mile 96.6) to Gorge Powerhouse (river mile 94.2). Temperature shall not exceed a 1-DMax of 21°C due to human activities. When natural conditions exceed a 1-DMax of 21°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C, nor shall such temperature increases, at any time, exceed $t = 34/(T + 9)$.																			
WRIA 4 Upper Skagit																			

3

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Bacon Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Baker Lake and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Bear Creek and the unnamed outlet creek of Blue Lake: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Big Beaver Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Big Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Buck Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cascade River and Boulder Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Circle Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Clear Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Diobsud Creek and the unnamed tributary at longitude -121.4414 and latitude 48.5850: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Goodell Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Hozomeen Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Illabot Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Jordan Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Lightning Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Little Beaver Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Murphy Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Newhalem Creek, and all tributaries	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Rocky Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Ruby Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Sauk River and Dutch Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Silver Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Skagit River and tributaries, except where listed otherwise for this WRIA.[1]		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

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TABLE 602	Aquatic Life Uses						Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Stetattle Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Straight Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Suiattle River all tributaries above Harriet Creek.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Sulfur Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tenas Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Thunder Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
White Chuck River and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 4:																		
1. Skagit River (Gorge by-pass reach) from Gorge Dam (river mile 96.6) to Gorge Powerhouse (river mile 94.2). Temperature shall not exceed a 1-DMax of 21°C due to human action. When natural conditions exceed a 1-DMax of 21°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C, nor shall such temperature increases, at any time, exceed $t = 34/(T + 9)$.																		
WRIA 5 Stillaguamish																		
Brooks Creek and the unnamed tributary at latitude 48.2967 longitude -121.9031: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Canyon Creek above unnamed tributary at latitude 48.1242 longitude -121.8894 (Sect. 34 T31N R7E) to headwaters (including tributaries).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Canyon Creek's unnamed tributaries at latitude 48.1459 longitude -121.9648.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Unnamed tributaries at latitude 48.1461 longitude -122.9649 located upstream of unnamed tributary at river mile 3 of Canyon Creek	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Crane Creek and unnamed tributary at latitude 48.3330 longitude -121.1000: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Crane Creek's unnamed tributaries at latitude 48.3315 longitude -121.1030: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cub Creek and the unnamed tributary at latitude 48.1655 longitude -121.9376: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Deer Creek (on N.F. Stillaguamish) and the unnamed tributary at longitude -121.9565 and latitude 48.3195: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Dicks Creek and unnamed outlet of Myrtle Lake at latitude 48.3187 longitude -121.8129: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Jim Creek and Little Jim Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Jorgenson Slough (Church Creek) from latitude 48.2347 longitude -121.3530 between West Pass and Hat Slough: All waters (including tributaries) above the junction.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Lake Cavanaugh and all tributaries above outlet at latitude 48.3127 longitude -121.9802.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Pilchuck Creek and Bear Creek: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Pilchuck Creek's unnamed tributaries at latitude 48.3104 longitude -122.1305: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Pilchuck Creek from latitude 48.2395 longitude -122.2015 (above 268th St) to headwaters including tributaries(except where designated Char)		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Unnamed tributary to Portage Creek at latitude 48.1837 longitude -122.2314: All waters (including tributaries) above the junction		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stillaguamish River from mouth to junction of north and south forks (river mile 17.8).			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stillaguamish River, North Fork, from mouth to Boulder River (including tributaries) except where designated Char.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stillaguamish River, North Fork, and Boulder River: All waters (including tributaries) from the junction up to Squire Creek, downstream of the Mt. Baker Snoqualmie National Forest.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stillaguamish River, North Fork, and Boulder River: All waters (including tributaries) from the junction up to Squire Creek that are in or above the Mt. Baker Snoqualmie National Forest.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Stillaguamish River, North Fork, from Squire Creek (river mile 31.2) to headwaters, including all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses					Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water		Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Stillaguamish River, South Fork, from mouth to Canyon Creek (river mile 33.7).		✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Stillaguamish River, South Fork, from Canyon Creek (river mile 33.7) to the unnamed tributary at latitude 48.0921 longitude -121.8797 (near Cranberry Creek).		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Stillaguamish River, South Fork, and the unnamed tributary at latitude 48.0921 longitude -121.8797 (near Cranberry Creek): All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
WRIA 6 Island																				
There are no specific waterbody entries for this WRIA.																				
WRIA 7 Snohomish																				
Cherry Creek and tributaries from mouth to headwaters.		✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Cripple Creek and all tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Kelly Creek and tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Miller River, East Fork, and West Fork Miller River: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
North Fork Creek and unnamed creek at latitude 47.7409 longitude -121.8231 (Sect. 18 T26N R8E): All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Pilchuck River from mouth to Boulder Creek.		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Pilchuck River and Boulder Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Pratt River and all tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Skykomish River and tributaries from mouth to May Creek (above Gold Bar at river mile 41.2).		✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Skykomish River and May Creek (above Gold Bar at river mile 41.2): All waters (including tributaries) above junction (Except where designated Char).		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Skykomish River, North Fork, beginning below Salmon Creek at latitude 47.8790 longitude –121.4594) to headwaters (including tributaries).	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Skykomish River, South Fork, and Beckler River: All waters (including	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses					Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water		Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
tributaries) above the junction.																				
Snohomish River from mouth and east of longitude 122°13'40"W upstream to latitude 47°56'30"N (southern tip of Ebey Island at river mile 8.1).[1]			✓						✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Snohomish River from latitude 47°56'30"N (southern tip of Ebey Island at river mile 8.1) to below Pilchuck Creek at latitude 47.9045 longitude -122.0917.			✓						✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Snohomish River from below Pilchuck Creek (latitude 47. 9045 longitude - 122.0917) to confluence with Skykomish and Snoqualmie River (river mile 20.5).		✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Snoqualmie River from mouth to junction with Harris Creek (latitude 47.7686 longitude -121.9605; Sect.5 T25N R6E)			✓						✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Snoqualmie River and tributaries from and including Harris Creek (latitude 47.7686 longitude -121.9605; Sect.5 T25N R6E) to west boundary of Twin Falls State Park on south fork (river mile 9.1).		✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Snoqualmie River, South Fork, from west boundary of Twin Falls State Park (river mile 9.1) to headwaters (including tributaries).		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Snoqualmie River, North Fork, from mouth to Sunday Creek.		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Snoqualmie River, North Fork, and Sunday Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Snoqualmie River, Middle Fork, from mouth to Dingford Creek (Except where designated char).		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Snoqualmie River, Middle Fork, and Dingford Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Snoqualmie River's Middle Fork's unnamed tributaries at latitude 47.5389 longitude -121.5629 (Sect. 29 T24N R10E).	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Sultan River and tributaries from mouth to Chaplain Creek (river mile 5.9).		✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Sultan River and tributaries from Chaplain Creek (river mile 5.9) to headwaters.[2]		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Taylor River and all tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Tolt River, North Fork, and unnamed creek at latitude 47.7183 longitude - 121.7775: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses			
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Tolt River, South Fork, and tributaries from mouth to west boundary of Sec. 31-T26N-R9E (river mile 6.9).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tolt River, South Fork, and tributaries from west boundary of Sec. 31-T26N-R9E (river mile 6.9) to headwaters, except for the waters specifically listed in this table: South Fork Tolt River and South Fork Tolt River's unnamed tributaries.[3]		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tolt River, South Fork, and unnamed creek at latitude 47.6925 longitude - 121.7392: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tolt River's South Fork's unnamed tributaries at latitude 47.6889 longitude - 121.7856 (Sect.33 T26N R8E).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Trout Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 7:																		
1. Fecal coliform organism levels shall both not exceed a geometric mean value of 200 colonies/100 mL and not have more than 10 percent of the samples obtained for calculating the mean value exceeding 400 colonies/100 mL.																		
2. No waste discharge will be permitted above city of Everett Diversion Dam (river mile 9.4).																		
3. No waste discharge will be permitted for the South Fork Tolt River and tributaries from west boundary of Sec. 31-T26N-R9E (river mile 6.9) to headwaters.																		
WRIA 8 Cedar-Sammamish																		
Cedar River from Lake Washington to the Maplewood Bridge (river mile 4.1).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cedar River and tributaries from the Maplewood Bridge (river mile 4.1) to Landsburg Dam (river mile 21.6).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cedar River and tributaries from Landsburg Dam (river mile 21.6) to Chester Morse Lake.[1]		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cedar River at Chester Morse Lake Cedar Falls Dam: All waters (including tributaries) to headwaters.[2]	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Holder Creek and the unnamed tributary at latitude 47.4581 longitude -121.9496: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Issaquah Creek from Lake Sammamish to headwaters (including tributaries) except where designated Char.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Lake Washington Ship Canal from Government Locks (river mile 1.0) to Lake Washington (river mile 8.6).[3,4]		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 8:																		
1. No waste discharge will be permitted.																		
2. No waste discharge will be permitted.																		
3. Salinity shall not exceed one part per thousand (1.0 ppt) at any point or depth along a line that transects the ship canal at the University Bridge (river mile 6.1).																		
4. This waterbody is to be treated as a Lakes for purposes of applying this chapter.																		
WRIA 9 Duwamish-Green																		
Duwamish River from mouth south of a line bearing 254° true from the NW corner of berth 3, terminal No. 37 to the Black River (river mile 11.0) (Duwamish River continues as the Green River above the Black River).				✓					✓		✓	✓	✓	✓	✓	✓	✓	✓
Green River from and including the Black River (river mile 11.0 and point where Duwamish River continues as the Green River) to latitude 47.3699 longitude - 122.246 (Sect. 25 T22N R4E) above junction with unnamed tributary.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Green river from above junction with unnamed tributary at latitude 47.3699 longitude -122.2461 (Sect. 25 T22N R4E) (east of the West Valley highway) to west boundary of Flaming Geyser State Park (including all tributaries)		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Green River from W. Boundary of Flaming Geyser State Park to headwaters (including tributaries) except where designated Char, Core, and Ex. Primary:		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Green River and Sunday Creek: All waters (including tributaries) above the junction.[1]	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Smay Creek and West Fork Smay Creek: All waters (including tributaries) above the junction.[1]	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 9:																		
1. No waste discharge will be permitted for the Green River and tributaries (King County) from west boundary of Sec. 13-T21N-R7E (river mile 59.1) to headwaters.																		
WRIA 10 Puyallup-White																		

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TABLE 602	Aquatic Life Uses							Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Carbon River and tributaries above latitude 46.9998 longitude -121.0794, downstream of the Snoqualmie National Forest or Mt. Rainier National Park.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Carbon River and tributaries above latitude 46.9998 longitude -121. 9794 that are in or above the Snoqualmie National Forest or Mt. Rainier National Park.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Clarks Creek upstream of tribal reservation.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Clear Creek and tributaries upstream of tribal reservation.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Clearwater River and Milky Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Greenwater River from junction with White River to headwaters (including all tributaries).	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Puyallup River from mouth to river mile 1.0.				✓						✓		✓	✓	✓	✓	✓	✓	✓	✓
Puyallup River from river mile 1.0 to junction with White River.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Puyallup River and tributaries from junction with White River to Mowich River (Except where designated char).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Puyallup River at and including Mowich River: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
South Prairie Creek and all tributaries above the Kepka Fishing Pond, except those waters in or above the Snoqualmie National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
South Prairie Creek and all tributaries above the-Kepka Fishing Pond that are in or above the Snoqualmie National Forest.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Swan Creek upstream of tribal reservation.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Voight Creek and Bear Creek: All waters (including tributaries) above the junction, that are downstream of the Snoqualmie National Forest or Mt. Rainier National Park.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Voight Creek and Bear Creek: All waters (including tributaries) above the junction that are in or above the Snoqualmie National Forest or Mt. Rainier National Park.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
White River from mouth to latitude 47.2438 longitude -122.2422 (Sect. 1 T20N			✓						✓										

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses					Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water		Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
R4E).																				
White River from latitude 47.2438 longitude -122.2422 (Sect. 1 T20N R4E) to Mud Mountain dam (including tributaries).		✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
White River from Mud Mountain Dam (river mile 27.1) to West Fork White River at (latitude 47. 3699 longitude -121.6197) except where designated Char.		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
White River from and including West Fork White River: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Wilkeson Creek and Gale Creek: All waters (including tributaries) above the junction, except those waters in or above the Snoqualmie National Forest.	✓								✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Wilkeson Creek and Gale Creek: All waters (including tributaries) above the junction that are in or above the Snoqualmie National Forest.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
WRIA 11 Nisqually																				
Big Creek and all tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Copper Creek and all tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
East Creek and all tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Horn Creek and tributaries			✓						✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Little Nisqually River and all tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Mashel River and Little Mashel River: All waters (including tributaries) above the junction.	✓								✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Mineral Creek and all tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Muck Creek and tributaries		✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Murray Creek and tributaries			✓								✓	✓	✓	✓		✓	✓	✓	✓	✓
Nisqually River mainstem from mouth to Alder Dam (river mile 44.2).		✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	✓
Nisqually River from Alder Dam (river mile 44.2) to Tahoma Creek (including tributaries) except where designated Char.		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Nisqually River and Tahoma Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓

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TABLE 602	Aquatic Life Uses						Recreation Uses		Water Supply Uses				Misc. Uses			
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Rocky Slough from latitude 46.8882 longitude -122.4339 to latitude 46.9109 longitude -122.4012.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Tanwax Creek and tributaries downstream of lakes			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 12 Chambers-Clover																		
Clover Creek from outlet of Lake Spanaway to inlet of Lake Steilacoom.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 13 Deschutes																		
Deschutes River from mouth to and including tributary to Offutt Lake.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Deschutes River, and tributaries, upstream of the tributary to Offutt Lake (all waters in or above the national forest boundary).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Deschutes River, and tributaries, upstream of the tributary to Offutt Lake (all waters below the national forest boundary).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 14 Kennedy-Goldsborough																		
Campbell Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Coffee Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cranberry Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Deer Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Goldsborough Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hiawata Creek and tributaries			✓					✓										
Jarrell Creek and tributaries			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
John's Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Jones Creek and tributaries			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Malaney Creek (at Spencer Lake)		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
McLane Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mill Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Perry Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Shelton Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Uncle Johns Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Unnamed stream (latitude 47.2237 longitude -122.9135) at Peale Passage inlet on west side of Hartstene Island.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 15 Kitsap																		
Anderson Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Barker Creek and tributaries from Dyes Inlet to Island Lake		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Blackjack Creek and tributaries downstream of Square Lake		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Chico Creek and tributaries above junction with Kitsap Creek (tributaries to Chico Bay in Dyes Inlet).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Clear Creek from Dyes Inlet to headwaters (including tributaries)		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Gamble Creek and tributaries (latitude 47.8116 longitude -122.5797).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Gorst Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Martha John Creek and tributaries (latitude 47.8252 longitude -122.5632).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ross Creek and tributaries		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Strawberry Creek and tributaries (latitude 47.6458 longitude -122.6933)		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Union River and tributaries from Bremerton Waterworks Dam (river mile 6.9) to headwaters.[1]		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Unnamed tributary to Sinclair Inlet between Gorst and Anderson Creeks (latitude 47.5270 longitude -122.6932).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Unnamed tributary to Sinclair Inlet (latitude 47.5471 longitude -122.6123) east of Blackjack Creek			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Unnamed tributary west of Port Gamble Bay at latitude 47.8195 longitude -122.5848.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 15:																		
1. No waste discharge will be permitted.																		
WRIA 16 Skokomish-Dosewallips																		

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Dosewallips River and tributaries.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Duckabush River and tributaries.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Hamma Hamma River and tributaries.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Rock Creek and unnamed tributary at latitude 47.3894 longitude -123.3496: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Skokomish River and tributaries, except where designated char.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Skokomish River, North Fork, from latitude 47.4160 longitude -123.2233 (below Cushman Upper Dam) to headwaters (including tributaries).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Skokomish River, South Fork, and Brown Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Vance Creek and Cabin Creek all waters above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 17 Quilcene-Snow																		
Big Quilcene River and tributaries.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 18 Elwha-Dungeness																		
Boulder Creek and Deep Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Dungeness River mainstem from mouth to Canyon Creek (river mile 10.8).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dungeness River, tributaries to mainstem, above and between confluence with Matriotti Creek to Canyon Creek (river mile 10.8).			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dungeness River and Canyon Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Elwha River and tributaries from mouth to Cat Creek, except where designated Char.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Elwha River and Cat Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Ennis Creek and White Creek (and all tributaries) from the junction with the Strait of Juan De Fuca to the Olympic National Park Boundary.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ennis Creek and tributaries lying above the Olympic National Park Boundary.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Griff Creek and the unnamed tributary at latitude 48.0135 longitude -123.5440 (Sect. 11 T29N R7W): All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Hughes Creek and the unnamed tributary at latitude 48.0298 longitude -123.6322 (Sect. 6 T29N R7W): All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Little River and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Matriotti Creek		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Wolf Creek and the unnamed tributary at latitude 47.9654 longitude -123.5374 (Sect. 35 T29N R7W): All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 19 Lyre-Hoko																		
There are no specific waterbody entries for this WRIA.																		
WRIA 20 Soleduc																		
Dickey River and tributaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hoh River and tributaries from mouth to South Fork Hoh River.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Hoh River and South Fork Hoh River: All waters above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Quillayute River.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Soleduck River and tributaries from mouth to Canyon Creek.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Soleduck River and all tributaries above Canyon Creek.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 21 Queets-Quinault																		
Clearwater River and the unnamed tributary at latitude 47.7270 longitude - 124.0361 (Sect.26 T26N R11W): All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Kunamakst Creek and the unnamed tributary at latitude 47.7285 longitude - 124.0771 (Sect.26 T26N R11W): All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Matheny Creek and the unnamed tributary at latitude 47.5592 longitude - 123.9538: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Queets River and tributaries from mouth to Tshletshy Creek.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

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TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Queets River and tributaries above the junction with Tshletshy Creek.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Quinault River and tributaries from mouth to the junction with the North Fork Quinalt River.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Quinault River and North Fork Quinault: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Salmon River, Middle Fork, and the unnamed tributary at latitude 47.5208 longitude -123.9899: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Sams River and the unnamed tributary at latitude 47.6059 longitude -123.8941: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Sollecks River and the unnamed tributary at latitude 47.6937 longitude -124.0133: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Stequaleho Creek and the unnamed tributary at latitude 47.6620 longitude -124.0426: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tshletshy Creek and the unnamed tributary at latitude 47.6585 longitude -123.8668: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 22 Lower Chehalis																			
Andrews Creek and tributaries above junction with West Fork.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Baker Creek and the unnamed tributary at latitude 47.3301 longitude -123.4142: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Big Creek and Middle Fork Big Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Canyon River and the unnamed tributary at latitude 47.3473 longitude -123.4936: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Chehalis River from upper boundary of Grays Harbor at Cosmopolis (river mile 3.1, longitude 123°45'45"W) to latitude 46.6004 and longitude -123.1472 (Section 23 T13N R43W on main stem and to latitude 46.6013 and longitude -123.1253 on South Fork..			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Chester Creek and the unnamed tributary at latitude 47.4196 longitude -123.7841: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Cloquallum Creek.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Decker Creek.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Delezene Creek and tributaries above latitude 46.9413 longitude -123.3893.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Elk River, West Branch and tributaries above latitude 46.8111 longitude -123.9774.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Goforth Creek and the unnamed tributary at latitude 47.3560 longitude -123.7323: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Hoquiam River, East Fork and tributaries above latitude 47.0524 longitude -123.8428 (above Lytle Creek).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hoquiam River and tributaries above latitude 47.0571 longitude -123.9287 (above river mile 9.3 - Dekay Road Bridge) (upper limit of tidal influence).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hoquiam River, Middle Fork and tributaries above latitude 47.0418 longitude -123.9052.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hoquiam River mainstem (continues as west fork above east fork) from mouth to river mile 9.3 - Dekay Road Bridge) (upper limit of tidal influence).				✓					✓		✓	✓	✓	✓	✓	✓	✓	✓
Humptulips River and tributaries from mouth to latitude 47.0810 longitude -124.0655 (Section 4 T18N R11W).			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Humptulips River and tributaries from latitude 47.0810 longitude -124.0655 (Section 4 T18N R11W) to Olympic National Forest boundary (except where designated Char) .		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Humptulips River and tributaries from Olympic National Forest boundary to headwaters (except where designated Char) .		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Humptulips River, East Fork, and the unnamed tributary at latitude 47.3821 longitude -123.7163: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Humptulips River, West Fork, and Petes Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Johns River and North Fork Johns River: All waters above the junction.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Little Hoquiam River, North Fork and tributaries above latitude 47.0001 longitude -123.9269.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

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TABLE 602	Aquatic Life Uses							Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Little Hoquiam River and tributaries above latitude 46.9934 longitude -123.9364.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mox Chehalis Creek and tributaries above and latitude 46.9680 longitude -123.3083.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Newskah Creek and tributaries above latitude 46.9163 longitude -123.8235 (Section 32 T16N R9W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Satsop River and tributaries from latitude 46.9854 longitude -123.4887 (Section 6 T17N R6W) to headwaters, except where designated Char.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Satsop River, West Fork, and Robertson Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Satsop River, Middle Fork, and the unnamed tributary at latitude 47.3340 longitude -123.4451: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Wildcat Creek and tributaries above junction with Cloquallum Creek.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Wishkah River, East Fork and tributaries above latitude 47.0801 longitude -123.7560.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Wishkah River from mouth to river mile 6 (SW 1/4 SW 1/4 NE 1/4 Sec. 21-T18N-R9W).				✓						✓		✓	✓	✓	✓	✓	✓	✓	✓
Wishkah River from river mile 6 (SW 1/4 SW 1/4 NE 1/4 Sec. 21-T18N-R9W) to latitude 47.1089 longitude -123.7908.			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Wishkah River from river and tributaries from latitude 47.1089 longitude -123.7908 to junction with West Fork.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Wishkah River and tributaries from and including West Fork to headwaters.[1]		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Wynoochee River and tributaries from latitude 46.9709 longitude -123.6252 to (near railroad crossing) ~~mouth~~ to Olympic National Forest boundary (river mile 45.9).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Wynoochee River and tributaries from Olympic National Forest boundary (river mile 45.9) to Wynoochee Dam.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Wynoochee River and all tributaries above Wynoochee Dam.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 22:																			

TABLE 602	Aquatic Life Uses						Recreation Uses		Water Supply Uses				Misc. Uses			
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
1. No waste discharge will be permitted from south boundary of Sec. 33-T21N-R8W (river mile 32.0) to headwaters.																		
WRIA 23 Upper Chehalis																		
Bunker Creek and tributaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cedar Creek and tributaries above latitude 46.8760 longitude -123.2714 (near intersection with Highway 12).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Chehalis River, South Fork (including tributaries) above latitude 46.6014 longitude -123.1253 (near junction with State Route 6), except where specifically designated Char.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Chehalis River (including tributaries) above latitude 46.6004 longitude -123.1473 (Section 23 T13N R4W, except where specifically designated Char.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Chehalis River mainstem from upper boundary of Grays Harbor at Cosmopolis (river mile 3.1, longitude 123°4545"W) to latitude 46.6004 longitude -123.1473 (Section 23 T13N R4W on main stem and to latitude 46.6014 longitude -123.1253 on South Fork.[1]			✓					✓		✓	✓	✓	✓		✓	✓	✓	✓
Chehalis River, South Fork, and the unnamed tributary at latitude 49.179 longitude -123.4127 (Sect. 10 T10N R4W): All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Chehalis River, West Fork, and East Fork Chehalis River: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Coffee Creek and tributaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Eight Creek and the unnamed tributary at latitude 46.6211 longitude -123.4127: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Fall Creek and the unnamed tributary at Sect. 22 T15N R1E: All waters (including tributaries) above their junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Garrard Creek, South Fork, and tributaries above latitude 46.8013 longitude -123.3060.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hanaford Creek and all tributaries from east boundary of Sec. 25-T15N-R2W (river mile 4.1) to the unnamed tributary at latitude 46.7295 longitude -122.6812 except where designated Char.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

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TABLE 602	Aquatic Life Uses								Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Hanaford Creek and all tributaries from mouth to east boundary of Sec. 25-T15N-R2W (river mile 4.1)[2].			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hanaford Creek and the unnamed tributary at latitude 46.7295 longitude -122.6812 (Sect. 4 T14N R1E): All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Kearney Creek and the unnamed tributary at latitude 46.6256 longitude -122.5683: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Laramie Creek and the unnamed tributary at latitude 46.7901 longitude -122.5901: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Lincoln Creek, North Fork and tributaries above latitude 46.7370 longitude -123.7370 and (Section 36 T15N R5W).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Lincoln Creek, South Fork and tributaries above latitude 46.7253 longitude -123.2306 (Section 6 T14N R4W).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mima Creek and tributaries above latitude 46.8588 longitude -123.0856.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Newaukum River and tributaries (except where designated Char).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Newaukum River, North Fork, and the unnamed tributary at latitude 46.6793 longitude -122.6677: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Newaukum River, South Fork, and Frase Creek: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Pheeny Creek and the unnamed tributary at latitude 46.7836 longitude -122.6276 (Sect. 13 T15N R1E): All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Porter Creek and Jamaica Day Creek: All waters above the junction.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Rock Creek (upstream of Callow): All waters above confluence with Chehalis River (Section 15, T16N, R5W), except where designated otherwise in this table.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Rock Creek (upstream of Pe Ell) and the unnamed tributary at latitude 46.5279 longitude -123.3782 (Sect. 11 T12N R6W): All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Scatter Creek and tributaries from latitude 46.8025 longitude -123.0863 (near mouth) to headwaters.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Seven Creek and the unnamed tributary at latitude 46.6192 longitude -123.3723: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Skookumchuck River and tributaries from junction with Hanaford Creek to headwaters (except where designated char).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Skookumchuck River mainstem from mouth to Hanaford Creek.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Skookumchuck River and Hospital Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓		✓	✓	✓	✓	✓
Stearns Creek's, unnamed (GIS Ripple Creek) tributary at latitude 46.5711 longitude -122.9692 (Section 30 T13N R2W).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stearns Creek's, unnamed tributary to West Fork at latitude 46.5824 longitude -123.0222 (Section 26 T13N R3W.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stillman Creek and Little Mill Creek (Sect. 23 T12N R4W): All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Thrash Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Waddel Creek and tributaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 23:																		
1. Chehalis River from Scammon Creek (RM 65.8) to Newaukum River (RM 75.2);dissolved oxygen shall exceed 5.0 mg/L from June 1 to September 15. For the remainder of the year, the dissolved oxygen shall meet standard criteria.																		
2. Dissolved oxygen shall exceed 6.5 mg/L.																		
WRIA 24 Willapa																		
Bear River, unnamed south flowing tributary at latitude 46.3342 longitude -123.9394 (Section 20 T10N R10W).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Bear River and tributaries above latitude 46.3284 longitude -123.3284 (Section 28 T10N R10W) to headwaters.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Canon River and tributaries above latitude 46.5879 longitude -123.8672 (Section 25 T13N R10W).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Lower Salmon Creek and tributaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Middle Nemah River and tributaries above latitude 46.4873 longitude -123.8855		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
(Section 35 T12N R10W).																			
Mill Creek and tributaries above latitude 46.6448 longitude -123.6251 (Section 1 T13N R8W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Naselle River from O'Conner Creek to headwaters (including tributaries).		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
North Nemah River and tributaries above latitude 46.5172 longitude -123.8665 (Section 14 T12N R10W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
North River and Fall River: All waters above the junction (Section 25 T15N R7W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Pioneer Creek and tributaries above latitude 46.8149 longitude -123.5502 (Section 4 T15N R7W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Salmon Creek and tributaries above latitude 46.8904 longitude -123.6829 (Section 9 T16N R8W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Smith Creek and tributaries above latitude 46.7554 longitude -123.8424 (Section 30 T15N R9W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
South Naselle River above latitude 46.3499 longitude -123.8093 (Section 16 T10N R9W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
South Nemah River above latitude 46.4406 longitude -123.8630 (Section 13 T11N R10W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Stringer Creek and tributaries (Section 25 T13N R8W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Willapa River South Fork and tributaries above latitude 46.6479 longitude -123.7267 (Section 6 T13N R8W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Willapa River and Oxbow Creek: All waters upstream of the junction (Section 25 T13N R8W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Williams Creek and tributaries above latitude 46.5284 longitude -123.8668 (Section 14 T12N R10W).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 25 Grays-Elochoman																			
Abernathy Creek and Cameron Creek: All waters above the junction.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Coal Creek and Tributaries above and latitude 46.1839 longitude -123.0338 (just		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses					Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
below Harmony Creek).																		
Elochoman River and tributaries from mouth to latitude 46.2289 longitude - 123.3597 (Section 30 T9N R6W).			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Elochoman River and tributaries from latitude 46.2289 longitude -123.3597 (Section 30 T9N R6W) to headwaters.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Germany Creek from latitude 46.1946 longitude -123.1259 (near mouth) to headwaters.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Grays River from latitude 46.3454 longitude -123.6099 to headwaters.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hull Creek and tributaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mill Creek and Tributaries above latitude 46.1906 longitude -123.1802 (near mouth).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Skomokawa Creek and Wilson Creek: All waters above the junction.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 26 Cowlitz																		
Cispus River and tributaries.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Coweeman River and tributaries from mouth to latitude 46.1405 longitude - 122.8532 (Section 31 T8N R1W).			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Coweeman River and tributaries from latitude 46.1405 longitude -122.8532 Section 31 T8N R1W) to Mulholland Creek (river mile 18.4).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Coweeman River and tributaries from Mulholland Creek (river mile 18.4) to headwaters.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cowlitz River and tributaries from mouth to latitude 46.2622 longitude -122.9001 (Section 14 T9N R2W) base of Riffe Lake Dam (river mile 52.0).			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cowlitz River from latitude 46.2622 longitude -122.9001 (Section 14 T9N R2W) base of Riffe Lake Dam (river mile 52.0).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cowlitz River, and tributaries from base of Riffe Lake Dam (river mile 52.0) to headwaters.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Green River and tributaries.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Toutle River and tributaries from mouth to Green River on North Fork.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Toutle River, North Fork, and tributaries from Green River to headwaters.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Toutle River, South Fork, and tributaries.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 27 Lewis																		
Alec Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Big Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Chickoon Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Clear Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Clearwater Creek and unnamed creek: All waters (including tributaries) above the junction (Sect. 15 T8N R6E – below junction of Smith and Muddy Creeks).	✓						✓			✓	✓	✓		✓	✓	✓	✓	✓
Curly Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cussed Hollow Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Kalama River east of Interstate 5 to Kalama River Falls (river mile 10.4) (including tributaries).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Kalama River from lower Kalama River Falls (river mile 10.4) to headwaters (including tributaries).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Lewis River from Houghton Creek (including tributaries) to Lake Merwin.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Lewis River and Pass Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Lewis River's unnamed tributaries at latitude 46.1122 longitude -121.9174 (Sect. 11 T7N R7E).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Lewis River, East Fork, from and including Mason Creek to Multon Falls (river mile 24.6) including tributaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Lewis River, East Fork, and tributaries from Multon Falls (river mile 24.6) to headwaters.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Little Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Panamaker Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Pin Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Pine Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Quartz Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Rush Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Spencer Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Steamboat Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tillicum Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 28 Salmon-Washougal																		
Burnt Bridge Creek.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Duncan Creek and unnamed tributary just east of Duncan Creek: All waters north of highway 14..		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Green Leaf Creek and Hamilton Creek: All waters above the junction.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hardy Creek and tributaries above lake inlet.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Lawton Creek and tributaries above latitude 45.5708 longitude -122.2576 (Section 13).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Salmon Creek from latitude 45.7176 longitude -122.6958 (below junction with Cougar Creek) and tributaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Washougal River from latitude 45.5883 longitude -122.3711 (Section 7 T1N R4E) (including tributaries).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Woodward Creek and tributaries north of highway 14.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 29 Wind-White Salmon																		
Bear Creek (tributary to White Salmon River) below National Forest Boundary			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Buck Creek and all tributaries (Two Buck Creeks drain to the White Salmon River, the mouth of this creek is found in Section 21 T7NR10E).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Carson Creek.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Catherine Creek and tributaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cave Creek below National Forest Boundary			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Gilmer Creek and all tributaries, except as noted otherwise.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

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TABLE 602	Aquatic Life Uses							Recreation Uses		Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Gilmer Creek's unnamed tributary in Sections 29 and 32 T5N R11E.			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Gotchen Creek and all tributaries, except those waters in or above the Gifford Pinchot National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Gotchen Creek and all tributaries that are in or above the Gifford Pinchot National Forest.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Green Canyon Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Jewett Creek and tributaries.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Killowatt Canyon Creek below National Forest Boundary			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Little White Salmon River and tributaries downstream of National Forest boundary.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Little White Salmon River and tributaries in or above National Forest boundary.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Major Creek and tributaries.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Morrison Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Rattlesnake Creek and the unnamed tributary at latitude 45.8512 longitude - 121.4081: All waters (including tributaries) above the junction.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Rock Creek and tributaries downstream of Gifford Pinchot National Forest boundaries..		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Spring Creek below National Forest Boundary			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Trout Lake Creek and all tributaries below Trout Lake.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Trout Lake Creek and all tributaries at and above Trout Lake.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
White Salmon River (including all natural tributaries) occurring downstream of National Forest boundary, not otherwise designated Char.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
White Salmon River (including all natural tributaries) occurring in or upstream of National Forest boundary, not otherwise designated Char.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
White Salmon River drainage's unnamed tributaries that terminate in Section 13 T6NR10E (latitude 46.0055 longitude 121.4991); all portions occurring downstream of the Gifford Pinchot National Forest boundary.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
White Salmon River drainage's unnamed tributaries that terminate in Section 13	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
T6NR10E (latitude 46.0055 longitude 121.4991); all portions occurring upstream of the Gifford Pinchot National Forest boundary.																		
White Salmon River and Cascade Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Wind River and tributaries downstream of Gifford Pinchot National Forest boundaries.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Wind River and tributaries in or upstream of Gifford Pinchot National Forest.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 30 Klickitat																		
Clearwater Creek and Trappers Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cougar Creek and Big Muddy Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Diamond Creek and Caitin Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Diamond Fork's unnamed tributaries at latitude 46.4205 longitude -121.1562.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Diamond Fork's unnamed tributaries at latitude 46.4355 longitude -121.1590 (outlet of Maiden Springs).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Fish Lake Stream and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Frasier Creek and Outlet Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Klickitat River mainstem from mouth to Little Klickitat River (river mile 19.8).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Klickitat River from Little Klickitat River (river mile 19.8) to Diamond Fork.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Klickitat River and all tributaries above the junction with Diamond Fork.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Little Klickitat River and all tributaries above the junction with Cozy Nook Creek.			✓					✓		✓	✓	✓		✓	✓	✓	✓	✓
Little Muddy Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
McCreedy Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 31 Rock-Glade																		

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TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Squaw Creek and unnamed tributary at and latitude 45.8758 longitude -120.4324 (Section 33 T5N R19E): all waters above junction.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Rock Creek and Quartz Creek: all waters above junction.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 32 Walla Walla																			
Blue Creek and tributaries above latitude 46.0581 and longitude 118.0971	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Coppei Creek, North and South Forks (including tributaries).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dry Creek and tributaries above junction with unnamed creek at latitude 46.1197 longitude -118.1378 (Seaman Rd).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mill Creek from mouth to 13th Street Bridge in Walla Walla (river mile 6.4).[1]			✓							✓		✓	✓	✓	✓	✓	✓	✓	✓
Mill Creek from 13th Street Bridge in Walla Walla (river mile 6.4) to latitude 46.0862 longitude -118.2395 in north channel and latitude 46.0800 longitude -118.2541 in south channel.			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mill Creek from latitude 46.0862 longitude -118.2395 in north channel and latitude 46.0800 longitude -118.2541 in south channel to headwaters (including tributaries) except where otherwise designated Char.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mill Creek and Railroad Canyon: All waters (including tributaries) above the junction up to city of Walla Walla Waterworks Dam (river mile 21.6).	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mill Creek and tributaries from city of Walla Walla Waterworks Dam (river mile 21.6) to headwaters (including upstream and downstream of where Mill Creek flows into Oregon).[2]	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Touchet River above latitude 46.3172 longitude -118.0000 (Sect. 30 T10N R38E) (including tributaries) not otherwise designated Char.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Touchet River, North Fork, and Wolf Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Touchet River, South Fork, and the unnamed tributary at latitude 46.2307 longitude -117.9397: All waters (including tributaries) above the junction, except those waters in or above the Umatilla National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Touchet River, South Fork, and the unnamed tributary at latitude 46.2307 longitude -117.9397: All waters (including tributaries) above the junction that are	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses			
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
in or above the Umatilla National Forest.																			
Walla Walla River from mouth to Lowden (Dry Creek at river mile 27.2).				✓						✓		✓	✓	✓	✓	✓	✓	✓	✓
Walla Walla River from Lowden (Dry Creek at river mile 27.2) to Oregon border (river mile 40).[3]			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Whiskey Creek, and unnamed tributary system at and latitude 46.2176 longitude - 118.0667 (Section 33 T9N R38E), all waters above junction.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 32:																			
1. Dissolved oxygen concentration shall exceed 5.0 mg/L.																			
2. No waste discharge will be permitted for Mill Creek and tributaries from city of Walla Walla Waterworks Dam (river mile 21.6) to headwaters.																			
3. Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed t = 34/(T + 9).																			
WRIA 33 Lower Snake																			
Snake River from mouth to Washington-Idaho-Oregon border (river mile 176.1).[1]			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 33:																			
1. Below Clearwater River (river mile 139.3). Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed t = 34/(T + 9). Special condition - special fish passage exemption as described in WAC 173-201A-200 (1) (f).																			
WRIA 34 Palouse																			
Palouse River from Palouse Falls to south fork (Colfax, river mile 89.6).				✓						✓		✓	✓	✓	✓	✓	✓	✓	✓
Palouse River mainstem from mouth to Palouse Falls			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Palouse River from south fork (Colfax, river mile 89.6) to Idaho border (river mile 123.4).[1]			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes on WRIA 34:																			
1. Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed t = 34/(T + 9).																			

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
WRIA 35 Middle Snake																		
All streams flowing into Oregon from North Fork Wenaha River east to, and including, Fairview Creek.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Asotin River from and including Charley Creek to headwaters (including tributaries) not otherwise designated Char.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Asotin River, North Fork, and all tributaries above Lick Creek, except those waters in or above the Umatilla National Forest.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Asotin River, North Fork, and all tributaries above Lick Creek that are in or above the Umatilla National Forest.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Charley Creek and the unnamed tributary at latitude 46.2851 longitude -117.3216: All waters (including tributaries) above the junction, except those waters in or above the Umatilla National Forest.	✓							✓		✓	✓	✓		✓	✓	✓	✓	✓
Charley Creek and the unnamed tributary at latitude 46.2851 longitude -117.3216: All waters (including tributaries) above the junction that are in or above the Umatilla National Forest.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cottonwood Creek and the unnamed tributary at latitude 46.0678 longitude -117.3015 (Section 21 T7N R44E) all waters above the junction.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Crooked Creek (including tributaries) from Oregon Border to headwaters.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cummings Creek and all tributaries, except those waters in or above the Umatilla National Forest.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cummings Creek and all tributaries that are in or above the Umatilla National Forest.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
George Creek, above and including Coombs Canyon (including tributaries).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
George Creek and the unnamed tributary at latitude 46.2292 longitude -117.1874 (Section 29 T9N R45E), all waters above junction not otherwise designated Char.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Grande Ronde River from mouth to Oregon border (river mile 37).[1]			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Grouse Creek and tributaries from Oregon border.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Grub Canyon and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Hixon Canyon and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Little Tucannon River and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Menatchee Creek and West Fork Menatchee Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Pataha Creek and Dry Pataha Creek: All waters (including tributaries) above the junction, except those waters in or above the Umatilla National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Pataha Creek and Dry Pataha Creek: All waters (including tributaries) above the junction that are in or above the Umatilla National Forest.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Snake River from mouth to Washington-Idaho-Oregon border (river mile 176.1).[2]			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Tennile Creek, all waters above junction with unnamed creek at latitude 46.2156 longitude -117.0386 (Section 33 T9N R46E).		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tucannon River and tributaries from latitude 46.4592 longitude -117.8461 (Section 6, T11N R40E) to Panjab Creek (except where designated char).		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tucannon River mainstem from between Little Tucannon River and Panjab Creek.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tucannon River and Panjab Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tucannon River's unnamed tributaries in Sect. 1 T10N R40E and in Sect. 35 T11N R40E (South of Marengo): all waters above their forks.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Tumalum Creek and the unnamed tributary at latitude 46.3594 longitude - 117.6488: All waters (including tributaries) above the junction, except those waters in or above the Umatilla National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Tumalum Creek and the unnamed tributary at latitude 46.3594 longitude - 117.6488: All waters (including tributaries) above the junction that are in or above the Umatilla National Forest.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Willow Creek and the unnamed tributary at latitude 46.4182 longitude -117.8314: All waters (including tributaries) above the junction.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 35:																			
1. Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature																			

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed t = 34/(T + 9).																		
2. The following two notes apply:																		
(a) Below Clearwater River (river mile 139.3). Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed t = 34/(T + 9). Special condition - special fish passage exemption as described in WAC 173-201A-200 (1) (f).																		
(b) Above Clearwater River (river mile 139.3). Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increases will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed 0.3°C due to any single source or 1.1°C due to all such activities combined.																		
WRIA 36 Esquatzel Coulee																		
There are no specific waterbody entries for this WRIA.																		
WRIA 37 Lower Yakima																		
Ahtanum Creek North Fork's unnamed tributaries at latitude 46.5465 longitude - 120.8857.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ahtanum Creek North Fork's unnamed tributaries at latitude 46.5395 longitude - 120.9851.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ahtanum Creek, between junction with South Fork and junction of North and Middle Forks (including tributaries) except where designated Char		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ahtanum Creek, North Fork, and Middle Fork Ahtanum Creek: All waters (including tributaries) above the junction.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ahtanum Creek, South Fork, and all tributaries.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Carpenter Gulch and all tributaries.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Foundation Creek and all tributaries.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Nasty Creek and all tributaries.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Sulphur Creek.				✓					✓		✓	✓	✓	✓	✓	✓	✓	✓
Yakima River from mouth to Cle Elum River (river mile 185.6) except where specifically designated otherwise in Table 602.[1]			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 37:																		

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
1. Temperature shall not exceed a 1-DMax of 21.0°C due to human activities. When natural conditions exceed a 1-DMax of 21.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed t = 34/(T + 9).																		
WRIA 38 Naches																		
American River and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Barton Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Bumping Lake's unnamed tributaries at latitude 46.8850 longitude -121.2779.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Bumping River's unnamed tributaries at latitude 46.9317 longitude -121.2067 (outlet of Flat Iron Lake).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Bumping River and tributaries downstream of the upper end of Bumping Lake (except where designated char).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Bumping River (and tributaries) upstream of Bumping Lake.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cedar Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Clear Creek and tributaries (including Clear Lake).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Crow Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Deep Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Goat Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Granite Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Indian Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Little Naches River and Bear Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Little Naches River, South Fork and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Naches River and tributaries from latitude 46.7640 longitude -120.8286 (just upstream of Cougar Canyon) to Snoqualmie National Forest boundary (river mile 35.7) (except where designated Char).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Naches River from Snoqualmie National Forest boundary (river mile 35.7) to headwaters (except where designated Char).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Pileup Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Quartz Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Rattlesnake Creek: All waters above the junction with North Fork Rattlesnake Creek.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Rattlesnake Creek, North Fork, all waters above latitude 46.8107 longitude 121.0694 (from and including the unnamed tributary just above junction with mainstem).	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Sand Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Sunrise Creek (latitude 46.9042 longitude -121.2431) and all tributaries	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tieton River and tributaries (except where otherwise designated).		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tieton River, North Fork (including tributaries) above the junction at Clear Lake.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tieton River, South Fork, and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 39 Upper Yakima																			
Cle Elum River from mouth to latitude 47.3805 longitude -121.0983 (above Little Salmon la Sac Creek).		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cle Elum River and all tributaries from junction with unnamed tributary at and latitude 47.3805 longitude -121.0983 to headwaters.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Indian Creek and tributaries downstream of Wenatchee National Forest boundary below.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Indian Creek and tributaries in or above National Forest boundary.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Jack Creek and tributaries downstream of Wenatchee National Forest boundary below.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Jack Creek and tributaries in or above National Forest boundary.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Little Kachess Lake (narrowest point dividing Kachess Lake from Little Kachess Lake) and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Manastash Creek: All waters above the Junction of the North and South Forks that are downstream of the Wenatchee National Forest boundary.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Manastash Creek: All waters above the Junction of the North and South Forks that are in or above the Wenatchee National Forest.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Manastash Creek mainstem from mouth to junction of North and South Forks.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Manastash Creek, tributaries to mainstem, between the mouth and the junction of North and South Forks.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Swauk Creek mainstem from mouth to junction with First Creek.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Swauk Creek from junction with First Creek to Wenatchee National Forest (including tributaries).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Taneum Creek, tributaries to mainstem, from mouth to Wenatchee National Forest boundary.			✓				✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Taneum Creek mainstem from mouth to Wenatchee National Forest boundary.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Teanaway River mainstem from mouth to West Fork Teanaway River.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Teanaway River, tributaries to mainstem, from mouth to West Fork Teanaway River.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Teanaway River, West Fork, and tributaries downstream of the Wenatchee National Forest.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Teanaway River, West Fork, and tributaries upstream of the Wenatchee National Forest.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Teanaway River, North Fork, and tributaries from junction with West Fork to Jungle Creek that are downstream of the Wenatchee National Forest boundary (except where designated otherwise).		✓						✓		✓	✓	✓		✓	✓	✓	✓	✓
Teanaway River, North Fork, and tributaries from junction with West Fork to Jungle Creek that are in or above the Wenatchee National Forest boundary (except where designated otherwise).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Teanaway River, North Fork, and all tributaries above and including Jungle Creek.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Yakima River mainstem from mouth to Cle Elum River (river mile 185.6) except where specifically designated otherwise in Table 602.[1]			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses			
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Yakima River and tributaries from Cle Elum River (river mile 185.6) to headwaters (except where designated otherwise).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Yakima River and tributaries above the unnamed tributary (latitude 47.2927 longitude -121.2971) entering the Yakima River in Sect.25 T21NR12E.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes for WRIA 39:																		
1. Temperature shall not exceed a 1-DMax of 21.0°C due to human activities. When natural conditions exceed a 1-DMax of 21.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed t = 34/(T + 9).																		
WRIA 40 Alkaki-Squilchuck																		
There are no specific water body entries for this WRIA.																		
WRIA 41 Lower Crab																		
Crab Creek and tributaries.				✓					✓		✓	✓	✓	✓	✓	✓	✓	✓
WRIA 42 Grand Coulee																		
Crab Creek and tributaries.				✓					✓		✓	✓	✓	✓	✓	✓	✓	✓
WRIA 43 Upper Crab-Wilson																		
Crab Creek and tributaries.				✓					✓		✓	✓	✓	✓	✓	✓	✓	✓
WRIA 44 Moses Coulee																		
There are no specific waterbody entries for this WRIA.																		
WRIA 45 Wenatchee																		
Chiwaukum Creek from junction with Skinney Creek to headwaters (including tributaries).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Chiwawa River from mouth to Chickamin Creek (including tributaries).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Chiwawa River (and all tributaries) above and including Chickamin Creek.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Chumstick Creek and tributaries downstream of the National Forest boundary (not otherwise designated char).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Chumstick Creek and tributaries in or above the National Forest boundary (not otherwise designated char).		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

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TABLE 602	Aquatic Life Uses							Recreation Uses		Water Supply Uses					Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Dry Creek and Chumstick Creek: All waters (including tributaries) above the junction, except those waters in or above the Wenatchee National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dry Creek and Chumstick Creek: All waters (including tributaries) above the junction that are in or above the Wenatchee National Forest.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Eagle Creek and the unnamed tributary at latitude 47.6544 longitude -120.5165: All waters (including tributaries) above the junction, except those waters in or above the Wenatchee National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Eagle Creek and the unnamed tributary at latitude 47.6544 longitude -120.5165: All waters (including tributaries) above the junction that are in or above the Wenatchee National Forest.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Icicle Creek (including tributaries) from mouth to confluence National Forest Boundary.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Icicle Creek (including tributaries) from National Forest boundary to confluence with Jack Creek.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Icicle Creek above and including Jack Creek (including all tributaries).	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Ingalls Creek (including tributaries).	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Mission Creek from latitude 47.5583 longitude -120.5745 to headwaters (including tributaries) downstream of the National Forest boundary.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mission Creek from latitude 47.5583 longitude -120.5745 to headwaters (including tributaries) in or above the National Forest boundary.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Peshastin Creek from National Forest Boundary to headwaters (including tributaries) except where designated char.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	
Peshastin Creek from junction with Mill Creek to National Forest Boundary (including tributaries).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	
Second Creek and the unnamed tributary at latitude 47.7384 longitude -120.5935: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Van Creek and the unnamed tributary at latitude 47.6722 longitude -120.5373: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Wenatchee River mainstem between Peshastin Creek and the boundary of the		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses					Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water		Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Wenatchee National Forest (river mile 27.1).																				
Wenatchee River from Wenatchee National Forest boundary (river mile 27.1) to Chiwawa River (including tributaries) except where designated otherwise.		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Wenatchee River and all tributaries upstream of Minnow Creek (above Chiwawa River junction).	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
WRIA 46 Entiat																				
Brennegan Creek and the unnamed tributary at and latitude 47.9098 longitude -120.4185: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Entiat River and tributaries occurring below the National Forest boundary from and including the Mad River to Wenatchee National Forest boundary on the mainstem Entiat River (river mile 20.5).		✓						✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Entiat River and all tributaries above the unnamed creek at and latitude 47.9135 longitude -120.4942 (below Fox Creek).	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Entiat River's unnamed tributaries upstream of latitude 47.9106 longitude -121.5010 (below Fox Creek).	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Gray Canyon, North Fork, and South Fork Gray Canyon: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Hornet Creek and all tributaries.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Mad River and all tributaries above latitude 47.8015 longitude -120.4920 (below Young Creek).	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Mud Creek and Switchback Canyon: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Potato Creek and Gene Creek: All waters above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Preston Creek and South Fork Preston Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Stormy Creek and the unnamed tributary at latitude 47.8387 longitude -120.3865: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓
Tillicum Creek and Indian Creek: All waters (including tributaries) above the	✓							✓			✓	✓	✓	✓		✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses			
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
junction.																			
WRIA 47 Chelan																			
Stehekin River.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 48 Methow																			
Bear Creek from mouth to headwaters (including tributaries) in or above the National Forest boundary.		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Bear Creek from mouth to headwaters (including tributaries) downstream of the National Forest boundary.		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Beaver Creek and South Fork Beaver Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Big Hidden Lake and all tributaries, and the outlet stream that flows into the East Fork Pasayten River.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Boulder Creek and Pebble Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Buttermilk Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Chewuch River and tributaries from mouth to headwaters (except where designated otherwise).		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Chewuch River and tributaries above Buck Creek at Section 30, T38, R22E..	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Eagle Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Early Winters Creek (including tributaries) from mouth to headwaters.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Eureka Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Goat Creek above the junction with Roundup Creek to headwaters (including tributaries).	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Gold Creek and all tributaries, except those waters in or above the Okanogan National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Gold Creek and all tributaries that are in or above the Okanogan National Forest.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Lake Creek and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

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TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Libby Creek and Hornel Draw: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Little Bridge Creek and tributaries	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Lost River Gorge and all tributaries upstream of junction with Sunset Creek.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Methow River from mouth to junction with Twisp River.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Methow River from junction with Twisp River to Chewuch River (river mile 50.1).		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Methow River and tributaries from Chewuch River (river mile 50.1) to headwaters (except where designated char.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Methow River, West Fork, (including tributaries) from and including Robinson Creek and its tributaries to headwaters (except unnamed tributary above mouth at latitude 48.6594 longitude -120.5382.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Pipestone Canyon Creek and all tributaries below Campbell Lake.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Pipestone Canyon Creek and all tributaries above Campbell Lake, Campbell Lake, and all tributaries to Campbell Lake.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Smith Canyon Creek and Elderberry Canyon: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Twisp River from mouth to War Creek.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Twisp River and War Creek: All waters (including tributaries) above the junction.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Wolf Creek from and including unnamed tributary at latitude 48.4849 longitude -120.3180 to headwaters (including tributaries).	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 49 Okanogan																		
Okanogan River.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 50 Foster																		
There are no specific waterbody entries for this WRIA.																		
WRIA 51 Nespelem																		
There are no specific waterbody entries for this WRIA.																		

TABLE 602	Aquatic Life Uses						Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
WRIA 52 Sanpoil																		
There are no specific waterbody entries for this WRIA.																		
WRIA 53 Lower Lake Roosevelt																		
There are no specific waterbody entries for this WRIA.																		
WRIA 54 Lower Spokane																		
Spokane River from mouth to Long Lake Dam (river mile 33.9).[1]			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Spokane River from Long Lake Dam (river mile 33.9) to Nine Mile Bridge (river mile 58.0).[2]		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Spokane River from Nine Mile Bridge (river mile 58.0) to the Idaho border (river mile 96.5).[3]			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes for WRIA 54:

1. Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed t = 34/(T + 9).

2. a. The average euphotic zone concentration of total phosphorus (as P) shall not exceed 25µg/L during the period of June 1 to October 31.

b. Temperature shall not exceed a 1-DMax of 20.0°C, due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed t = 34/(T + 9).

3. Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time exceed t=34/(T+9).

WRIA 55 Little Spokane																		
There are no specific waterbody entries for this WRIA.																		
WRIA 56 Hangman																		
There are no specific waterbody entries for this WRIA.																		
WRIA 57 Middle Spokane																		
Lake Creek and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses						Recreation Uses		Water Supply Uses				Misc. Uses			
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species	Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Spokane River from Nine Mile Bridge (river mile 58.0) to the Idaho border (river mile 96.5).[1]			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Notes on WRIA 57:																		
1. Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time exceed t=34/(T+9).																		
WRIA 58 Middle Lake Roosevelt																		
There are no specific waterbody entries for this WRIA.																		
WRIA 59 Colville																		
Colville River.			✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
WRIA 60 Kettle																		
There are no specific waterbody entries for this WRIA.																		
WRIA 61 Upper Lake Roosevelt																		
There are no specific waterbody entries for this WRIA.																		
WRIA 62 Pend Oreille																		
All streams flowing into Idaho from Bath Creek (latitude 48.5865 longitude 117.0351) to the Canadian border.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Calispell Creek (including tributaries) from Small Creek to Calispell Lake.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Calispell Lake and all tributaries.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cedar Creek from latitude 48.7500 longitude -117.4349 (including tributaries) to headwaters: all waters that are in the Colville National Forest.	✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cedar Creek from latitude 48.7500 longitude -117.4349 to (including tributaries) to headwaters: all waters that are outside the Colville National Forest.	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cedar Creek from mouth to latitude 48.7500 longitude -117.4349 (including tributaries) in or above Colville National Forest boundary.		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Cedar Creek from mouth to latitude 48.7500 longitude -117.4349 (including tributaries) downstream of the Colville National Forest.		✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 602	Aquatic Life Uses							Recreation Uses			Water Supply Uses				Misc. Uses				
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Core Summer Habitat	Spawning/Rearing	Rearing/Migration Only	Redband Trout	Warm Water Species		Ex Primary Cont	Primary Cont	Secondary Cont	Domestic Water	Industrial Water	Agricultural Water	Stock Water	Wildlife Habitat	Harvesting	Commerce/Navigation	Boating	Aesthetics
Harvey Creek and Paupac Creek: All waters (including tributaries) above the junction.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Indian Creek from mouth to headwaters.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Le Clerc Creek, East Branch, and West Branch Le Clerc Creek: All waters (including tributaries) above the junction, except those waters in or above the Colville National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Le Clerc Creek, East Branch, and West Branch Le Clerc Creek: All waters (including tributaries) above the junction that are in or above the Colville National Forest.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Le Clerc Creek from mouth to junction with West Branch le Clerc Creek (including tributaries).		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mill Creek from mouth to headwaters (including tributaries).		✓						✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Pend Oreille River from Canadian border (river mile 16.0) to Idaho border (river mile 87.7).[1]			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Slate Creek from mouth to headwaters (including tributaries).	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Small Creek and all tributaries, except those waters in or above the National Forest.	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Small Creek and all tributaries that are in or above the National Forest.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
South Salmo River and all tributaries.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Sullivan Creek above junction with Harvey Creek (including tributaries) to headwaters.	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Tacoma Creek, South Fork, upstream of Tacoma Creek and downstream of the Colville National Forest boundary (including tributaries).	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Tacoma Creek, South Fork, and tributaries upstream of the Colville National Forest boundary (including tributaries).	✓							✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes for WRIA 62:

1. Temperature shall not exceed a 1-DMax of 20.0°C due to human activities. When natural conditions exceed a 1-DMax of 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed

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TABLE 602	Aquatic Life Uses	Recreation Uses	Water Supply Uses	Misc. Uses
Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	Char Spawning /Rearing	Ex Primary Cont	Domestic Water	Wildlife Habitat
	Core Summer Habitat	Primary Cont	Industrial Water	Harvesting
	Spawning/Rearing	Secondary Cont	Agricultural Water	Commerce/Navigation
	Rearing/Migration Only		Stock Water	Boating
	Redband Trout			Aesthetics
	Warm Water Species			

t = 34/(T + 9).

[Statutory Authority: RCW 90.48.035. 06-23-117 (Order 06-04), § 173-201A-602, filed 11/20/06, effective 12/21/06. Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-602, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-610 Use designations—Marine waters. All marine surface waters have been assigned specific uses for protection under Table 612.

Table 610 (Key to Table 612)

Abbreviation	General Description
Aquatic Life Uses:	(see WAC 173-201A-210(1))
Extraordinary	Extraordinary quality salmonid and other fish migration, rearing, and spawning; clam, oyster, and mussel rearing and spawning; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing and spawning.
Excellent	Excellent quality salmonid and other fish migration, rearing, and spawning; clam, oyster, and mussel rearing and spawning; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing and spawning.
Good	Good quality salmonid migration and rearing; other fish migration, rearing, and spawning; clam, oyster, and mussel rearing and spawning; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing and spawning.
Fair	Fair quality salmonid and other fish migration.
Shellfish Harvesting:	(see WAC 173-201A-210(2))
Shellfish Harvest	Shellfish (clam, oyster, and mussel) harvesting.
Recreational Uses:	(see WAC 173-201A-210(3))
Primary Cont.	Primary contact recreation.
Secondary Cont.	Secondary contact recreation.
Miscellaneous Uses:	(see WAC 173-201A-210(4))
Wildlife Habitat	Wildlife habitat.
Harvesting	Salmonid and other fish harvesting, and crustacean and other shellfish (crabs, shrimp, scallops, etc.) harvesting.
Com./Navig.	Commerce and navigation.
Boating	Boating.
Aesthetics	Aesthetic values.

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-610, filed 7/1/03, effective 8/1/03.]

WAC 173-201A-612 Table 612—Use designations for marine waters. (1) Table 612 lists uses for marine waters. Only the uses with the most stringent criteria are listed. The criteria notes in Table 612 take precedence over the criteria in WAC 173-201A-210 for the same parameter.

(2) Table 612 is necessary to determine and fully comply with the requirements of this chapter. If you are viewing a paper copy of the rule from the office of the code reviser or are using their web site, Table 612 may be missing (it will instead say "place illustration here"). In this situation, you may view Table 612 at the department of ecology's web site at www.ecy.wa.gov, or request a paper copy of the rule with Table 612 from the department of ecology or the office of the code reviser.

Table 612	Aquatic Life Uses				Shellfish Harvest	Recreational Uses		Misc. Uses				
Use Designations for Marine Waters	Extraordinary	Excellent	Good	Fair		Primary Cont	Secondary Cont	Wildlife Habitat	Harvesting	Com/Navig	Boating	Aesthetics
Budd Inlet south of latitude 47°04'N (south of Priest Point Park).			✓				✓	✓	✓	✓	✓	✓
Coastal waters: Pacific Ocean from Ilwaco to Cape Flattery.	✓				✓	✓		✓	✓	✓	✓	✓
Commencement Bay south and east of a line bearing 258° true from "Brown's Point" and north and west of line bearing 225° true through the Hylebos waterway light.		✓			✓	✓		✓	✓	✓	✓	✓
Commencement Bay, inner, south and east of a line bearing 225° true through Hylebos waterway light except the city waterway south and east of south 11th Street.			✓				✓	✓	✓	✓	✓	✓
Commencement Bay, city waterway south and east of south 11th Street.				✓			✓	✓		✓	✓	✓
Drayton Harbor, south of entrance.		✓			✓	✓		✓	✓	✓	✓	✓
Dyes and Sinclair inlets west of longitude 122°37'W.		✓			✓	✓		✓	✓	✓	✓	✓
Elliott Bay east of a line between Pier 91 and Duwamish Head.		✓			✓	✓		✓	✓	✓	✓	✓
Everett Harbor, inner, northeast of a line bearing 121° true from approximately 47°59'5"N and 122°13'44"W (southwest corner of the pier).			✓				✓	✓	✓	✓	✓	✓
Grays Harbor west of longitude 123°59'W.		✓			✓	✓		✓	✓	✓	✓	✓
Grays Harbor east of longitude 123°59'W to longitude 123°45'45"W (Cosmopolis Chehalis River, river mile 3.1). Special condition - dissolved oxygen shall exceed 5.0 mg/L.			✓				✓	✓	✓	✓	✓	✓
Guemes Channel, Padilla, Samish and Bellingham bays east of longitude 122°39'W and north of latitude 48°27'20"N.		✓			✓	✓		✓	✓	✓	✓	✓
Hood Canal.	✓				✓	✓		✓	✓	✓	✓	✓
Mukilteo and all North Puget Sound west of longitude 122°39'W (Whidbey, Fidalgo, Guemes and Lummi islands and State Highway 20 Bridge at Deception Pass), except as otherwise noted.	✓				✓	✓		✓	✓	✓	✓	✓
Oakland Bay west of longitude 123°05'W (inner Shelton harbor).			✓				✓	✓	✓	✓	✓	✓

Table 612	Aquatic Life Uses				Shellfish Harvest	Recreational Uses		Misc. Uses				
Use Designations for Marine Waters	Extraordinary	Excellent	Good	Fair		Primary Cont	Secondary Cont	Wildlife Habitat	Harvesting	Com/Navig	Boating	Aesthetics
Port Angeles south and west of a line bearing 152° true from buoy "2" at the tip of Ediz Hook.		✓			✓	✓		✓	✓	✓	✓	✓
Port Gamble south of latitude 47°51'20"N.		✓			✓	✓		✓	✓	✓	✓	✓
Port Townsend west of a line between Point Hudson and Kala Point.		✓			✓	✓		✓	✓	✓	✓	✓
Possession Sound, south of latitude 47°57'N.	✓				✓	✓		✓	✓	✓	✓	✓
Possession Sound, Port Susan, Saratoga Passage, and Skagit Bay east of Whidbey Island and State Highway 20 Bridge at Deception Pass between latitude 47°57'N (Mukilteo) and latitude 48°27'20"N (Similk Bay), except as otherwise noted.		✓			✓	✓		✓	✓	✓	✓	✓
Puget Sound through Admiralty Inlet and South Puget Sound, south and west to longitude 122°52'30"W (Brisco Point) and longitude 122°51'W (northern tip of Hartstene Island).	✓				✓	✓		✓	✓	✓	✓	✓
Sequim Bay southward of entrance.	✓				✓	✓		✓	✓	✓	✓	✓
South Puget Sound west of longitude 122°52'30"W (Brisco Point) and longitude 122°51'W (northern tip of Hartstene Island, except as otherwise noted).		✓			✓	✓		✓	✓	✓	✓	✓
Strait of Juan de Fuca.	✓				✓	✓		✓	✓	✓	✓	✓
Totten Inlet and Little Skookum Inlet, west of longitude 122°56'32" (west side of Steamboat Island).	✓				✓	✓		✓	✓	✓	✓	✓
Willapa Bay seaward of a line bearing 70° true through Mailboat Slough light (Willapa River, river mile 1.8).		✓			✓	✓		✓	✓	✓	✓	✓

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), § 173-201A-612, filed 7/1/03, effective 8/1/03.]

Chapter 173-204 WAC
SEDIMENT MANAGEMENT STANDARDS

WAC

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PART I—GENERAL INFORMATION

WAC 173-204-100 Authority and purpose. (1) This chapter is promulgated under the authority of chapter 90.48 RCW, the Water Pollution Control Act; chapter 70.105D RCW, the Model Toxics Control Act; chapter 90.70 RCW, the Puget Sound Water Quality Authority Act; chapter 90.52 RCW, the Pollution Disclosure Act of 1971; chapter 90.54 RCW, the Water Resources Act of 1971; and chapter 43.21C RCW, the state Environmental Policy Act, to establish marine, low salinity and freshwater surface sediment management standards for the state of Washington.

(2) The purpose of this chapter is to reduce and ultimately eliminate adverse effects on biological resources and significant health threats to humans from surface sediment contamination by:

(a) Establishing standards for the quality of surface sediments;

(b) Applying these standards as the basis for management and reduction of pollutant discharges; and

(c) Providing a management and decision process for the cleanup of contaminated sediments.

(3) Part III, Sediment quality standards of this chapter provides chemical concentration criteria, biological effects criteria, human health criteria, and other toxic, radioactive, biological, or deleterious substances criteria which identify surface sediments that have no adverse effects, including no acute or chronic adverse effects on biological resources and no significant health risk to humans, as defined in this regulation. The sediment quality standards provide a regulatory and management goal for the quality of sediments throughout the state.

(4) The sediment criteria of WAC 173-204-320 through 173-204-340 shall constitute surface sediment quality standards and be used to establish an inventory of surface sediment sampling stations where the sediments samples taken from these stations are determined to pass or fail the applicable sediment quality standards.

(5) Part IV, Sediment source control standards of this chapter shall be used as a basis for controlling the effects of point and nonpoint source discharges to sediments through the National Pollutant Discharge Elimination System (NPDES) federal permit program, state water quality management permit programs, issuance of administrative orders or other means determined appropriate by the department. The source control standards establish discharge sediment monitoring requirements and criteria for establishment and maintenance of sediment impact zones.

(6) Part V, Sediment cleanup standards of this chapter establishes administrative procedural requirements and criteria to identify, screen, rank and prioritize, and cleanup contaminated surface sediment sites. The sediment cleanup standards of WAC 173-204-500 through 173-204-590 shall be used pursuant to authorities established under chapters 90.48 and 70.105D RCW.

(7) This chapter establishes and defines a goal of minor adverse effects as the maximum level of sediment contamination allowed in sediment impact zones under the provisions of Part IV, Sediment source control standards and as the cleanup screening levels for identification of sediment cleanup sites and as the minimum cleanup levels to be achieved in all cleanup actions under Part V, Sediment cleanup standards.

(8) Local ordinances establishing requirements for the designation and management of marine, low salinity and freshwater sediments shall not be less stringent than this chapter.

Note: All codes, standards, statutes, rules or regulations cited in this chapter are available for inspection at the Department of Ecology, P.O. Box 47703, Olympia, Washington 98504-7703.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-100, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-100, filed 3/27/91, effective 4/27/91.]

WAC 173-204-110 Applicability. (1) The sediment quality standards of WAC 173-204-300 through 173-204-315, and 173-204-350, and the sediment cleanup standards of WAC 173-204-500 through 173-204-580 shall apply to all surface sediments.

(2) The sediment quality standards of WAC 173-204-320, 173-204-330, and 173-204-340 shall apply to marine, low salinity and freshwater surface sediments, respectively.

(3) The source control standards of WAC 173-204-400 through 173-204-420 shall apply to each person's actions which exposes or resuspends surface sediments which exceed, or otherwise cause or potentially cause surface sediments to exceed, the applicable standards of WAC 173-204-320 through 173-204-340.

(4) The sediment recovery zone standards of WAC 173-204-590 shall apply to each person's cleanup action decision made pursuant to WAC 173-204-580 where the selected cleanup action leaves in place marine, low salinity, or freshwater sediments that exceed the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(5) The sediment quality standards of WAC 173-204-320 through 173-204-340 shall not apply:

(a) Within a sediment impact zone as authorized by the department under WAC 173-204-415; or

(b) Within a sediment recovery zone as authorized by the department under WAC 173-204-590; or

(c) To particulates suspended in the water column; or

(d) To particulates suspended in a permitted effluent discharge.

(6) Nothing in this chapter shall constrain the department's authority to make appropriate sediment management decisions on a case-specific basis using best professional judgment and latest scientific knowledge for cases where the standards of this chapter are reserved or standards are not available.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-110, filed 3/27/91, effective 4/27/91.]

WAC 173-204-120 Antidegradation and designated use policies. (1) Antidegradation policy. The antidegradation policy of the state of Washington as generally guided by chapters 90.48 and 90.54 RCW, is applicable to any person's new or increased activity and shall apply to this chapter as follows:

(a) Existing beneficial uses shall be maintained and protected and no further degradation which would interfere with or become injurious to existing beneficial uses shall be allowed.

(b) No degradation of existing sediment quality shall be allowed of waters constituting an outstanding national resource, such as waters of national and state parks and scenic and recreation areas, wildlife refuges, and waters of exceptional recreational or ecological significance.

(c) Whenever surface sediments are of a higher quality (i.e., lower chemical concentrations or adverse biological response) than the criteria assigned to said sediments, the existing surface sediment quality shall be protected and waste and other materials and substances shall not be allowed to contaminate such sediments or reduce the existing sediment quality thereof, except in those instances where:

(i) It is clear, after satisfactory public participation and intergovernmental coordination, that overriding considerations of the public interest will be served;

(ii) All wastes and other materials and substances proposed for discharge that may contaminate such sediments are provided with all known, available and reasonable methods of prevention, control, and treatment and/or best management practices;

(iii) The reduction of existing surface sediment quality is authorized by the department; and

(iv) Existing beneficial uses are maintained and protected, and no degradation which would interfere with and/or become injurious to existing sediment beneficial uses and/or causes long-term, irreparable harm to the environment is allowed.

(2) Designated use policy. The policy of the department and the purpose of this chapter shall be to manage waste discharges and sediment quality so as to protect existing beneficial uses and move towards attainment of designated beneficial uses as specified in section 101 (a)(2) of the federal Clean Water Act (33 USC 1251, et seq.) and chapter 173-201 WAC, the Water quality standards for surface waters of the state of Washington. This policy is applicable to any person's existing or proposed actions which may affect surface sediment quality.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-120, filed 3/27/91, effective 4/27/91.]

WAC 173-204-130 Administrative policies. The department shall implement this chapter in accordance with the following policies:

(1) The department shall seek to implement, and as necessary modify this chapter to protect biological resources and human health consistent with WAC 173-204-100(2). To implement the intent of this subsection, the department shall use methods that accurately reflect the latest scientific knowledge consistent with the definitions contained in WAC 173-204-200 (14) and (15), as applicable.

(2) At the interface between surface sediments, ground water or surface water, the applicable standards shall depend on which beneficial use is or could be adversely affected, as determined by the department. If beneficial uses of more than one resource are affected, the most restrictive standards shall apply.

(3) It shall be the goal of the department to modify this chapter so that methods such as confirmatory biological tests, sediment impact zone models, use of contaminated sediment site ranking models, etc., continue to accurately reflect the latest scientific knowledge as established through ongoing validation and refinement.

(4) Any person or the department may propose an alternate technical method to replace or enhance the application of a specific technical method required under this chapter. Using best professional judgment, the department shall provide advance review and approval of any alternate technical method proposed prior to its application. Application and use of alternate technical methods shall be allowed when the department determines that the technical merit of the resulting decisions will improve the department's ability to implement and meet the intent of this chapter as described in WAC 173-204-100(2), and will remain consistent with the scientific intent of definitions contained in WAC 173-204-200 (14) and (15). The department shall maintain a record of the department's decisions concerning application for use of alternate technical methods pursuant to this subsection. The record shall be made available to the public on request.

(5) Intergovernmental coordination. The department shall ensure appropriate coordination and consultation with federally recognized Indian tribes and local, state, and federal agencies to provide information on and to implement this chapter.

(6) The department shall conduct an annual review of this chapter, and modify its provisions every three years, or as necessary. Revision to this chapter shall be made pursuant to the procedures established within chapter 34.05 RCW, the Administrative Procedure Act.

(7) Review of scientific information. When evaluating this chapter for necessary revisions, the factors the department shall consider include:

(a) New or additional scientific information which is available relating surface sediment chemical quality to acute or chronic adverse effects on biological resources as defined in WAC 173-204-200 (1) and (7);

(b) New or additional scientific information which is available relating human health risk to marine, low salinity, or freshwater surface sediment chemical contaminant levels;

(c) New or additional scientific information which is available relating levels of other toxic, radioactive, biological and deleterious substances in marine, low salinity, or freshwater sediments to acute or chronic adverse effects on biological resources, or to a significant health risk to humans;

(d) New state or federal laws which have established environmental or human health protection standards applicable to surface sediment; or

(e) Scientific information which has been identified for addition, modification or deletion by a scientific review process established by the department.

(8) Public involvement and education. The goal of the department shall be to provide timely information and mean-

ingful opportunities for participation by the public in the annual review conducted by the department under subsection (6) of this section, and any modification of this chapter. To meet the intent of this subsection the department shall:

(a) Provide public notice of the department's decision regarding the results of its annual review of this chapter, including:

(i) The department's findings for the annual review factors identified in subsection (7) of this section;

(ii) The department's decision regarding the need for modification of this chapter based on its annual review; and

(iii) Identification of a time period for public opportunity to comment on the department's findings and decisions pursuant to this subsection.

(b) Provide public notice by mail or by additional procedures determined necessary by the department which may include:

(i) Newspaper publication;

(ii) Other news media;

(iii) Press releases;

(iv) Fact sheets;

(v) Publications;

(vi) Any other method as determined by the department.

(c) Conduct public meetings as determined necessary by the department to educate and inform the public regarding the department's annual review determinations and decisions.

(d) Comply with the rule making and public participation requirements of chapter 34.05 RCW, the Administrative Procedure Act, for any revisions to this chapter.

(9) Test sediments evaluated for compliance with the sediment quality standards of WAC 173-204-320 through 173-204-340 and/or the sediment impact zone maximum criteria of WAC 173-204-420 and/or the cleanup screening levels criteria of WAC 173-204-520 shall be sampled and analyzed using the Puget Sound Protocols or other methods approved by the department. Determinations made pursuant to this chapter shall be based on sediment chemical and/or biological data that were developed using an appropriate quality assurance/quality control program, as determined by the department.

(10) The statutory authority for decisions under this chapter shall be clearly stated in the decision documents prepared pursuant to this chapter. The department shall undertake enforcement actions consistent with the stated authority under which the action is taken. The process for judicial review of these decisions shall be pursuant to the statutes under which the action is being taken.

(11) When the department identifies this chapter as an applicable, or relevant and appropriate requirement for a federal cleanup action under the Comprehensive Environmental Response, Compensation and Liability Act, the department shall identify the entire contents of this chapter as the appropriate state requirement.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-130, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-130, filed 3/27/91, effective 4/27/91.]

PART II—DEFINITIONS

WAC 173-204-200 Definitions. For the purpose of this chapter, the following definitions shall apply:

(1) "Acute" means measurements of biological effects using surface sediment bioassays conducted for time periods that are relatively short in comparison to the life cycle of the test organism. Acute effects may include mortality, larval abnormality, or other endpoints determined appropriate by the department.

(2) "Amphipod" means crustacean of the Class Amphipoda, e.g., Rhepoxynius abronius, Ampelisca abdita, or Eohaustorius estuarius.

(3) "Appropriate biological tests" means only tests designed to measure directly, or through established predictive capability, biologically significant adverse effects to the established or potential benthic or aquatic resources at a given location, as determined by rule by the department.

(4) "Beneficial uses" means uses of waters of the state which include but are not limited to use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

(5) "Best management practices" or "BMPs" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of surface sediments of the state. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or water disposal, or drainage from raw material storage.

(6) "Bioassay" means a test procedure that measures the response of living plants, animals, or tissues to a sediment sample.

(7) "Chronic" means measurements of biological effects using sediment bioassays conducted for, or simulating, prolonged exposure periods of not less than one complete life cycle, evaluations of indigenous field organisms for long-term effects, assessment of biological effects resulting from bioaccumulation and biomagnification, and/or extrapolated values or methods for simulating effects from prolonged exposure periods. Chronic effects may include mortality, reduced growth, impaired reproduction, histopathological abnormalities, adverse effects to birds and mammals, or other endpoints determined appropriate by the department.

(8) "Contaminated sediment" means surface sediments designated under the procedures of WAC 173-204-310 as exceeding the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(9) "Control sediment sample" means a surface sediment sample which is relatively free of contamination and is physically and chemically characteristic of the area from which bioassay test animals are collected. Control sediment sample bioassays provide information concerning a test animal's tolerance for stress due to transportation, laboratory handling, and bioassay procedures. Control sediment samples cannot exceed the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(10) "Department" means the department of ecology.

(11) "Freshwater sediments" means surface sediments in which the sediment pore water contains less than or equal to 0.5 parts per thousand salinity.

(12) "Low salinity sediments" means surface sediments in which the sediment pore water contains greater than 0.5 parts per thousand salinity and less than 25 parts per thousand salinity.

(13) "Marine finfish rearing facilities" shall mean those private and public facilities located within state waters where finfish are fed, nurtured, held, maintained, or reared to reach the size of release or for market sale.

(14) "Marine sediments" means surface sediments in which the sediment pore water contains 25 parts per thousand salinity or greater.

(15) "Minor adverse effects" means a level of effects that:

(a) Has been determined by rule by the department, except in cases subject to WAC 173-204-110(6); and

(b) Meets the following criteria:

(i) An acute or chronic adverse effect to biological resources as measured by a statistically and biologically significant response relative to reference in no more than one appropriate biological test as defined in WAC 173-204-200(3); or

(ii) A statistically and biologically significant response that is significantly elevated relative to reference in any appropriate biological test as defined in WAC 173-204-200(3); or

(iii) Biological effects per (b)(i) or (ii) of this subsection as predicted by exceedance of an appropriate chemical or other deleterious substance standard, except where the prediction is overridden by direct biological testing evidence pursuant to (b)(i) and (ii) of this subsection; and

(c) Does not result in significant human health risk as predicted by exceedance of an appropriate chemical, biological, or other deleterious substance standard.

(16) "No adverse effects" means a level of effects that:

(a) Has been determined by rule by the department, except in cases subject to WAC 173-204-110(6); and

(b) Meets the following biological criteria:

(i) No acute or chronic adverse effects to biological resources as measured by a statistically and biologically significant response relative to reference in any appropriate biological test as defined in WAC 173-204-200(3); and

(ii) No acute or chronic adverse biological effect per (b)(i) of this subsection as predicted by exceedance of an appropriate chemical or other deleterious substance standard, except where the prediction is overridden by direct biological testing evidence pursuant to (b)(i) of this subsection; and

(iii) Does not result in significant human health risk as predicted by exceedance of an appropriate chemical, biological, or other deleterious substance standard.

(17) "Other toxic, radioactive, biological, or deleterious substances" means contaminants which are not specifically identified in the sediment quality standards chemical criteria of WAC 173-204-320 through 173-204-340 (e.g., organic debris, tributyltin, DDT, etc.).

(18) "Person" means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, industry, private corporation, port district, special purpose district, irrigation district, unit of local government, state government agency, federal government agency, Indian tribe, or any other entity whatsoever.

(19) "Practicable" means able to be completed in consideration of environmental effects, technical feasibility and cost.

(20) "Puget Sound basin" or "Puget Sound" means:

(a) Puget Sound south of Admiralty Inlet, including Hood Canal and Saratoga Passage;

(b) The waters north to the Canadian border, including portions of the Strait of Georgia;

(c) The Strait of Juan de Fuca south of the Canadian border; and

(d) All the lands draining into these waters as mapped in water resources inventory areas numbers 1 through 19, set forth in water resources management program established pursuant to the Water Resources Act of 1971, chapter 173-500 WAC.

(21) "Puget Sound protocols" means *Puget Sound Estuary Program. 1986. As amended. Recommended Protocols for Measuring Selected Environmental Variables in Puget Sound, U.S. Environmental Protection Agency, Region 10, Seattle, WA (looseleaf)*.

(22) "Reference sediment sample" means a surface sediment sample which serves as a laboratory indicator of a test animal's tolerance to important natural physical and chemical characteristics of the sediment, e.g., grain size, organic content. Reference sediment samples represent the nonanthropogenically affected background surface sediment quality of the sediment sample. Reference sediment samples cannot exceed the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(23) "Sediment impact zone" means an area where the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 are exceeded due to ongoing permitted or otherwise authorized wastewater, storm water, or nonpoint source discharges and authorized by the department within a federal or state wastewater or storm water discharge permit, or other formal department authorization.

(24) "Sediment recovery zone" means an area where the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 are exceeded as a result of historical discharge activities, and authorized by the department as a result of a cleanup decision made pursuant to WAC 173-204-580, Cleanup action decision.

(25) "Site units" means discrete subdivisions of an individual contaminated sediment site that are being evaluated for the purpose of establishing cleanup standards. Site units are based on consideration of unique locational, environmental, spatial, or other conditions determined appropriate by the department, e.g., cleanup under piers, cleanup in eelgrass beds, cleanup in navigational lanes.

(26) "Surface sediments" or "sediment(s)" means settled particulate matter located in the predominant biologically active aquatic zone, or exposed to the water column. Sediment(s) also includes settled particulate matter exposed by human activity (e.g., dredging) to the biologically active aquatic zone or to the water column.

(27) "Test sediment" means a sediment sample that is evaluated for compliance with the sediment quality standards of WAC 173-204-320 through 173-204-340 and/or the sediment impact zone maximum criteria of WAC 173-240-420

and/or the cleanup screening levels criteria of WAC 173-204-520.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-200, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-200, filed 3/27/91, effective 4/27/91.]

PART III—SEDIMENT QUALITY STANDARDS

WAC 173-204-300 Purpose. The sediment quality standards of WAC 173-204-320 through 173-204-340 include chemical concentration criteria, biological effects criteria, human health criteria, other toxic, radioactive, biological, or deleterious substances criteria, and nonanthropogenically affected sediment quality criteria which are used to identify sediments that have no adverse effects on biological resources, and correspond to no significant health risk to humans. Designation determinations using the sediment quality standards of WAC 173-204-320 through 173-204-340 shall be conducted as stipulated in WAC 173-204-310, Sediment quality standards designation procedures.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-300, filed 3/27/91, effective 4/27/91.]

WAC 173-204-310 Sediment quality standards designation procedures. Any person may use these procedures to determine a sediment's designation using the applicable sediment quality standards of WAC 173-204-320 through 173-204-340. Any person who designates test sediments using the procedures of this section shall meet the sampling and testing plan requirements of WAC 173-204-600 and records management requirements of WAC 173-204-610. Test sediments designated using the procedures of this section shall be sampled and analyzed using the Puget Sound protocols or other methods approved by the department, and shall use an appropriate quality assurance/quality control program, as determined by the department. A sediment sample that passes the initial designation procedures is designated as complying with the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, until such time as any person or the department confirms the sediment designation as failing the applicable sediment quality standards of WAC 173-204-320 through 173-204-340. A sediment sample that fails the initial designation procedures is designated as not complying with the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, until such time as any person or the department confirms the sediment designation as passing the applicable sediment quality standards of WAC 173-204-320 through 173-204-340. A sediment sample that passes or fails the confirmatory designation procedures is designated as such under the procedures of WAC 173-204-310. Sediments shall be designated with the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 as follows:

(1) Initial designation. Sediments that have been chemically analyzed for the applicable chemical concentration criteria of WAC 173-204-320 through 173-204-340 shall be designated as follows:

(a) Sediments with chemical concentrations equal to or less than all the applicable chemical and human health criteria are designated as having no adverse effects on biological resources, and not posing a significant health threat to humans, and pass the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(b) Sediments with chemical concentrations which exceed any one applicable chemical or human health criterion in WAC 173-204-320 through 173-204-340 are designated as having adverse effects on biological resources or posing significant human health threats, and fail the sediment quality standards of WAC 173-204-320 through 173-204-340, pending confirmatory designation.

(2) Confirmatory designation. Any person or the department may confirm the designation of sediments which have either passed or failed initial designation procedures listed in subsection (1) of this section using the applicable biological testing of WAC 173-204-315, as required below. Sediment samples that pass all the required confirmatory biological tests are designated as passing the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, notwithstanding the sediment's previous initial designation under subsection (1) of this section. Any sediment sample which fails any one of the required confirmatory biological tests shall be designated as failing the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, notwithstanding the sediment's previous initial designation under subsection (1) of this section. The confirmatory biological test standards are described below.

(a) To confirm the designation of a sediment which either passed or failed any applicable chemical concentration criterion established in WAC 173-204-320 through 173-204-340, the sediment shall be tested for:

(i) Two of the acute effects biological tests described in the applicable standards of WAC 173-204-315; and

(ii) One of the chronic effects biological tests described in the applicable standards of WAC 173-204-315.

(b) Sediments with chemical concentrations which either passed or failed any applicable human health criterion of WAC 173-204-320 through 173-204-340 shall be eligible for confirmatory designation as follows: Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(3) Initial and confirmatory designation of sediments which contain other toxic, radioactive, biological, or deleterious substances. Sediments which contain other toxic, radioactive, biological, or deleterious substances, as defined in WAC 173-204-200(16), shall be designated by the department using the following procedures.

(a) The department shall:

(i) Identify individual contaminants of concern;

(ii) Identify appropriate and practicable sampling and analysis methodologies;

(iii) Identify test interpretation standards for initial and confirmatory designation; and

(iv) Identify acceptable levels of sediment contamination for sediments which contain other toxic, radioactive, biological, or deleterious substances.

(b) Where sediment containing other toxic, radioactive, biological or deleterious substances may also be contaminated by chemicals identified in WAC 173-204-320 through 173-204-340, the department shall require application of the

appropriate tests and standards of WAC 173-204-320 through 173-204-340, as determined by the department, in addition to any requirements developed pursuant to (a) of this subsection.

(c) The department may use all or some of the sediment biological tests of WAC 173-204-320 through 173-204-340 to designate sediments with other toxic, radioactive, biological or deleterious substances in cases where those tests are technically appropriate, as determined by the department.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-310, filed 3/27/91, effective 4/27/91.]

WAC 173-204-315 Confirmatory marine sediment biological tests. (1) The following five acute and chronic effects biological tests shall be used to confirm designation of Puget Sound marine sediments using the procedures described in WAC 173-204-310(2). Use of alternate biological tests shall be subject to the review and approval of the department using the procedures of WAC 173-204-130(4).

(a) Acute effects tests.

(i) Amphipod: Ten-day mortality sediment bioassay for the Amphipod, i.e., Rhepoxynius abronius, Ampelisca abdita, or Eohaustorius estuarius.

(ii) Larval: Any one of the following mortality/abnormality sediment bioassays:

(A) Crassostrea gigas, i.e., Pacific oyster;

(B) Mytilus (edulis) galloprovincialis, i.e., Blue mussel;

(C) Strongylocentrotus purpuratus, i.e., Purple sea urchin;

(D) Strongylocentrotus droebachiensis, i.e., Green sea urchin; or

(E) Dendraster excentricus, i.e., Sand dollar.

(b) Chronic effects tests.

(i) Benthic infaunal abundance: Abundance of the following major taxa: Class Crustacea, Class Polychaeta, and Phylum Mollusca.

(ii) Juvenile polychaete: Twenty-day growth rate of the juvenile polychaete Neanthes arenaceodentata; or

(iii) Microtox saline extract: Decreased luminescence from the bacteria Vibrio fisheri after a fifteen minute exposure.

(2) Performance standards for control and reference sediment biological test results. The biological tests of this section shall not be considered valid unless test results for the appropriate control and reference sediments meet the performance standards of (a) through (e) of this subsection. The department may reject the results of a reference sediment biological test based on unacceptably high variability.

(a) Amphipod: The control sediment shall have less than ten percent mortality over the test period. The reference sediment shall have less than twenty-five percent mortality.

(b) Larval: The seawater control sample shall have less than thirty percent combined abnormality and mortality (i.e., a seventy percent normal survivorship at time-final).

(c) Benthic abundance: The reference benthic macroinvertebrate assemblage shall be representative of areas of Puget Sound removed from significant sources of contaminants, and to the extent possible shall have the following characteristics:

(i) The taxonomic richness of benthic macroinvertebrates and the abundances of higher taxonomic groups shall reflect seasonality and natural physical-chemical conditions (e.g., grain size composition and salinity of sediments, water depth) in a reference area, and not be obviously depressed as a result of chemical toxicity;

(ii) Normally abundant species that are known to be sensitive to chemical contaminants shall be present;

(iii) Normally rare species that are known to become abundant only under chemically disturbed conditions shall be rare or absent; and

(iv) The abundances of normally rare species that control community structure through physical modification of the sediment shall be similar to those observed at the test sediment site.

(d) Juvenile polychaete: The control sediment shall have less than ten percent mortality and mean individual growth of $\geq$ 0.72 mg/ind/day per dry weight basis. The reference sediment shall have a mean individual growth rate which is at least eighty percent of the mean individual growth rate found in the control sediment. Control sediments exhibiting growth below 0.72 mg/ind/day may be approved by the department on a case-by-case basis.

(e) Microtox: Reserved: The department shall determine performance standards on a case-by-case basis as necessary to meet the intent of this chapter.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-315, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-315, filed 3/27/91, effective 4/27/91.]

WAC 173-204-320 Marine sediment quality standards. (1) Goal and applicability.

(a) The sediment quality standards of this section shall correspond to a sediment quality that will result in no adverse effects, including no acute or chronic adverse effects on biological resources and no significant health risk to humans.

(b) The marine sediment quality standards of this section shall apply to marine sediments located within Puget Sound as defined in WAC 173-204-200(19).

(c) Non-Puget Sound marine sediment quality standards. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(2) Chemical concentration criteria. The chemical concentrations in Table I establish the marine sediment quality standards chemical criteria for designation of sediments.

(a) Where laboratory analysis indicates a chemical is not detected in a sediment sample, the detection limit shall be reported and shall be at or below the Marine Sediment Quality Standards chemical criteria value set in this table.

(b) Where chemical criteria in this table represent the sum of individual compounds or isomers, the following methods shall be applied:

(i) Where chemical analyses identify an undetected value for every individual compound/isomer then the single highest detection limit shall represent the sum of the respective compounds/isomers; and

(ii) Where chemical analyses detect one or more individual compound/isomers, only the detected concentrations will be added to represent the group sum.

(c) The listed chemical parameter criteria represent concentrations in parts per million, "normalized," or expressed, on a total organic carbon basis. To normalize to total organic carbon, the dry weight concentration for each parameter is divided by the decimal fraction representing the percent total organic carbon content of the sediment.

(d) The LPAH criterion represents the sum of the following "low molecular weight polynuclear aromatic hydrocarbon" compounds: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, and Anthracene. The LPAH criterion is not the sum of the criteria values for the individual LPAH compounds as listed.

(e) The HPAH criterion represents the sum of the following "high molecular weight polynuclear aromatic hydrocarbon" compounds: Fluoranthene, Pyrene, Benz(a)anthracene, Chrysene, Total Benzofluoranthenes, Benzo(a)pyrene, Indeno(1,2,3,-c,d)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene. The HPAH criterion is not the sum of the criteria values for the individual HPAH compounds as listed.

(f) The TOTAL BENZOFLUORANTHENES criterion represents the sum of the concentrations of the "B," "J," and "K" isomers.

Table I
Marine Sediment Quality Standards—
Chemical Criteria

CHEMICAL PARAMETER	MG/KG DRY WEIGHT (PARTS PER MILLION (PPM) DRY)
ARSENIC	57
CADMIUM	5.1
CHROMIUM	260
COPPER	390
LEAD	450
MERCURY	0.41
SILVER	6.1
ZINC	410

CHEMICAL PARAMETER	MG/KG ORGANIC CARBON (PPM CARBON)
LPAH	370
NAPHTHALENE	99
ACENAPHTHYLENE	66
ACENAPHTHENE	16
FLUORENE	23
PHENANTHRENE	100
ANTHRACENE	220
2-METHYLNAPHTHALENE	38
HPAH	960
FLUORANTHENE	160
PYRENE	1000
BENZ(A)ANTHRACENE	110
CHRYSENE	110
TOTAL BENZOFLUORANTHENES	230
BENZO(A)PYRENE	99
INDENO (1,2,3,-C,D) PYRENE	34
DIBENZO (A,H) ANTHRACENE	12
BENZO(G,H,I)PERYLENE	31
1,2-DICHLOROBENZENE	2.3
1,4-DICHLOROBENZENE	3.1
1,2,4-TRICHLOROBENZENE	0.81
HEXACHLOROBENZENE	0.38
DIMETHYL PHTHALATE	53
DIETHYL PHTHALATE	61
DI-N-BUTYL PHTHALATE	220
BUTYL BENZYL PHTHALATE	4.9
BIS (2-ETHYLHEXYL) PHTHALATE	47
DI-N-OCTYL PHTHALATE	58
DIBENZOFURAN	15
HEXACHLOROBUTADIENE	3.9
N-NITROSODIPHENYLAMINE	11
TOTAL PCB'S	12

CHEMICAL PARAMETER	UG/KG DRY WEIGHT (PARTS PER BILLION (PPB) DRY)
PHENOL	420
2-METHYLPHENOL	63
4-METHYLPHENOL	670
2,4-DIMETHYL PHENOL	29
PENTACHLOROPHENOL	360
BENZYL ALCOHOL	57
BENZOIC ACID	650

(3) Biological effects criteria. For designation of sediments pursuant to WAC 173-204-310(2), sediments are determined to have adverse effects on biological resources when any one of the confirmatory marine sediment biological tests of WAC 173-204-315(1) demonstrate the following results:

(a) Amphipod: The test sediment has a higher (statistically significant, t test, $p \leq 0.05$) mean mortality than the reference sediment and the test sediment mean mortality exceeds twenty-five percent, on an absolute basis.

(b) Larval: The test sediment has a mean survivorship of normal larvae that is less (statistically significant, t test, $p \leq 0.05$) than the mean normal survivorship in the reference sediment and the test sediment mean normal survivorship is less than eighty-five percent of the mean normal survivorship in the reference sediment (i.e., the test sediment has a mean combined abnormality and mortality that is greater than fifteen percent relative to time-final in the reference sediment).

(c) Benthic abundance: The test sediment has less than fifty percent of the reference sediment mean abundance of any one of the following major taxa: Class Crustacea, Phylum Mollusca or Class Polychaeta, and the test sediment abundance is statistically different (t test, $p \leq 0.05$) from the reference sediment abundance.

(d) Juvenile polychaete: The test sediment has a mean individual growth rate of less than seventy percent of the reference sediment mean individual growth rate and the test sediment mean individual growth rate is statistically different (t test, $p \leq 0.05$) from the reference sediment mean individual growth rate.

(e) Microtox: The mean light output of the highest concentration of the test sediment is less than eighty percent of the mean light output of the reference sediment, and the two means are statistically different from each other (t test, $p \leq 0.05$).

(4) Marine sediment human health criteria. Reserved: The department may determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(5) Marine sediment other toxic, radioactive, biological, or deleterious substances criteria. Other toxic, radioactive, biological or deleterious substances in, or on, sediments shall be at or below levels which cause no adverse effects in marine biological resources, and below levels which correspond to a significant health risk to humans, as determined by the department. The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to

meet the intent of this chapter pursuant to WAC 173-204-310(3).

(6) Nonanthropogenically affected sediment quality criteria. Whenever the nonanthropogenically affected sediment quality is of a lower quality (i.e., higher chemical concentrations, higher levels of adverse biological response, or posing a greater health threat to humans) than the applicable sediment quality standards assigned for said sediments by this chapter, the existing sediment chemical and biological quality shall be identified on an area-wide basis as determined by the department, and used in place of the sediment quality standards of WAC 173-204-320.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-320, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-320, filed 3/27/91, effective 4/27/91.]

WAC 173-204-330 Low salinity sediment quality standards. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-330, filed 3/27/91, effective 4/27/91.]

WAC 173-204-340 Freshwater sediment quality standards. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-340, filed 3/27/91, effective 4/27/91.]

WAC 173-204-350 Sediment quality standards inventory. (1) The department shall gather available data on sediments and produce an inventory of sediment sampling stations which pass or fail the applicable sediment quality standards of WAC 173-204-320 through 173-204-340. Sediment sampling stations which are evaluated for compliance with the sediment quality standards of WAC 173-204-320 through 173-204-340 and placed on the inventory shall be sampled and analyzed using the Puget Sound Protocols or other methods approved by the department, and shall use an appropriate quality assurance/quality control program, as determined by the department. The sediment quality standards inventory produced per this section shall be used by the department, and made available upon request to the public and other federal, state, and local agencies for the following uses:

(a) To identify and target necessary source control activities, such as discharger monitoring, to eliminate adverse effects on biological resources and significant health threats to humans from sediment contamination;

(b) To identify contaminated sediment cleanup sites per the procedures in WAC 173-204-500 through 173-204-590;

(c) To establish sediment quality ambient monitoring program status and trends analyses and reports;

(d) To identify the sediment quality of areas proposed for dredging, in-water construction, and other actions requiring federal, state, and/or local permits; and

(e) To complete other uses consistent with the intent of this chapter, as determined by the department.

(2) Sources of data. Sediment biological and chemical data shall be gathered by the department for review to produce and update the sediment quality inventory on a biennial basis. Data sources include, but are not limited to:

(a) Sediment data collected by the department for the Puget Sound ambient monitoring program, compliance monitoring of permitted discharges, and special environmental investigations.

(b) Sediment data submitted to the U.S. Army Corps of Engineers in support of dredging permit applications.

(c) Sediment data collected to identify problem areas and needed source controls in Puget Sound as defined in WAC 173-204-200(19), other marine waters, and all low salinity and freshwater areas in Washington state.

(d) Sediment data used or collected in compliance with chapter 70.105D RCW, and the Model Toxics Control Act cleanup regulation, chapter 173-340 WAC.

(e) Sediment data used or collected in compliance with the federal Comprehensive Environmental Response, Compensation and Liability Act.

(f) Sediment data collected as a requirement of a National Pollutant Discharge Elimination System or state discharge permit.

(g) Sediment data derived from other studies including:

(i) Federally sponsored monitoring studies.

(ii) Special monitoring studies conducted by local and municipal governments, or private industry.

(iii) Data derived through Washington state department of natural resources administration of use authorizations.

(3) The inventory shall be updated and made available to the public on a biennial basis.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-350, filed 3/27/91, effective 4/27/91.]

PART IV—SEDIMENT SOURCE CONTROL

WAC 173-204-400 General considerations. (1) The standards of WAC 173-204-400 through 173-204-420 specify a process for managing sources of sediment contamination. These procedures include:

(a) Evaluating the potential for a waste discharge to create a sediment impact;

(b) Requiring application for a sediment impact zone authorization;

(c) Verifying whether a discharge has received all known, available and reasonable methods of prevention, control, and treatment prior to discharge, and/or application of best management practices;

(d) Analysis and verification of the potential sediment impact;

(e) Determining whether the sediment impact zone would meet maximum allowable contamination requirements;

(f) Evaluating the proposed sediment impact zone in consideration of locational criteria;

(g) Design and/or constrain the sediment impact zone to be as small, and with the least contamination, as practicable;

(h) Public review of the proposed sediment impact zone authorization;

(i) Issuance of the sediment impact zone authorization with provisions for maintenance and closure; and

(j) Reducing and eventually eliminating the sediment impact zone via renewals and modifications of a sediment impact zone authorization.

(2) Permits and other authorizations of wastewater, storm water, and nonpoint source discharges to surface waters of the state of Washington under authority of chapter 90.48 RCW shall be conditioned so that the discharge receives all known, available and reasonable methods of prevention, control, and treatment, and best management practices prior to discharge, as required by chapters 90.48, 90.52, and 90.54 RCW. The department shall provide consistent guidance on the collection, analysis and evaluation of wastewater, receiving-water, and sediment samples to meet the intent of this section using consideration of pertinent sections of the *Department of Ecology Permit Writers' Manual*, as amended, and other guidance approved by the department.

(3) As determined necessary, the department shall require any person who proposes a new discharge to evaluate the potential for the proposed discharge to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(4) As determined necessary, the department shall require existing permitted discharges to evaluate the potential for the permitted discharge to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(5) Within permits authorizing existing discharges to surface waters of the state of Washington, the department may specify appropriate locations and methodologies for the collection and analysis of representative samples of wastewater, receiving-water, and sediments to evaluate the potential for the discharge to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(6) In establishing the need for, and the appropriate, individual permit monitoring conditions, the department shall consider multiple factors relating to the potential for a discharge to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 including but not limited to:

(a) Discharge particulate characteristics;

(b) Discharge contaminant concentrations, flow, and loading rate;

(c) Sediment chemical concentration and biological effects levels;

(d) Receiving water characteristics;

(e) The geomorphology of sediments;

(f) Cost mitigating factors such as the available resources of the discharger; and

(g) Other factors determined necessary by the department.

(7) As determined necessary to ensure the wastewater discharge does not cause a violation of the applicable standards of WAC 173-204-320 through 173-204-340, except as authorized by the department under WAC 173-204-415, Sediment impact zones, the department shall stipulate permit terms and conditions which include wastewater discharge average and maximum mass loading per unit time, and wastewater discharge average and maximum chemical concentrations within new and existing facility permits authorizing wastewater discharges to surface waters of the state of Washington.

(8) As determined necessary, the department shall modify wastewater discharge permits whenever it appears the discharge causes a violation, or creates a substantial potential to cause a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, as authorized by RCW 90.48.520.

(9) To meet the intent of this section, the sediment quality standards of WAC 173-204-320 through 173-204-340 and the sediment impact zone standards of WAC 173-204-415 through 173-204-420 are not considered to be federal discharge permit effluent limits subject to antibacksliding requirements of the federal Clean Water Act. Discharge permit sediment monitoring and sediment impact zone compliance requirements may be used to establish effluent limits sufficient to meet the standards of this chapter.

(10) As determined necessary, the department shall use issuance of administrative actions under authority of chapters 90.48 or 70.105D RCW to implement this chapter.

(11) Wastewater dilution zones. Water quality mixing zones authorized by the department pursuant to chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington, do not satisfy the standards of WAC 173-204-415, Sediment impact zones.

(12) For the sediment source control standards of WAC 173-204-400 through 173-204-420, any and all references to violation of, potential to violate, exceedance of, or potential to exceed the applicable standards of WAC 173-204-320 through 173-204-340 shall also apply to the antidegradation and designated use policies of WAC 173-204-120. Any exceedances or potential exceedances of the antidegradation or designated use policies of WAC 173-204-120 shall meet the applicable requirements of WAC 173-204-400 through 173-204-420.

(13) Under no circumstances shall the provisions of sediment source control standards WAC 173-204-400 through 173-204-420 be construed as providing for the relaxation of discharge permit requirements under other authorities including, but not limited to, chapter 90.48 RCW, the Water Pollution Control Act, chapter 90.54 RCW, the Water Resources Act of 1971, and the Federal Water Pollution Control Act of 1972 and amendments.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-400, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-400, filed 3/27/91, effective 4/27/91.]

WAC 173-204-410 Sediment quality goal and sediment impact zone applicability. (1) Goal and policies.

(a) It is the established goal of the department to manage source control activities to reduce and ultimately eliminate adverse effects on biological resources and significant health threats to humans from sediment contamination.

(b) The stated policy of the department shall be to only authorize sediment impact zones so as to minimize the number, size, and adverse effects of all zones, with the intent to eliminate the existence of all such zones whenever practica-

ble. The department shall consider the relationship between environmental effects, technical feasibility and cost in determining whether it is practicable to minimize and/or eliminate sediment impact zones.

(c) The department shall implement the standards of WAC 173-204-400 through 173-204-420 so as to prevent the creation of new contaminated sediment cleanup sites identified under WAC 173-204-530(4).

(2) A sediment impact zone authorization issued by the department under the authority of chapter 90.48 RCW does not constitute authorization to trespass on lands not owned by the applicant. These standards do not address and in no way alter the legal rights, responsibilities, or liabilities of the permittee or landowner of the sediment impact zone for any applicable requirements of proprietary, real estate, tort, and/or other laws not directly expressed as a requirement of this chapter.

(3) Except as identified in subsection (6)(d) of this section, any person may apply for a sediment impact zone under the following conditions:

(a) The person's discharge is provided with all known, available and reasonable methods of prevention, control, and treatment, and meets best management practices as stipulated by the department; and

(b) The person's discharge activity exposes or resuspends sediments which exceed, or otherwise cause or potentially cause sediments to exceed the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, or the antidegradation policy standards of WAC 173-204-120 (1)(a) and (c) within a period of ten years from the later date of either the department's formal approval of the application for a sediment impact zone authorization or the starting date of the discharge.

(4) The department shall only authorize sediment impact zones for permitted wastewater and storm water discharges, and other discharges authorized by the department. The department shall authorize all sediment impact zones via discharge permits or other formal administrative actions.

(5) The department shall not limit the application, establishment, maintenance, or closure of an authorized sediment impact zone via consideration of sediment contamination determined by the department to be the result of unknown, unpermitted or historic discharge sources.

(6) As determined necessary by the department, any person with a permitted discharge shall be required to meet the standards of WAC 173-204-400 through 173-204-420, as follows:

(a) Any person with a new or existing permitted wastewater discharge shall be required to meet the standards of WAC 173-204-400 through 173-204-420;

(b) Any person with a new or existing permitted industrial storm water discharge, regulated as process wastewater in National Pollutant Discharge Elimination System or state discharge permits, shall be required to meet the standards of WAC 173-204-400 through 173-204-420;

(c) Any person with a new or existing permitted storm water or nonpoint source discharge, which fully uses all known, available and reasonable methods of prevention, control, and treatment, and best management practices as stipulated by the department at the time of the person's application for a sediment impact zone, shall be required to meet the standards of WAC 173-204-400 through 173-204-420;

(d) Any person with a storm water discharge, existing prior to the adoption of this chapter, and determined by the department to not be fully using best management practices stipulated by the department at the time of the person's application for a permit from the department, shall be eligible for a sediment impact zone as follows:

(i) The department shall issue sediment impact zone authorizations with requirements for application of best management practices stipulated by the department on an approved time schedule.

(ii) Sediment impact zones authorized by the department for permitted storm water discharges under the applicability provisions of subsection (6)(d) of this section shall be subject to cleanup action determinations made by the department pursuant to WAC 173-204-500 through 173-204-590 when the sediment impact zone maximum criteria of WAC 173-204-420 are exceeded within the authorized sediment impact zone.

(iii) The department shall identify and include best management practices required to meet the sediment impact zone design standards of WAC 173-204-415(4) as soon as practicable within sediment impact zone authorizations established for storm water discharges per WAC 173-204-410 (6)(d).

(7) Dredged material and fill discharge activities subject to authorization under Section 401 of the federal Clean Water Act via chapter 90.48 RCW and chapter 173-225 WAC, establishment of implementation procedures of application for certification, are not subject to the standards of WAC 173-204-415 but are subject to the standards of WAC 173-204-400 through 173-204-410 and 173-204-420 as follows:

(a) Requirements for dredging activities and disposal sites shall be established by the department using best available dredged material management guidelines and applicable federal and state rules. These guidelines shall include the Puget Sound dredged disposal analysis (PSDDA) dredged material testing and disposal requirements cited in:

(i) *Management Plan Report - Unconfined Open-Water Disposal Of Dredged Material, Phase I, (Central Puget Sound), June 1988, or as amended;*

(ii) *Management Plan Report - Unconfined Open-Water Disposal Of Dredged Material, Phase II, (North And South Puget Sound), September 1989, or as amended;* and

(iii) *Users Manual For Dredged Material Management In Puget Sound, November 1990, or as amended.*

(b) In coordination with other applicable federal and state and local dredged material management programs, the department may issue administrative orders to establish approved disposal sites, to specify disposal site use conditions, and to specify disposal site monitoring requirements.

(c) The department may authorize sediment impact zones for dredged material disposal via federal Clean Water Act Section 401 certification actions.

(d) As determined necessary by the department, the department may authorize sediment impact zones for dredged material disposal via administrative orders issued under authority of chapter 90.48 RCW. The department shall authorize sediment impact zones for all Puget Sound dredged disposal analysis disposal sites via administrative orders issued under authority of chapter 90.48 RCW.

(e) Administrative orders and certifications establishing sediment impact zones for dredged material disposal sites shall describe establishment, maintenance, and closure requirements for the authorized site, consistent with the requirements described in (a) of this subsection.

(8) The source control standards of WAC 173-204-400 through 173-204-420 are applicable in cases where the sediment quality standards of WAC 173-204-320 through 173-204-340 are reserved.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-410, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-410, filed 3/27/91, effective 4/27/91.]

WAC 173-204-412 Marine finfish rearing facilities. (1) Purpose. This section sets forth the applicability of this chapter to marine finfish rearing facilities only. This section also identifies marine finfish rearing facility siting, operation, closure and monitoring requirements to meet the intent of this chapter, as applicable.

(2) Applicability. Marine finfish rearing facilities and their associated discharges are not subject to the authority and purpose standards of WAC 173-204-100 (3) and (7), and the marine sediment quality standards of WAC 173-204-320 and the sediment impact zone maximum criteria of WAC 173-204-420, within and including the distance of one hundred feet from the outer edge of the marine finfish rearing facility structure. Marine finfish rearing facilities are not subject to the sediment impact zone standards of WAC 173-204-415.

(3) Sediment monitoring. Sediment quality compliance and monitoring requirements for marine finfish rearing facilities shall be addressed through National Pollutant Discharge Elimination System or other permits issued by the department for facility operation. Marine finfish rearing facilities shall meet the following sediment quality monitoring requirements:

(a) Any person with a new facility shall identify a baseline sediment quality prior to facility operation for benthic infaunal abundance, total organic carbon and grain size in the location of the proposed operation and downcurrent areas that may be potentially impacted by the facility discharge;

(b) Any person with an existing operating facility shall monitor sediment quality for total organic carbon levels and identify the location of any sediments in the area of the facility statistically different (t test, $p \leq 0.05$) from the total organic carbon levels identified as facility baseline levels or statistically different from the applicable total organic carbon levels as identified in Table 1:

TABLE 1 - Puget Sound Reference Total Organic Carbon Values

Silt-Clay Particles (percent Dry Weight)	Total Organic Carbon (percent Dry Weight)
0-20	0.5
20-50	1.7
50-80	3.2
80-100	2.6

(c) The locations and frequency of monitoring for total organic carbon, benthic infaunal abundance and other parameters shall be determined by the department and identified in the applicable National Pollutant Discharge Elimination System permit;

(d) Antibacterials. Reserved: The department shall determine on a case-by-case basis the methods, procedure, locations, and frequency for monitoring antibacterials associated with the discharge from a marine finfish rearing facility;

(e) Closure. All permitted marine finfish rearing facilities shall monitor sediments impacted during facility operation to document recovery of sediment quality to background levels. The department shall determine on a case-by-case basis the methods, procedure, locations, and frequency for monitoring sediments after facility closure.

(4) Sediment impact zones. Marine finfish rearing facilities and their associated discharges that are permitted under a National Pollutant Discharge Elimination System permit are hereby provided a sediment impact zone by rule for any sediment quality impacts and biological effects within and including the distance of one hundred feet from the outer edge of the marine finfish rearing facility structure.

(a) The department may authorize an individual marine finfish rearing facility sediment impact zone for any sediments beyond a distance of one hundred feet from the facility perimeter via National Pollutant Discharge Elimination System permits or administrative actions. The authorized sediment impact zone shall meet the benthic infaunal abundance requirements of the sediment impact zone maximum criteria, WAC 173-204-420 (3)(c)(iii). Marine finfish rearing facilities that exceed the sediment quality conditions of subsection (3)(b) of this section beyond a distance of one hundred feet from the facility perimeter shall:

(i) Begin an enhanced sediment quality monitoring program to include benthic infaunal abundance consistent with the requirements of the National Pollutant Discharge Elimination System permit. The sediment quality monitoring program shall include a benthic infaunal abundance reference sediment sample as required in subsection (3)(a) of this section or a benthic infaunal abundance reference sediment sample in compliance with WAC 173-204-200(21); and

(ii) Be consistent with the sediment source control general considerations of WAC 173-204-400 and the sediment quality goal and sediment impact zone applicability requirements of WAC 173-204-410, apply for a sediment impact zone as determined necessary by the department.

(b) Administrative orders or permits establishing sediment impact zones for marine finfish rearing facilities shall describe establishment, maintenance, and closure requirements as determined necessary by the department.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-412, filed 12/29/95, effective 1/29/96.]

WAC 173-204-415 Sediment impact zones. The purpose of this section is to set forth the standards for establishment, maintenance, and closure of sediment impact zones to meet the intent of sediment quality dilution zones authorized pursuant to RCW 90.48.520, except for sediment impact zones authorized under WAC 173-204-410(7). The department shall authorize all sediment impact zones via discharge permits or other formal administrative actions.

(1) General requirements. Authorization, modification and renewal of a sediment impact zone by the department

shall require compliance with the following general requirements:

(a) Permits authorizing wastewater discharges to surface waters of the state of Washington under authority of chapter 90.48 RCW shall be conditioned so that the discharge receives:

(i) All known, available and reasonable methods of prevention, control, and treatment prior to discharge, as required by chapters 90.48, 90.52, and 90.54 RCW; and

(ii) Best management practices as stipulated by the department.

(b) The maximum area, and maximum chemical contaminant concentration and/or allowable maximum biological effect level within sediments assigned to a sediment impact zone shall be as authorized by the department, in accordance with the standards of this section.

(c) The department shall determine that the person's activity generating effluent discharges which require authorization of a sediment impact zone is in the public interest.

(d) The department shall determine that any person's activity generating effluent discharges which require authorization of a sediment impact zone has adequately addressed alternative waste reduction, recycling, and disposal options through application of all known, available and reasonable methods of prevention, control, and treatment to minimize as best practicable the volume and concentration of waste contaminants in the discharge.

(e) The area boundaries of the sediment impact zone established by the department shall include the minimum practicable surface area, not to exceed the surface area allowed under subsection (4) of this section.

(f) Adverse effects to biological resources within an authorized sediment impact zone shall be maintained at the minimum chemical contamination and biological effects levels practicable at all times. The department shall consider the relationship between environmental effects, technical feasibility and cost in determining the minimum practicable chemical contamination and biological effects levels. Adverse effects to biological resources within an authorized sediment impact zone shall not exceed a minor adverse effects level as a result of the discharge, as determined by the procedures of subsection (4) of this section.

(g) The operational terms and conditions for the sediment impact zone shall be maintained at all times.

(h) Final closure of the sediment impact zone shall be conducted in strict accordance with the department's sediment impact zone authorization.

(i) Documents authorizing a sediment impact zone shall require that the permitted discharge not result in a violation of the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, outside the area limits of the established zone.

(j) All applications to the department for sediment impact zone authorizations shall be subject to public notice, comment and hearing procedures defined but not limited to the applicable discharge permit or other formal administrative action requirements of chapter 43.21C RCW, the State Environmental Policy Act, chapter 197-11 WAC, SEPA rules, chapter 90.48 RCW, chapter 163-216 WAC, the State waste discharge permit program, and chapter 173-220 WAC, National Pollutant Discharge Elimination System Permit Program prior to issuance of the authorization. In determining the need for, location, and/or design of any sediment impact zone authorization, the department shall give consideration to all comments received during public review of the proposed sediment impact zone application.

(2) Application requirements.

(a) Whenever, in the opinion of the department, as a result of an ongoing or proposed effluent discharge, a person violates, shall violate, or creates a substantial potential to violate the sediment quality standards of WAC 173-204-320 through 173-204-340 as applicable within a period of ten years from the later date of either the department's evaluation of the ongoing discharge or the starting date of the proposed discharge, the department may require application for a sediment impact zone authorization under authority of chapter 90.48 RCW.

(b) Any person with a proposed or permitted effluent discharge shall apply to the department for authorization of a sediment impact zone when:

(i) The department requires the sediment impact zone application by written notification; or

(ii) The person independently identifies that the ongoing or proposed effluent discharge violates, shall violate, or creates a substantial potential to violate the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 within a period of ten years from the later date of the person's evaluation of the ongoing discharge or the starting date of the proposed discharge, using the procedures of this section.

(c) As necessary, the department may require any person to submit a sediment impact zone application in multiple steps concurrent with its ongoing review and determination concerning the adequacy of the application. The application shall provide the sediment impact zone design information required in subsection (4) of this section and other such information the department determines necessary. The application shall also provide the legal location and landowner(s) of property proposed for use as, or potentially affected by, a sediment impact zone, and shall be accompanied by such other relevant information as the department may require. The department shall issue a written approval of the complete sediment impact zone application prior to or concurrent with authorizing a sediment impact zone.

(d) Submittal of an application to the department for authorization of a sediment impact zone under the terms and conditions of this section shall establish the applicant's interim compliance with requirements of chapter 90.48 RCW and this chapter, as determined by the department. The department may authorize an interim compliance period within a valid discharge permit or administrative order to ensure ultimate compliance with chapter 90.48 RCW and this chapter. The interim compliance period shall not continue beyond the date of issuance of a sediment impact zone authorization within a valid discharge permit issued by the department.

(e) Prior to authorization, the department shall make a reasonable effort to identify and notify all landowners, adjacent landowners, and lessees affected by the proposed sediment impact zone. The department shall issue a sediment impact zone notification letter to any person it believes to be a potentially affected landowner and other parties determined

appropriate by the department. The notification letter shall be sent by certified mail, return receipt requested, or by personal service. The notification letter shall provide:

(i) The name of the person the department believes to be the affected landowner;

(ii) The names and addresses of other affected landowners to whom the department has sent a proposed sediment impact zone notification letter;

(iii) The name and address of the sediment impact zone applicant;

(iv) A general description of the location, size, and contamination level proposed for the sediment impact zone;

(v) The intention of the department to release all specific sediment impact zone application information to the public upon written request to the department;

(vi) The determination of the department concerning whether the proposed sediment impact zone application meets the standards of this section;

(vii) The intention of the department whether to authorize the proposed sediment impact zone; and

(viii) Notification that the affected landowners, adjacent landowners, and lessees may comment on the proposed sediment impact zone. Any comments on the proposed sediment impact zone authorization shall be submitted in writing to the department within thirty days from the date of receipt of the notification letter, unless the department provides an extension.

(f) Prior to authorization, the department shall issue a sediment impact zone notification letter to affected port districts, the Washington state department of natural resources marine lands division, the U.S. Army Corps of Engineers, and other parties determined appropriate by the department. The notification letter shall be sent by certified mail, return receipt requested, or by personal service. The notification letter shall provide the information required under (e) of this subsection.

(3) Locational considerations. The department shall require any person applying for a sediment impact zone to submit information concerning potential location considerations of the zone. The location of an authorized sediment impact zone shall avoid whenever possible and minimize adverse impacts to areas of special importance. Prior to authorization of a sediment impact zone, the department shall consider all pertinent information from the applicant, all affected parties, local, state and federal agencies, federally recognized Indian tribes, and the public concerning locational considerations, including but not limited to:

(a) Spawning areas;

(b) Nursery areas;

(c) Waterfowl feeding areas;

(d) Shellfish harvest areas;

(e) Areas used by species of economic importance;

(f) Tribal areas of significance;

(g) Areas determined to be ecologically unique;

(h) Water supply intake areas;

(i) Areas used for primary contact public recreation;

(j) High quality waters that constitute an outstanding national resource; and

(k) Areas where sediment quality is substantially better than levels necessary for protection of biological resources and human health.

(4) Design requirements. The location, areal limitations, and degree of effects allowed within an authorized sediment impact zone shall be determined by application of the department's sediment impact zone computer models "CORMIX," "PLUMES," and/or "WASP," or an alternate sediment impact zone model(s) approved by the department under WAC 173-204-130(4), as limited by the standards of this section and the department's best professional judgment. The models shall be used by the department or by the discharger as required by the department, to estimate the impact of any person's wastewater or storm water discharge on the receiving water and sediment quality for a period of ten years from the later date of either the department's formal approval of the application for a sediment impact zone authorization or the starting date of the discharge.

(a) Data requirements. The discharger shall submit the following information to determine requirements for establishment and authorization of a sediment impact zone, as required by the department:

(i) Data reports and analyses results for all samples of wastewater or storm water, receiving water, and sediments collected by the discharger or other parties relating to evaluation of the potential effects of the permitted discharge, as required by WAC 173-204-400.

(ii) Data reports and analyses results determined necessary to:

(A) Apply discharge modeling to the permitted discharge; and

(B) To identify and evaluate potential alternative chemical and biological effects of the discharge on the receiving water and sediments; and

(C) To identify and evaluate potential alternatives to define the areal size and location of a sediment impact zone needed by the discharge.

(iii) Data reports and analyses results from the discharger's application of the "CORMIX," "PLUMES," and/or "WASP" or an alternate sediment impact zone model(s) approved by the department under WAC 173-204-130(4), to the permitted discharge to identify and evaluate:

(A) Potential alternative chemical and biological effects of the discharge on the receiving water and sediments; and

(B) Potential alternatives for the areal distribution and location of a potential sediment impact zone required by the discharge.

(iv) Preferred alternative for closure of the potential sediment impact zone by active removal and/or natural recovery, and identified costs of the preferred closure method.

(b) Overlapping sediment impact zones. Overlapping sediment impact zones, as predicted by the "CORMIX," "PLUMES," and/or "WASP" models or an alternate sediment impact zone model(s) approved by the department under WAC 173-204-130(4), and the department's best professional judgment, shall be authorized only as follows:

(i) The applicable sediment impact zone maximum criteria of WAC 173-204-420 shall not be exceeded as a result of the multiple discharge sediment impact zones overlap; and

(ii) If the department determines that the applicable chemical contaminant concentration and biological effects restrictions of WAC 173-204-420 would be exceeded as a result of the overlap of multiple discharge sediment impact

zones, the department may authorize the sediment impact zones after:

(A) Application of a waste load allocation process to the individual permitted discharges to identify individual permit effluent limitations necessary to meet:

(I) The applicable chemical contaminant concentration and biological effects restrictions for sediment impact zones required by this section; and/or

(II) Storm water best management practices required by the department; and

(B) Establishment of individual permit compliance schedules for the multiple permitted discharges to ensure compliance with:

(I) The permit effluent limitations established by the department using the waste load allocation process and best professional judgment; and

(II) The standards of WAC 173-204-400 through 173-204-420.

(5) Maintenance requirements.

(a) The department shall review sediment impact zone monitoring conducted by the discharger to evaluate compliance with the department's sediment impact zone authorization and the standards of WAC 173-204-400 through 173-204-420. The department may require additional sediment impact zone monitoring when the department determines that any sediment sampling station within an authorized sediment impact zone exceeds the sediment impact zone maximum criteria of WAC 173-204-420 or violates the sediment impact zone authorization as a result of the discharge.

(b) Whenever the department can clearly demonstrate that, as a result of an effluent discharge, a discharger violates, shall violate, or creates a substantial potential to violate the department's sediment impact zone authorization, or the sediment impact zone maximum criteria of WAC 173-204-420, the department shall:

(i) Provide written notification and supporting documentation of the department's clear demonstration determination to the affected discharger;

(ii) Establish a reasonable time frame for the affected discharger to either submit a written statement and supporting documentation rebutting the department's clear demonstration determination, or accept the department's determination. The discharger may use the clear demonstration methods identified in (c) of this subsection for rebuttal of the department's clear demonstration; and

(iii) Provide written notification of the department's determination concerning approval or denial of the submitted clear demonstration rebuttal to the discharger.

(c) For the purpose of this section, a clear demonstration shall consist of:

(i) Use of the sediment impact zone model(s) "CORMIX," "PLUMES," and/or "WASP" or other model(s) to demonstrate a discharge(s) is the source of the violation or potential violation; and

(ii) Use of one or more of the following methods to demonstrate a violation of the sediment impact zone authorization or the sediment impact zone maximum criteria of WAC 173-204-420:

(A) Direct sediment sampling. A violation of the sediment impact zone authorization and/or the sediment impact zone maximum criteria of WAC 173-204-420 is demonstrated when:

(I) The average chemical concentration for three stations within the sediment impact zone exceeds the sediment impact zone maximum criteria of WAC 173-204-420 due to the discharge source. This concentration average shall not include stations for which complete biological testing information shows that the biological effects requirements of WAC 173-204-420, or the authorized sediment impact zone if applicable, are met; or

(II) The biological effects at each of any three stations within the sediment impact zone exceed the sediment impact zone maximum biological effects criteria of WAC 173-204-420 or the authorized sediment impact zone as applicable, due to the discharge source; or

(B) Monitoring data which demonstrates a chemical contaminant concentration gradient toward the discharge source exists in sediments which violates the sediment impact zone authorization or the standards of WAC 173-204-420; or

(C) A trend analysis of the effluent chemical discharge quality and inplace sediment monitoring data which statistically demonstrates an ongoing violation or substantial potential to violate the sediment impact zone authorization or the standards of WAC 173-204-420; or

(D) Field depositional (e.g., sediment traps) and/or effluent particulate (e.g., centrifuge analysis) data which demonstrate an ongoing violation or substantial potential to violate the sediment impact zone authorization or the standards of WAC 173-204-420; or

(E) Mathematical or computer modeling which demonstrates an ongoing violation or substantial potential to violate the sediment impact zone authorization or the standards of WAC 173-204-420.

(d) The department's response to a clear demonstration of a violation or potential violation shall be to require maintenance activities in the following order:

(i) Require reanalysis of whether the discharger's effluent treatment complies with all known, available and reasonable methods of prevention, control, and treatment and best management practices based on the data used to establish the clear demonstration;

(ii) Alter the authorized sediment impact zone size and/or degree of effects consistent with the standards of this section and the results of direct sediment sampling;

(iii) Reduce impacts of the existing or potential violation by requiring additional discharge controls or additional sediment impact zone maintenance activities which can include, but are not limited to:

(A) Dredging and removal of sediments, solely for sediment impact zone maintenance needs or coordinated with maintenance dredging of commercially important areas, e.g., navigational lanes or ship berthing areas;

(B) Dredging, treatment, and replacement of sediments within the sediment impact zone; and/or

(C) Capping of sediments within the sediment impact zone;

(iv) Limit the quantity and/or quality of the existing permitted discharge; and/or

(v) Withdraw the department's sediment impact zone authorization and require final closure of the zone.

(e) All sediment impact zone maintenance actions conducted under this chapter shall provide for landowner review of the maintenance action plans prior to implementation of the action. In cases where the discharger is not able to secure access to lands subject to the sediment impact zone maintenance actions of this subsection, the department may facilitate negotiations or other proceedings to secure access to the lands. Requests for department facilitation of land access shall be submitted to the department in writing by the responsible discharger.

(6) Closure planning and requirements.

(a) The discharger shall select and identify a preferred method for closure of a sediment impact zone in the application required by WAC 173-204-415(2). Closure methods can include either active cleanup and/or natural recovery and monitoring. The department shall incorporate the discharger's identified closure method in the sediment impact zone authorization.

(b) The department may require closure of authorized sediment impact zones when the department determines that:

(i) The discharger has violated the sediment impact zone maintenance standards of subsection (5) of this section; or

(ii) The department determines that:

(A) The wastewater or storm water discharge quality will not violate the applicable sediment quality standards of WAC 173-204-320 through 173-204-340; or

(B) A sediment impact zone is no longer needed or eligible under the standards of WAC 173-204-410 through 173-204-415.

(7) Modification of sediment impact zones. The department may modify sediment impact zone authorization requirements where the nature of a person's activity which generates, transports, disposes, prevents, controls, or treats effluent discharges has substantially changed and been demonstrated to the department's satisfaction. The modification may occur after consideration of the following:

(a) Reduction of effects. Assessment of the discharge activities and treatment methods shall be conducted by the discharger to demonstrate to the satisfaction of the department that:

(i) Elimination of the sediment impact zone is not practicable; and

(ii) Further reduction in any existing or proposed sediment impact zone area size and/or level of contamination or effects is not practicable in consideration of discharge requirements for all known, available and reasonable methods of prevention, control, and treatment, best management practices, and applicable waste reduction and recycling provisions.

(b) Alterations. There are substantial alterations or additions to the person's activity generating effluent discharges which require authorization of a sediment impact zone which occur after permit issuance and justify application of permit conditions different from, or absent in, the existing permit.

(c) New information. Sediment impact zones may be modified when new information is received by the department that was not available at the time of permit issuance that would have justified the application of different sediment impact zone authorization conditions.

(d) New regulations. The standards or regulations on which the permit was based have changed by amended standards, criteria, or by judicial decision after the permit was issued.

(e) Changes in technology. Advances in waste control technology that qualify as "all known, available and reasonable methods of prevention, control, and treatment" and "best management practices" shall be adopted as permit requirements, as appropriate, in all permits reissued by the department.

(8) Renewal of previously authorized sediment impact zones. Renewal of sediment impact zones previously authorized under the standards of WAC 173-204-410 and this section shall be allowed under the following conditions:

(a) The department determines the discharge activities and treatment methods meet all known, available and reasonable methods of prevention, control, and treatment and best management practices as stipulated by the department; and

(b) The discharger demonstrates to the department's satisfaction that the discharge activities comply with the standards of WAC 173-204-400 through 173-204-420 and with the existing sediment impact zone authorization; and

(c) Reduction of effects. The discharger conducts an assessment of the permitted discharge activities and treatment methods and demonstrates to the department's satisfaction that:

(i) Elimination of the sediment impact zone is not practicable; and

(ii) A further reduction in any existing or proposed sediment impact zone area size and/or level of contamination is not practicable in consideration of discharge requirements for all known, available and reasonable methods of prevention, control, and treatment, best management practices, and applicable waste reduction and recycling provisions.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-415, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-415, filed 3/27/91, effective 4/27/91.]

WAC 173-204-420 Sediment impact zone maximum criteria. This section establishes minor adverse effects as the maximum chemical contaminant concentration, maximum health risk to humans, maximum biological effects level, maximum other toxic, radioactive, biological, or deleterious substance level, and maximum nonanthropogenically affected sediment quality level allowed within authorized sediment impact zones due to an existing or proposed discharge. If the department determines that the standards of this section are or will be exceeded as a result of an existing or proposed discharge(s), the department shall authorize a sediment impact zone or modify a sediment impact zone authorization consistent with the standards of WAC 173-204-400 through 173-204-420 such that individual permit effluent limitations, requirements, and compliance time periods are sufficient to meet the standards of this section as applicable.

(1) Applicability.

(a) The marine sediment impact zone maximum chemical criteria, and the marine sediment biological effects criteria, and the marine sediment human health criteria, and the marine sediment other toxic, radioactive, biological or deleterious substance criteria and the marine sediment nonanthropogenically affected sediment criteria of this section shall apply to marine sediments within Puget Sound.

(b) Non-Puget Sound marine sediment impact zone maximum criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(c) Low salinity sediment impact zone maximum criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(d) Freshwater sediment impact zone maximum criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(2) Puget Sound marine sediment impact zone maximum chemical criteria. The maximum chemical concentration levels that may be allowed within an authorized sediment impact zone due to a permitted or otherwise authorized discharge shall be at or below the chemical levels stipulated in Table II, Sediment Impact Zone Maximum Chemical Criteria, except as provided for by the marine sediment biological effects restrictions of subsection (3) of this section, and any compliance time periods established under WAC 173-204-410 (6)(d) and 173-204-415.

(a) Where laboratory analysis indicates a chemical is not detected in a sediment sample, the detection limit shall be reported and shall be at or below the Marine Sediment Quality Standards chemical criteria value set in WAC 173-204-320(2).

(b) Where chemical criteria in this table represent the sum of individual compounds or isomers, the following methods shall be applied:

(i) Where chemical analyses identify an undetected value for every individual compound/isomer then the single highest detection limit shall represent the sum of the respective compounds/isomers; and

(ii) Where chemical analyses detect one or more individual compound/isomers, only the detected concentrations will be added to represent the group sum.

(c) The listed chemical parameter criteria represent concentrations in parts per million, "normalized," or expressed, on a total organic carbon basis. To normalize to total organic carbon, the dry weight concentration for each parameter is divided by the decimal fraction representing the percent total organic carbon content of the sediment.

(d) The LPAH criterion represents the sum of the following "low molecular weight polynuclear aromatic hydrocarbon" compounds: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, and Anthracene. The LPAH criterion is not the sum of the criteria values for the individual LPAH compounds as listed.

(e) The HPAH criterion represents the sum of the following "high molecular weight polynuclear aromatic hydrocarbon" compounds: Fluoranthene, Pyrene, Benz(a)anthracene, Chrysene, Total Benzofluoranthenes, Benzo(a)pyrene, Indeno(1,2,3,-c,d)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene. The HPAH criterion is not the sum of the criteria values for the individual HPAH compounds as listed.

(f) The TOTAL BENZOFLUORANTHENES criterion represents the sum of the concentrations of the "B," "J," and "K" isomers.

Table II
Puget Sound Marine Sediment Impact Zones
Maximum Chemical Criteria

CHEMICAL PARAMETER	MG/KG DRY WEIGHT (PARTS PER MILLION (PPM) DRY)
ARSENIC	93
CADMIUM	6.7
CHROMIUM	270
COPPER	390
LEAD	530
MERCURY	0.59
SILVER	6.1
ZINC	960

CHEMICAL PARAMETER	MG/KG ORGANIC CARBON (PPM CARBON)
LPAH	780
NAPHTHALENE	170
ACENAPHTHYLENE	66
ACENAPHTHENE	57
FLUORENE	79
PHENANTHRENE	480
ANTHRACENE	1200
2-METHYLNAPHTHALENE	64
HPAH	5300
FLUORANTHENE	1200
PYRENE	1400
BENZ(A)ANTHRACENE	270
CHRYSENE	460
TOTAL BENZOFLUORANTHENES	450
BENZO(A)PYRENE	210
INDENO (1,2,3,-C,D) PYRENE	88
DIBENZO (A,H) ANTHRACENE	33
BENZO(G,H,I)PERYLENE	78
1,2-DICHLOROBENZENE	2.3
1,4-DICHLOROBENZENE	9
1,2,4-TRICHLOROBENZENE	1.8
HEXACHLOROBENZENE	2.3
DIMETHYL PHTHALATE	53
DIETHYL PHTHALATE	110
DI-N-BUTYL PHTHALATE	1700
BUTYL BENZYL PHTHALATE	64
BIS (2-ETHYLHEXYL) PHTHALATE	78
DI-N-OCTYL PHTHALATE	4500
DIBENZOFURAN	58
HEXACHLOROBUTADIENE	6.2
N-NITROSODIPHENYLAMINE	11
TOTAL PCB'S	65

CHEMICAL PARAMETER	UG/KG DRY WEIGHT (PARTS PER BILLION (PPB) DRY)
PHENOL	1200
2-METHYLPHENOL	63
4-METHYLPHENOL	670
2,4-DIMETHYL PHENOL	29
PENTACHLOROPHENOL	690
BENZYL ALCOHOL	73
BENZOIC ACID	650

(3) Puget Sound marine sediment impact zone maximum biological effects criteria. The maximum biological effects level that may be allowed within an authorized sediment impact zone shall be at or below a minor adverse biological effects level. The acute and chronic effects biological tests of WAC 173-204-315(1) may be used to determine compliance with the minor adverse biological effects restriction within an authorized sediment impact zone as follows:

(a) When using biological testing to determine compliance with the maximum biological effects criteria within a sediment impact zone, a person shall select and conduct any two acute effects tests and any one chronic effects test.

(b) The biological tests shall not be considered valid unless test results for the appropriate control and reference sediment samples meet the performance standards described in WAC 173-204-315(2).

(c) The sediment impact zone maximum biological effects level is established as that level below which any two of the biological tests in any combination exceed the criteria of WAC 173-204-320(3), or one of the following biological test determinations is made:

(i) Amphipod: The test sediment has a higher (statistically significant, t test, $p \leq 0.05$) mean mortality than the reference sediment and the test sediment mean mortality is greater than a value represented by the reference sediment mean mortality plus thirty percent; or

(ii) Larval: The test sediment has a mean survivorship of normal larvae that is less (statistically significant, t test, $p \leq 0.05$) than the mean normal survivorship in the reference sediment sample and the test sediment mean normal survivorship is less than seventy percent of the mean normal survivorship in the reference sediment (i.e., the test sediment has a mean combined abnormality and mortality that is greater than thirty percent relative to time-final in the reference sediment); or

(iii) Benthic abundance: The test sediment has less than fifty percent of the reference sediment mean abundance of any two of the following major taxa: Class Crustacea, Phylum Mollusca or Class Polychaeta and the test sediment abundances are statistically different (t test, $p \leq 0.05$) from the reference sediment abundances; or

(iv) Juvenile polychaete: The test sediment has a mean individual growth rate of less than fifty percent of the reference sediment mean individual growth rate and the test sediment mean individual growth rate is statistically different (t test, $p \leq 0.05$) from the reference sediment mean individual growth rate.

(4) Puget Sound marine sediment impact zone maximum human health criteria. Reserved: The department may determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(5) Puget Sound marine sediment impact zone maximum other toxic, radioactive, biological, or deleterious substances criteria. Other toxic, radioactive, biological or deleterious substances in, or on, sediments shall be below levels which cause minor adverse effects in marine biological resources, or which correspond to a significant health risk to humans, as determined by the department. The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(6) Puget Sound marine sediment impact zone maximum nonanthropogenically affected sediment criteria. Whenever the nonanthropogenically affected sediment quality is of a lower quality (i.e., higher chemical concentrations, higher levels of adverse biological response, or posing a higher threat to human health) than the applicable sediment impact zone maximum criteria established under this section, the existing sediment chemical and biological quality shall be identified on an area-wide basis as determined by the department, and used in place of the standards of WAC 173-204-420.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-420, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-420, filed 3/27/91, effective 4/27/91.]

PART V—SEDIMENT CLEANUP STANDARDS

WAC 173-204-500 Sediment cleanup decision process and policies. (1) The standards of WAC 173-204-500 through 173-204-590 are procedures which specify a cleanup decision process for managing contaminated sediments. These procedures include:

(a) Screening sediment station clusters of potential concern;

(b) Conducting hazard assessments to identify cleanup sites;

(c) Ranking sites identified in (b) of this subsection;

(d) Determining the appropriate site cleanup authority;

(e) Conducting a site cleanup study;

(f) Determining the site-specific cleanup standard;

(g) Selecting a site cleanup action; and

(h) Where necessary, authorizing a cleanup site sediment recovery zone.

(2) Under this chapter, the department may require or take those actions necessary to implement the standards of WAC 173-204-500 through 173-204-580 for all contaminated sediment stations on the inventory identified in WAC 173-204-350.

(3) The cleanup process and procedures under this chapter and under other laws may be combined. The department may initiate a cleanup action under this chapter and may upon further analysis determine that another law is more appropriate, or vice versa.

(4) It is the policy of the department to manage sediment cleanup actions towards the goal of reducing and ultimately eliminating adverse effects on biological resources and significant health threats to humans from sediment contamination. To achieve this goal, the department will pursue sediment cleanup decisions and cleanup standards that are as close as practicable to the sediment quality standards of WAC 173-204-320 through 173-204-340, including the consideration of net environmental effects, cost and technical feasibility. The department shall only authorize sediment recovery zones so as to minimize the number, size and adverse effects of all zones, with the intent to eliminate the existence of all such zones whenever practicable.

(5) The department shall endeavor to make sediment cleanup decisions in an expeditious manner, as soon as all needed information is available, consistent with the availability of department resources and the priority of the cleanup site.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-500, filed 3/27/91, effective 4/27/91.]

WAC 173-204-510 Screening sediment station clusters of potential concern. (1) Using the sediment quality standards inventory of WAC 173-204-350, the department shall analyze the sediment sampling data to identify station clusters of potential concern and station clusters of low concern per the standards of this section. Station clusters of potential concern shall be further evaluated using the hazard

assessment standards of WAC 173-204-530. Station clusters of low concern shall remain on the inventory and no further cleanup action determinations shall be taken by the department until the stations are reexamined per subsection (5) of this section.

(2) A station cluster is defined as any number of stations from the inventory of WAC 173-204-350 that are determined to be spatially and chemically similar. For the purpose of identifying a station cluster of potential concern per the procedures of this subsection, three stations with the highest contaminant concentration for any particular contaminant or the highest degree of biological effects as identified in WAC 173-204-520 are selected from a station cluster. This procedure may be repeated for multiple chemicals identified in WAC 173-204-520, recognizing that the three stations with the highest concentration for each particular contaminant may be different and the respective areas for all chemicals may overlap. The department shall review the inventory of WAC 173-204-350 to identify station clusters of potential concern via the following process:

(a) Identify if available, the three stations within a station cluster with the highest concentration of each chemical contaminant identified in WAC 173-204-520, Cleanup screening levels criteria; and

(b) For each contaminant identified in (a) of this subsection, determine the average concentration for the contaminant at the three stations identified in (a) of this subsection; and

(c) Identify if available, three stations within the station cluster with the highest level of biological effects for the biological tests identified in WAC 173-204-315(1); and

(d) If the average contaminant concentration for any three stations identified in (a) of this subsection, exceeds the applicable cleanup screening level in WAC 173-204-520, then the station cluster is defined as a station cluster of potential concern; and

(e) If the biological effects at each of the three stations from (c) of this subsection exceeds the cleanup screening level in WAC 173-204-520, then the station cluster is defined as a station cluster of potential concern; and

(f) If neither of the conditions of (d) or (e) of this subsection apply, then the station cluster is defined as a station cluster of low concern; and

(g) If the department determines that any three stations within a station cluster exceed the sediment cleanup screening levels human health criteria or the other toxic, radioactive, biological, or deleterious substances criteria or the nonanthropogenically affected criteria of WAC 173-204-520, then the station cluster is defined as a station cluster of potential concern.

(3) Notification. When a station cluster of potential concern has been identified, the department shall issue notification to the landowners, lessees, onsite dischargers, adjacent dischargers, and other persons determined appropriate by the department prior to the department's conducting a hazard assessment as defined in WAC 173-204-530.

(4) No further cleanup action determinations shall be taken with station clusters of low concern until the inventory of WAC 173-204-350 is updated and the stations reexamined per subsection (5) of this section. Station clusters of low concern shall receive no further consideration for active cleanup, unless new information indicates an increase of chemical contamination at the stations in question. Station clusters of low concern shall be evaluated by the department for improved source control and/or monitoring requirements of this chapter.

(5) The department may at any time reexamine a station or group of stations to reevaluate and identify station clusters of potential concern following the procedures of subsection (2) of this section when new information demonstrates to the department's satisfaction that reexamination actions are necessary to fulfill the purposes of WAC 173-204-500 through 173-204-590.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-510, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-510, filed 3/27/91, effective 4/27/91.]

WAC 173-204-520 Cleanup screening levels criteria. (1) Applicability.

(a) The marine sediment cleanup screening levels chemical criteria, and the marine sediment biological effects criteria, and the marine sediment other toxic, radioactive, biological, or deleterious substance criteria, and the marine sediment nonanthropogenically affected criteria of this section shall apply to marine sediments within Puget Sound. The cleanup screening levels establish minor adverse effects as the level above which station clusters of potential concern are defined, and at or below which station clusters of low concern are defined, per the procedures identified in WAC 173-204-510(2). The cleanup screening levels also establish the levels above which station clusters of potential concern are defined as cleanup sites, per the procedures identified in WAC 173-204-530, Hazard assessment. The criteria in Table III and this section also establish minor adverse effects as the Puget Sound marine sediment minimum cleanup level to be used in evaluation of cleanup alternatives per the procedures of WAC 173-204-560, and selection of a site cleanup standard(s) per the procedures of WAC 173-204-570.

(b) Non-Puget Sound marine sediment cleanup screening levels and minimum cleanup levels criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(c) Low salinity sediment cleanup screening levels and minimum cleanup levels criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(d) Freshwater sediment cleanup screening levels and minimum cleanup levels criteria. Reserved: The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(2) Puget Sound marine sediment cleanup screening levels and minimum cleanup levels chemical criteria. The chemical concentration criteria in Table III establish the Puget Sound marine sediment cleanup screening levels and minimum cleanup levels chemical criteria.

(a) Where laboratory analysis indicates a chemical is not detected in a sediment sample, the detection limit shall be reported and shall be at or below the Marine Sediment Quality Standards chemical criteria value set in WAC 173-204-320(2).

(b) Where chemical criteria in this table represent the sum of individual compounds or isomers, the following methods shall be applied:

(i) Where chemical analyses identify an undetected value for every individual compound/isomer then the single highest detection limit shall represent the sum of the respective compounds/isomers; and

(ii) Where chemical analyses detect one or more individual compound/isomers, only the detected concentrations will be added to represent the group sum.

(c) The listed chemical parameter criteria represent concentrations in parts per million, "normalized," or expressed, on a total organic carbon basis. To normalize to total organic carbon, the dry weight concentration for each parameter is divided by the decimal fraction representing the percent total organic carbon content of the sediment.

(d) The LPAH criterion represents the sum of the following "low molecular weight polynuclear aromatic hydrocarbon" compounds: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, and Anthracene. The LPAH criterion is not the sum of the criteria values for the individual LPAH compounds as listed.

(e) The HPAH criterion represents the sum of the following "high molecular weight polynuclear aromatic hydrocarbon" compounds: Fluoranthene, Pyrene, Benz(a)anthracene, Chrysene, Total Benzofluoranthenes, Benzo(a)pyrene, Indeno(1,2,3,-c,d)pyrene, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene. The HPAH criterion is not the sum of the criteria values for the individual HPAH compounds as listed.

(f) The TOTAL BENZOFLUORANTHENES criterion represents the sum of the concentrations of the "B," "J," and "K" isomers.

Table III
Puget Sound Marine Sediment
Cleanup Screening Levels
and
Minimum Cleanup Levels —
Chemical Criteria

CHEMICAL PARAMETER	MG/KG DRY WEIGHT (PARTS PER MILLION (PPM) DRY)
ARSENIC	93
CADMIUM	6.7
CHROMIUM	270
COPPER	390
LEAD	530
MERCURY	0.59
SILVER	6.1
ZINC	960

CHEMICAL PARAMETER	MG/KG ORGANIC CARBON (PPM CARBON)
LPAH	780
NAPHTHALENE	170
ACENAPHTHYLENE	66
ACENAPHTHENE	57
FLUORENE	79
PHENANTHRENE	480
ANTHRACENE	1200
2-METHYLNAPHTHALENE	64
HPAH	5300
FLUORANTHENE	1200
PYRENE	1400
BENZ(A)ANTHRACENE	270
CHRYSENE	460
TOTAL BENZOFLUORANTHENES	450
BENZO(A)PYRENE	210
INDENO (1,2,3,-C,D) PYRENE	88
DIBENZO (A,H) ANTHRACENE	33
BENZO(G,H,I)PERYLENE	78
1,2-DICHLOROBENZENE	2.3
1,4-DICHLOROBENZENE	9
1,2,4-TRICHLOROBENZENE	1.8
HEXACHLOROBENZENE	2.3
DIMETHYL PHTHALATE	53
DIETHYL PHTHALATE	110
DI-N-BUTYL PHTHALATE	1700
BUTYL BENZYL PHTHALATE	64
BIS (2-ETHYLHEXYL) PHTHALATE	78
DI-N-OCTYL PHTHALATE	4500
DIBENZOFURAN	58
HEXACHLOROBUTADIENE	6.2
N-NITROSODIPHENYLAMINE	11
TOTAL PCB'S	65

CHEMICAL PARAMETER	UG/KG DRY WEIGHT (PARTS PER BILLION (PPB) DRY)
PHENOL	1200
2-METHYLPHENOL	63
4-METHYLPHENOL	670
2,4-DIMETHYL PHENOL	29
PENTACHLOROPHENOL	690
BENZYL ALCOHOL	73
BENZOIC ACID	650

(3) Puget Sound marine sediment cleanup screening levels and minimum cleanup level biological criteria. The biological effects criteria of this subsection establish the Puget Sound marine sediment cleanup screening level, and the Puget Sound marine sediment minimum cleanup level criteria.

(a) The acute and chronic effects biological tests of WAC 173-204-315(1) shall be used to:

(i) Identify the Puget Sound marine sediment cleanup screening level for the purpose of screening sediment station clusters of potential concern using the procedures of WAC 173-204-510(2); and

(ii) Identify the Puget Sound marine sediment cleanup screening level for the purpose of identifying station clusters of low concern and/or cleanup sites using the hazard assessment procedures of WAC 173-204-530(4); and/or

(iii) Identify the Puget Sound marine sediment minimum cleanup level to confirm minimum cleanup level determinations using the procedures of WAC 173-204-570(3).

(b) When using biological testing to determine if station clusters exceed the cleanup screening level or to identify the minimum cleanup level for a contaminated site, test results from at least two acute effects tests and one chronic effects test shall be evaluated.

(c) The biological tests shall not be considered valid unless test results for the appropriate control and reference sediment samples meet the performance standards described in WAC 173-204-315(2).

(d) The cleanup screening level and minimum cleanup level is exceeded when any two of the biological tests exceed the criteria of WAC 173-204-320(3); or one of the following test determinations is made:

(i) Amphipod: The test sediment has a higher (statistically significant, t test, $p \leq 0.05$) mean mortality than the reference sediment and the test sediment mean mortality is greater

than a value represented by the reference sediment mean mortality plus thirty percent.

(ii) Larval: The test sediment has a mean survivorship of normal larvae that is less (statistically significant, t test, $p \leq 0.05$) than the mean normal survivorship in the reference sediment and the test sediment mean normal survivorship is less than seventy percent of the mean normal survivorship in the reference sediment (i.e., the test sediment has a mean combined abnormality and mortality that is greater than thirty percent relative to time-final in the reference sediment).

(iii) Benthic abundance: The test sediment has less than fifty percent of the reference sediment mean abundance of any two of the following major taxa: Class Crustacea, Phylum Mollusca or Class Polychaeta and the test sample abundances are statistically different (t test, $p \leq 0.05$) from the reference abundances.

(iv) Juvenile polychaete: The test sediment has a mean individual growth rate of less than fifty percent of the reference sediment mean individual growth rate and the test sediment mean individual growth rate is statistically different (t test, $p \leq 0.05$) from the reference sediment mean individual growth rate.

(4) Puget Sound marine sediment cleanup screening levels and minimum cleanup levels human health criteria. Reserved: The department may determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(5) Puget Sound marine sediment cleanup screening levels and minimum cleanup levels other toxic, radioactive, biological, or deleterious substances criteria. Other toxic, radioactive, biological, or deleterious substances in, or on, sediments shall be at or below levels which cause minor adverse effects in marine biological resources, or which correspond to a significant health risk to humans, as determined by the department. The department shall determine on a case-by-case basis the criteria, methods, and procedures necessary to meet the intent of this chapter.

(6) Puget Sound marine sediment cleanup screening levels and minimum cleanup levels nonanthropogenically affected sediment criteria. Whenever the nonanthropogenically affected sediment quality is of a lower quality (i.e., higher chemical concentrations, higher levels of adverse biological response, or posing a higher threat to human health) than the applicable cleanup screening levels or minimum cleanup levels criteria established under this section, the existing sediment chemical and biological quality shall be identified on an area-wide basis as determined by the department, and used in place of the standards of WAC 173-204-520.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-520, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-520, filed 3/27/91, effective 4/27/91.]

WAC 173-204-530 Hazard assessment and site identification. (1) Purpose. A hazard assessment shall be performed to gather existing and available information to further characterize each station cluster of potential concern identified per WAC 173-204-510.

(2) Hazard assessment requirements. Onsite dischargers, lessees, landowners, and adjacent dischargers shall submit, upon the department's request, all existing and available information that would enable the department to:

(a) Determine the concentration and/or areal extent and depth of sediment contamination at the station cluster of potential concern by:

(i) Identifying the contaminants exceeding the applicable sediment quality standards of WAC 173-204-320 through 173-204-340;

(ii) Identifying individual stations within the station cluster of potential concern which exceed the sediment cleanup screening levels criteria of WAC 173-204-520;

(iii) Identifying the level of toxicity to the applicable biological test organisms of WAC 173-204-320 through 173-204-340;

(iv) Determining where the applicable sediment quality standards of WAC 173-204-320 through 173-204-340, for any given contaminant, is met;

(v) Determining if concentrations of chemicals exist that potentially present a significant threat to human health;

(vi) Defining the location where the minimum cleanup level as defined in WAC 173-204-570 is met.

(b) Identify and characterize the present and historic source or sources of the contamination.

(c) Identify the location of sediment impact zones authorized under WAC 173-204-415.

(d) Identify sensitive resources in the vicinity of the station cluster of potential concern.

(e) Provide other information as determined necessary by the department for ranking sites under WAC 173-204-540.

(3) The department shall also compile existing and available information from other federal, state, and local governments that pertain to the topics in subsection (2) of this section.

(4) To identify cleanup sites, the department shall use all available information of acceptable quality gathered from the hazard assessment to evaluate station clusters of potential concern identified pursuant to WAC 173-204-510(2). For the purpose of identifying a cleanup site per the procedures of this subsection, three stations with the highest contaminant concentration for any particular contaminant or the highest degree of biological effects as identified in WAC 173-204-520 are selected from a station cluster of potential concern. This procedure may be repeated for multiple chemicals identified in WAC 173-204-520, recognizing that the three stations with the highest concentration for each particular contaminant may be different and the respective areas for all chemicals may overlap. The department shall review the list of station clusters of potential concern to identify cleanup sites via the following process:

(a) Identify if available, three stations within the station cluster of potential concern with the highest level of biological effects for the biological tests identified in WAC 173-204-315(1).

(b) Station clusters of potential concern where the level of biological effects for any three stations within the station cluster of potential concern exceeds the cleanup screening levels of WAC 173-204-520(3) shall be defined as cleanup sites.

(c) Identify if available, the three stations within a station cluster of potential concern with the highest concentration of each chemical contaminant identified in WAC 173-204-520,

Cleanup screening levels criteria. For the purpose of identifying a cleanup site per the procedures of this subsection, stations that meet the biological standards of WAC 173-204-520(3) shall not be included in the evaluation of chemical contaminant concentrations.

(d) For each contaminant identified in (c) of this subsection, determine the average concentration for the contaminant at the three stations identified in (c) of this subsection.

(e) Station clusters of potential concern for which any average chemical concentration identified in (d) of this subsection exceeds the cleanup screening level chemical criteria of Table III shall be defined as cleanup sites.

(f) After completion of the hazard assessment, if neither of the conditions of (b) or (e) of this subsection apply, then the station cluster is defined as a station cluster of low concern.

(g) Station clusters of potential concern where the department determines that any three stations within the station cluster of potential concern exceed the sediment cleanup screening levels human health criteria or the other toxic, radioactive, biological, or deleterious substances criteria or the nonanthropogenically affected criteria of WAC 173-204-520, shall be defined as cleanup sites.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-530, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-530, filed 3/27/91, effective 4/27/91.]

WAC 173-204-540 Ranking and list of sites. (1) Purpose. The department shall prepare and maintain a list of contaminated sediment sites in the order of their relative hazard ranking. From this list, the department shall select sites where action shall be taken.

(2) Site ranking. The department shall evaluate each cleanup site identified by the procedures in WAC 173-204-530 on a consistent basis using the procedure described in *Sediment Ranking System ("SEDRANK")*, *January 1990*, and all additions and revisions thereto or other procedures approved by the department. The purpose of ranking is to estimate, based on technical information compiled during the hazard assessment procedures in WAC 173-204-530, the relative potential risk posed by the site to human health and the environment. Information obtained during hazard assessment, plus any additional data specified in "SEDRANK," shall be included in the site hazard ranking evaluation.

(3) Considerations in ranking. In conducting sediment site ranking, the department shall assess both human health hazard and ecological hazard, and consider chemical toxicity, affected resources, and site characteristics for both types of hazards. The department shall also use best professional judgment and other information as necessary on a case-by-case basis to conduct site ranking.

(4) Site reranking. The department may, at its discretion, rerank a site. To rerank a site, the department shall use any additional information within the scope of the hazard ranking evaluation criteria and best professional judgment to establish that a significant change in rank should result.

(5) List of ranked sites.

(a) Contaminated sediment sites that are ranked via "SEDRANK" shall be placed on a list in the order of their relative hazard ranking. The list shall describe the current status of cleanup action at each site and be updated on an annual basis. The department may change a site's status to reflect current conditions on a more frequent basis. The status for each site shall be identified as one or more of the following:

(i) Sites awaiting cleanup action;

(ii) Sites where voluntary, incidental, partial or department initiated cleanup actions, as defined in WAC 173-204-550, are in progress;

(iii) Sites where a cleanup action has been completed and confirmational monitoring is underway;

(iv) Sites with sediment recovery zones authorized under WAC 173-204-590; and/or

(v) Other categories established by the department.

(b) The department shall routinely publish and make the list available to be used in conjunction with a review of ongoing and proposed regulatory actions to determine where and when a cleanup action should be taken. The department shall also make the list available to landowners and dischargers at or near listed sites, and to the public.

(6) Site delisting.

(a) The department may remove a site from the list only after it has determined that:

(i) All cleanup actions except confirmational monitoring have been completed and compliance with the site cleanup study and report and cleanup standard(s) has been achieved; or

(ii) The listing of the site was erroneous.

(b) A site owner or operator may request that a site be removed from the list by submitting a petition to the department. The petition shall state the reason for the site delisting request, and as determined appropriate by the department, shall include thorough documentation of all investigations performed, all cleanup actions taken, and all compliance monitoring data and results to demonstrate to the department's satisfaction that the site cleanup standards have been achieved. The department may require payment of costs incurred, including an advance deposit, for review and verification of the work performed. The department shall review such petitions, however the timing of the review shall be at its discretion and as resources may allow.

(c) The department shall maintain a record of sites that have been removed from the list under (a) of this subsection. This record shall be made available to the public on request.

(7) Relisting of sites. The department may relist a site which has previously been removed if it determines that the site requires further cleanup action.

(8) Delisting notice. The department shall provide public notice and an opportunity to comment when the department proposes to remove a site from the list.

(9) Relationship to hazardous sites list. The department may additionally evaluate cleanup sites on the site list developed under subsection (5) of this section for possible inclusion on the hazardous sites list published under WAC 173-340-330.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-540, filed 3/27/91, effective 4/27/91.]

WAC 173-204-550 Types of cleanup and authority. (1) Purpose. The department acknowledges that cleanups of contaminated sediment sites can occur under the authority of

chapter 90.48 or 70.105D RCW. Sediment cleanups may also be initiated by the federal government pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This section describes the department's role in department initiated and other cleanup actions.

(2) The department shall use best professional judgment and other information as necessary on a case-by-case basis to determine the appropriate administrative authority for conducting, or requiring contaminated sediment cleanup actions based on, but not limited to, the following considerations:

(a) Source of contaminants requiring cleanup including spills, dredging actions, and wastewater and/or storm water discharges;

(b) Significance of contamination threat to human health and the environment including the degree of contamination and types and number of contaminants;

(c) Public perception concerning the contaminant threat to human health and the environment;

(d) Personal or corporate financial status of the landowner(s) and/or discharger(s);

(e) Enforcement compliance history of the landowner(s) and/or discharger(s);

(f) Status of existing or pending federal, state, or local legal orders or administrative actions; and

(g) Size of cleanup action proposed or determined necessary.

(3) The types of cleanup actions below establish scenarios recognized by the department which may occur to effect cleanup of contaminated sediment sites. All of these types of cleanup actions shall be subject to administrative review and approval of the department under chapters 90.48 and/or 70.105D RCW.

(a) Department initiated cleanup. Department initiated cleanup actions occur when the department uses its authority under chapter 90.48 and/or 70.105D RCW to conduct or require and/or otherwise effect cleanup to meet the intent of this chapter.

(b) Voluntary cleanup. Voluntary cleanup actions are initiated by parties other than the department. The department shall encourage voluntary cleanup actions whenever possible, and as early as possible, to meet the intent of this chapter.

(c) Incidental cleanup. Incidental cleanup actions are conducted when other state or federally permitted activities are ongoing in and/or around the contaminated sediment site. Early coordination of incidental cleanup actions with the department is encouraged to meet the intent of this chapter, chapter 70.105D RCW, and chapter 90.48 RCW, as appropriate.

(d) Partial cleanup. Partial cleanup actions may be conducted when completion of cleanup study requirements under WAC 173-204-560 has identified and proposed discrete site units and cleanup standards, the department has approved the selection of the partial cleanup alternative per the standards of WAC 173-204-580, and the department has determined that awaiting action or decision on conducting a complete site cleanup would have a net detrimental effect on the environment or human health.

(e) CERCLA cleanup. Pursuant to the federal Comprehensive Environmental Response, Compensation and Liability Act, the department may identify chapter 173-204 WAC as an applicable state requirement for cleanup actions conducted by the federal government.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-550, filed 3/27/91, effective 4/27/91.]

WAC 173-204-560 Cleanup study. (1) Purpose. This section describes cleanup study plan and report standards which meet the intent of cleanup actions required under authority of chapter 90.48 and/or 70.105D RCW, and/or this chapter. Cleanup actions required under authority of chapter 70.105D RCW shall also meet all standards of chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation. The cleanup study plan and report standards in this chapter include activities to collect, develop, and evaluate sufficient information to enable consideration of cleanup alternatives and selection of a site-specific sediment cleanup standard prior to making a cleanup decision. Each person performing a cleanup action to meet the intent of this chapter shall submit a cleanup study plan and cleanup study report to the department for review and written approval prior to implementation of the cleanup action. The department may approve the cleanup study plan as submitted, may approve the cleanup study plan with appropriate changes or additions, or may require preparation of a new cleanup study plan.

(2) Scope of cleanup study plan. The scope of a cleanup study plan shall depend on the specific site informational needs, the site hazard, the type of cleanup action proposed, and the authority cited by the department to require cleanup. In establishing the necessary scope of the cleanup study plan, the department may consider cost mitigation factors, such as the financial resources of the person(s) responsible for the cleanup action. In all cases sufficient information must be collected, developed, and evaluated to enable the appropriate selection of a cleanup standard under WAC 173-204-570 and a cleanup action decision under WAC 173-204-580. The sediment cleanup study plan shall address:

(a) Public information/education;

(b) Site investigation and cleanup alternatives evaluation;

(c) Sampling plan and recordkeeping; and

(d) Site safety.

(3) Cleanup study plan public information/education requirements. The cleanup study plan shall encourage coordinated and effective public involvement commensurate with the nature of the proposed cleanup action, the level of public concern, and the existence of, or potential for adverse effects on biological resources and/or a threat to human health. The cleanup study plan shall address proposed activities for the following subjects:

(a) When public notice will occur, the length of the comment periods accompanying each notice, the potentially affected vicinity, and any other areas to be provided notice;

(b) Where public information repositories will be located to provide site information to the public;

(c) Methods for identifying the public's concerns, e.g., interviews, questionnaires, community group meetings, etc.;

(d) Methods for providing information to the public, e.g., press releases, public meetings, fact sheets, etc.;

(e) Coordination of public participation requirements mandated by other federal, state, or local laws;

(f) Amendments to the planned public involvement activities; and

(g) Any other elements that the department determines to be appropriate for inclusion in the cleanup study plan.

(4) Cleanup study plan site investigation and cleanup alternatives evaluation requirements. The content of the cleanup study plan for the site investigation and cleanup alternatives evaluation is determined by the type of cleanup action selected as defined under WAC 173-204-550. As determined by the department, the cleanup study plan shall address the following subjects:

(a) General site information. General information, including: Project title; name, address, and phone number of project coordinator; legal description of the cleanup site; area and volume dimensions of the site; present owners and operators of contaminant source discharges to site; chronological listing of past owners and operators of contaminant source discharges to the site and their respective operational history; and other pertinent information determined by the department.

(b) Site conditions map. An existing site conditions map which illustrates site features as follows:

(i) Property boundaries.

(ii) The site boundary defined by the individual contaminants exceeding the applicable sediment quality standards of WAC 173-204-320 through 173-204-340 at the point where the concentration of the contaminant would meet the:

(A) Cleanup objective; and

(B) Minimum cleanup level; and

(C) Recommended cleanup standards.

(iii) Surface and subsurface topography.

(iv) Surface and subsurface structures.

(v) Utility lines.

(vi) Navigation lanes.

(vii) Current and ongoing sediment sources.

(viii) Other pertinent information determined by the department.

(c) Site investigation. Sufficient investigation to characterize the distribution of sediment contamination present at the site, and the threat or potential threat to human health and the environment. Where applicable to the site, these investigations shall address the following:

(i) Surface water and sediments. Investigations of surface water hydrodynamics and sediment transport mechanisms to characterize significant hydrologic features such as: Site surface water drainage patterns, quantities and flow rates, areas of sediment erosion and deposition including estimates of sedimentation rates, and actual or potential contaminant migration routes to and from the site and within the site. Sufficient surface water and sediment sampling shall be performed to adequately characterize the areal and vertical distribution and concentrations of contaminants. Recontamination potential of sediments which are likely to influence the type and rate of contaminant migration, or are likely to affect the ability to implement alternative cleanup actions shall be characterized;

(ii) Geology and ground water system characteristics. Investigations of site geology and hydrogeology to adequately characterize the physical properties and distribution of sediment types, and the characteristics of ground water flow rate, ground water gradient, ground water discharge areas, and ground water quality data which may affect site cleanup alternatives evaluations;

(iii) Climate. Information regarding local and regional climatological characteristics which are likely to affect surface water hydrodynamics, ground water flow characteristics, and migration of sediment contaminants such as: Seasonal patterns of rainfall; the magnitude and frequency of significant storm events; prevailing wind direction and velocity;

(iv) Land use. Information characterizing human populations exposed or potentially exposed to sediment contaminants released from the site and present and proposed uses and zoning for shoreline areas contiguous with the site; and

(v) Natural resources and ecology. Information to determine the impact or potential impact of sediment contaminants from the site on natural resources and ecology of the area such as: Sensitive environment, local and regional habitat, plant and animal species, and other environmental receptors.

(d) Sediment contaminant sources. A description of the location, quantity, areal and vertical extent, concentration and sources of active and inactive waste disposal and other sediment contaminant discharge sources which affect or potentially affect the site. Where determined relevant by the department, the following information shall be obtained by the department from the responsible discharger:

(i) The physical and chemical characteristics, and the biological effects of site sediment contaminant sources;

(ii) The status of source control actions for permitted and unpermitted site sediment contaminant sources; and

(iii) A recommended compliance time frame for known permitted and unpermitted site sediment contaminant sources which affect or potentially affect implementation of the timing and scope of the site cleanup action alternatives.

(e) Human health risk assessment. The current and potential threats to human health that may be posed by sediment site contamination shall be evaluated using a risk assessment procedure approved by the department.

(f) Cleanup action alternatives. Each cleanup study plan shall include an evaluation of alternative cleanup actions that protect human health and the environment by eliminating, reducing, or otherwise controlling risks posed through each exposure pathway and migration route. The number and types of alternatives to be evaluated shall take into account the characteristics and complexity of the site.

(i) The proposed site cleanup alternatives may include establishment of site units, as defined in WAC 173-204-200(24), with individual cleanup standards within the range required by WAC 173-204-570, based on site physical characteristics and complexity, and cleanup standard alternatives established on consideration of cost, technical feasibility, and net environmental impact.

(ii) The proposed site cleanup alternatives may include establishment of a sediment recovery zone as authorized under WAC 173-204-590, Sediment recovery zones. Establishment or expansion of a sediment recovery zone shall not be used as a substitute for active cleanup actions, when such actions are practicable and meet the standards of WAC 173-204-580. The cleanup study plan shall include the following information for evaluation of sediment recovery zone alternatives:

(A) The time period during which a sediment recovery zone is projected to be necessary based on source loading and net environmental recovery processes determined by application of the department's sediment recovery zone computer models "CORMIX," "PLUMES," and/or "WASP," or an alternate sediment recovery zone model(s) approved by the department under WAC 173-204-130(4) as limited by the standards of this section and the department's best professional judgment;

(B) The legal location and landowner(s) of property proposed as a sediment recovery zone;

(C) Operational terms and conditions including, but not limited to proposed confirmational monitoring actions for discharge effluent and/or receiving water column and/or sediment chemical monitoring studies and/or bioassays to evaluate ongoing water quality, sediment quality, and biological conditions within and adjacent to the proposed or authorized sediment recovery zone to confirm source loading and recovery rates in the proposed sediment recovery zone.

(D) Potential risks posed by the proposed sediment recovery zone to human health and the environment;

(E) The technical practicability of elimination or reduction of the size and/or degree of chemical contamination and/or level of biological effects within the proposed sediment recovery zone; and

(F) Current and potential use of the sediment recovery zone, surrounding areas, and associated resources that are, or may be, affected by releases from the zone.

(G) The need for institutional controls or other site use restrictions to reduce site contamination risks to human health.

(iii) A phased approach for evaluation of alternatives may be required for certain sites, including an initial screening of alternatives to reduce the number of potential remedies for the final detailed evaluation. The final evaluation of cleanup action alternatives that pass the initial screening shall consider the following factors:

(A) Overall protection of human health and the environment, time required to attain the cleanup standard(s), and on-site and off-site environmental impacts and risks to human health resulting from implementing the cleanup alternatives;

(B) Attainment of the cleanup standard(s) and compliance with applicable federal, state, and local laws;

(C) Short-term effectiveness, including protection of human health and the environment during construction and implementation of the alternative; and

(D) Long-term effectiveness, including degree of certainty that the alternative will be successful, long-term reliability, magnitude of residual, biological and human health risk, and effectiveness of controls for ongoing discharges and/or controls required to manage treatment residues or remaining wastes cleanup and/or disposal site risks;

(g) Ability to be implemented. The ability to be implemented including the potential for landowner cooperation, consideration of technical feasibility, availability of needed off-site facilities, services and materials, administrative and regulatory requirements, scheduling, monitoring requirements, access for construction, operations and monitoring, and integration with existing facility operations and other current or potential cleanup actions;

(h) Cost, including consideration of present and future direct and indirect capital, operation, and maintenance costs and other foreseeable costs;

(i) The degree to which community concerns are addressed;

(j) The degree to which recycling, reuse, and waste minimization are employed; and

(k) Environmental impact. Sufficient information shall be provided to fulfill the requirements of chapter 43.21C RCW, the State Environmental Policy Act. Discussions of significant short-term and long-term environmental impacts, significant irrevocable commitments of natural resources, significant alternatives including mitigation measures, and significant environmental impacts which cannot be mitigated shall be included.

(5) Cleanup study plan — sampling plan and recordkeeping requirements. The cleanup study plan shall address proposed sampling and recordkeeping activities to meet the standards of WAC 173-204-600, Sampling and testing plan standards, and WAC 173-204-610, Records management, and the standards of this section.

(6) Cleanup study plan site safety requirements. The cleanup study plan shall address proposed activities to meet the requirements of the Occupational Safety and Health Act of 1970 (29 U.S.C. Sec. 651 et seq.) and the Washington Industrial Safety and Health Act (chapter 49.17 RCW), and regulations promulgated pursuant thereto. These requirements are subject to enforcement by the designated federal and state agencies. Actions taken by the department under this chapter do not constitute an exercise of statutory authority within the meaning of section (4)(b)(1) of the Occupational Safety and Health Act.

(7) Cleanup study report. Each person performing a cleanup action to meet the intent of this chapter shall submit a cleanup study report to the department for review and written approval of a cleanup decision prior to implementation of the cleanup action. The sediment cleanup study report shall include the results of cleanup study site investigations conducted pursuant to subsection (4) of this section, and preferred and alternate cleanup action proposals based on the results of the approved cleanup study plan.

(8) Sampling access. In cases where the person(s) responsible for cleanup is not able to secure access to sample sediments on lands subject to a cleanup study plan approved by the department, the department may facilitate negotiations or other proceedings to secure access to the lands. Requests for department facilitation of land access for sampling shall be submitted to the department in writing by the person(s) responsible for the cleanup action study plan.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-560, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-560, filed 3/27/91, effective 4/27/91.]

WAC 173-204-570 Sediment cleanup standards. (1) Applicability and purpose. This section establishes the sediment cleanup standards requirements for cleanup actions required under authority of chapter 90.48 and/or 70.105D RCW, and/or this chapter, and describes the process to determine site-specific cleanup standards.

(2) Cleanup objective. The sediment cleanup objective shall be to eliminate adverse effects on biological resources and significant health threats to humans from sediment contamination. The sediment cleanup objective for all cleanup actions shall be the sediment quality standards as defined in WAC 173-204-320 through 173-204-340, as applicable. The sediment cleanup objective identifies sediments that have no acute or chronic adverse effects on biological resources, and which correspond to no significant health risk to humans, as defined in this chapter.

(3) Minimum cleanup level. The minimum cleanup level is the maximum allowed chemical concentration and level of biological effects permissible at the cleanup site to be achieved by year ten after completion of the active cleanup action.

(a) The minimum cleanup levels criteria of WAC 173-204-520 shall be used in evaluation of cleanup alternatives per the procedures of WAC 173-204-560, and selection of a site cleanup standard(s) per the procedures of this section.

(b) The Puget Sound marine sediment minimum cleanup level is established by the following:

(i) Sediments with chemical concentrations at or below the chemical criteria of Table III shall be determined to meet the minimum cleanup level, except as provided in (b)(iv) of this subsection; and

(ii) Sediments with chemical concentrations that are higher than the chemical criteria of Table III shall be determined to exceed the minimum cleanup level, except as provided in (b)(iii) of this subsection; and

(iii) Sediments with biological effects that do not exceed the levels of WAC 173-204-520(3) shall be determined to meet the minimum cleanup level; and

(iv) Sediments with biological effects that exceed the levels of WAC 173-204-520(3) shall be determined to exceed the minimum cleanup level; and

(v) Sediments which exceed the sediment minimum cleanup level human health criteria or the other toxic, radioactive, biological, or deleterious substances criteria or the nonanthropogenically affected criteria of WAC 173-204-520 as determined by the department, shall be determined to exceed the minimum cleanup level.

(4) Sediment cleanup standard. The sediment cleanup standards are established on a site-specific basis within an allowable range of contamination. The lower end of the range is the sediment cleanup objective as defined in subsection (2) of this section. The upper end of the range is the minimum cleanup level as defined in subsection (3) of this section. The site specific cleanup standards shall be as close as practicable to the cleanup objective but in no case shall exceed the minimum cleanup level. For any given cleanup action, either a site-specific sediment cleanup standard shall be defined, or multiple site unit sediment cleanup standards shall be defined. In all cases, the cleanup standards shall be defined in consideration of the net environmental effects (including the potential for natural recovery of the sediments over time), cost and engineering feasibility of different cleanup alternatives, as determined through the cleanup study plan and report standards of WAC 173-204-560.

(5) All cleanup standards must ensure protection of human health and the environment, and must meet all legally applicable federal, state, and local requirements.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-570, filed 3/27/91, effective 4/27/91.]

WAC 173-204-580 Cleanup action decision. (1) Each person performing a cleanup action to meet the intent of this chapter shall comply with the standards of WAC 173-204-560(7), Cleanup study report. Except for cleanups conducted under chapter 70.105D RCW, the department shall review each cleanup study report and issue a written approval of one or more of the cleanup action alternatives described in the cleanup study report, or issue a written disapproval of all alternatives described in the cleanup study report. The department's approval of one or more cleanup study report cleanup action alternatives shall constitute the cleanup decision and shall be referenced in one or more permit or administrative authorities established under chapter 90.48 or 70.105D RCW, Section 401 of the federal Clean Water Act, chapter 173-225 WAC, establishment of implementation procedures of application for certification, or other administrative authorities available to the department. The department may approve the cleanup alternative recommended in the cleanup study report, may approve a different alternative discussed in the report, or may approve an alternative(s) with appropriate conditions. The department's disapproval of all cleanup study report cleanup action alternatives shall be issued by certified mail, return receipt requested, to the cleanup action proponent(s). The procedures for department review of the cleanup study report and selection of a cleanup action under chapter 70.105D RCW shall be in accordance with the procedures of chapter 173-340 WAC.

(2) All cleanup actions conducted under this chapter shall meet the following requirements:

(a) Receive department review and written approval of the preferred and/or alternate cleanup actions and necessary sediment recovery zones proposed in the cleanup study report prior to implementing a cleanup action(s);

(b) Achieve a degree of cleanup that is protective of human health and the environment;

(c) Achieve compliance with applicable state, federal, and local laws;

(d) Achieve compliance with site cleanup standards;

(e) Achieve compliance with sediment source control requirements pursuant to WAC 173-204-400 through 173-204-420, if necessary;

(f) Provide for landowner review of the cleanup study plan and report, and consider public concerns raised during review of the draft cleanup report; and

(g) Provide adequate monitoring to ensure the effectiveness of the cleanup action.

(3) Cleanup time frame.

(a) The cleanup action selected shall provide for a reasonable time frame for completion of the cleanup action, based on consideration of the following factors:

(i) Potential risks posed by the site to biological resources and human health;

(ii) Practicability of achieving the site cleanup standards in less than a ten-year period;

(iii) Current use of the site, surrounding areas, and associated resources that are, or may be, affected by the site contamination;

(iv) Potential future use of the site, surrounding areas, and associated resources that are, or may be, affected by the site contamination;

(v) Likely effectiveness and reliability of institutional controls;

(vi) Degree of, and ability to control and monitor, migration of contamination from the site; and

(vii) Natural recovery processes which are expected to occur at the site that will reduce concentrations of contaminants.

(b) The department may authorize cleanup time frames that exceed the ten-year period used in deriving the site cleanup standards of WAC 173-204-570(4) where cleanup actions are not practicable to accomplish within a ten-year period.

(4) In evaluating cleanup action alternatives, the department shall consider:

(a) The net environmental effects of the alternatives, including consideration of residual effects, recovery rates, and any adverse effects of cleanup construction or disposal activities;

(b) The relative cost-effectiveness of the alternatives in achieving the approved site cleanup standards; and

(c) The technical effectiveness and reliability of the alternatives.

(5) Public participation. The department shall provide opportunity for public review and comment on all cleanup action study plans, reports, and decisions reviewed and approved by the department, for cleanup actions conducted under this chapter.

(6) Land access. In cases where the person(s) responsible for cleanup is not able to secure access to lands subject to a cleanup action decision made pursuant to this section, the department may facilitate negotiations or other proceedings to secure access to the lands. Requests for department facilitation of land access shall be submitted to the department in writing by the person(s) named in the cleanup action approval.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-580, filed 3/27/91, effective 4/27/91.]

WAC 173-204-590 Sediment recovery zones. (1) The purpose of this section is to set forth the requirements for establishment and monitoring of sediment recovery zones to meet the intent of sediment quality dilution zones authorized pursuant to RCW 90.48.520. The standards of this section are applicable to cleanup action decisions made pursuant to WAC 173-204-580 where selected actions leave in place marine, low salinity, or freshwater sediments that exceed the applicable sediment quality standards of WAC 173-204-320 through 173-204-340.

(2) General requirements. Authorization of a sediment recovery zone by the department shall require compliance with the following general requirements:

(a) The sediment recovery zone shall be determined by application of the department's sediment recovery zone computer models "CORMIX," "PLUMES," and/or "WASP," or an alternate sediment recovery zone model(s) approved by the department under WAC 173-204-130(4) as limited by the standards of this section and the department's best professional judgment.

(b) The department shall provide specific authorization for a sediment recovery zone within the written approval of the cleanup study report and cleanup decision required under WAC 173-204-580.

(c) The time period during which a sediment recovery zone is authorized by the department shall be so stated in the department's written approval of the cleanup study report and cleanup decision.

(d) The department's written sediment recovery zone authorization shall identify the legal location and landowners of property proposed as a sediment recovery zone.

(e) Operational terms and conditions for the authorized sediment recovery zone pursuant to subsection (5) of this section shall be maintained at all times.

(f) Where cleanup is not practicable pursuant to the analysis under WAC 173-204-570(4), sediment recovery zones may be authorized for periods in excess of ten years.

(3) A sediment recovery zone authorization issued by the department under the authority of chapter 90.48 or 70.105D RCW, or other administrative means available to the department, does not constitute authorization to trespass on lands not owned by the applicant. These requirements do not address, and in no way alter, the legal rights, responsibilities, or liabilities of the permittee or landowner of the sediment recovery zone for any applicable requirements of proprietary, real estate, tort, and/or other laws not directly expressed as a requirement of this chapter.

(4) Prior to authorization, the department shall make a reasonable effort to identify and notify all landowners affected by the proposed sediment recovery zone. The department shall issue a sediment recovery zone notification letter to any person it believes to be a potentially affected landowner and other parties determined appropriate by the department. The notification letter shall be sent by certified mail, return receipt requested, or by personal service. The notification letter shall provide:

(a) The name of the person the department believes to be the affected landowner; and

(b) The names of other affected landowners to whom the department has sent a proposed sediment recovery zone notification letter; and

(c) The name of the sediment recovery zone applicant; and

(d) A general description of the proposed sediment recovery zone including the chemical(s) of concern by name and concentration, and the area of affected sediment; and

(e) The determination of the department concerning whether the proposed sediment recovery zone application meets the standards of this section; and

(f) The intention of the department whether to authorize the proposed sediment recovery zone; and

(g) Notification that the affected landowner may comment on the proposed sediment recovery zone. Any landowner comments shall be submitted in writing to the department within thirty days from the date of receipt of the notification letter, unless the department provides an extension.

(5) As determined necessary by the department, operational terms and conditions for the sediment recovery zone may include completion and submittal to the department of

discharge effluent and/or receiving water column and/or sediment chemical monitoring studies and/or bioassays to evaluate ongoing water quality, sediment quality, and biological conditions within and adjacent to the proposed or authorized sediment recovery zone.

(6) The department shall review all data or studies conducted in accordance with a sediment recovery zone authorization to ensure compliance with the terms and conditions of the authorization and the standards of this section. Whenever, in the opinion of the department, the operational terms and conditions of a sediment recovery zone or the standards of this section are violated or there is a potential to violate the sediment recovery zone authorization or the standards of this section, or new information or a reexamination of existing information indicates the sediment recovery zone is no longer appropriate, the department may at its discretion:

(a) Require additional chemical or biological monitoring as necessary;

(b) Revise the sediment recovery zone authorization as necessary to meet the standards of this section;

(c) Require active contaminated sediment maintenance actions including additional cleanup in accordance with the standards of WAC 173-204-500 through 173-204-580; and/or

(d) Withdraw the department's authorization of the sediment recovery zone.

[Statutory Authority: RCW 90.48.220. 96-02-058, § 173-204-590, filed 12/29/95, effective 1/29/96. Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-590, filed 3/27/91, effective 4/27/91.]

PART VI—SAMPLING AND TESTING PLANS/RECORDKEEPING

WAC 173-204-600 Sampling and testing plan standards. (1) Applicability. These standards apply to:

(a) Any person who samples sediments to determine compliance with this chapter;

(b) Any person who makes application to the department for authorization of a sediment impact zone under the standards of WAC 173-204-400 through 173-204-420; and

(c) Any person who samples sediments consistent with cleanup action plans approved and cleanup actions conducted under this chapter.

(2) All applicable persons shall at a minimum, develop, keep, and abide by a sediment sampling and testing plan. The sampling and testing plan shall be available for inspection at the request of the department. Sediment sampling and testing plans shall identify sampling dates, sample types, sample depths, sample composites, sample locations, sample positioning methods, sampling personnel, sampling equipment and methods, a description of methods of chemical analysis and biological testing, and quality assurance/quality control procedures.

(3) Sediment sampling locations and procedures and testing protocols and interpretations shall be those included in the Puget Sound protocols as amended and/or other methods approved by the department.

(4) The department reserves the right to revise these sampling and testing protocols when:

(a) The Puget Sound protocols are modified or updated per the approval of the department; or

(b) The department determines the Puget Sound protocols are not applicable to, or appropriate for analysis of sediment chemical contamination in any given case.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-600, filed 3/27/91, effective 4/27/91.]

WAC 173-204-610 Records management. (1) Applicability. These standards apply to:

(a) Any person who samples sediments to determine compliance with this chapter;

(b) Any person who makes application to the department for authorization of a sediment impact zone under the standards of WAC 173-204-400 through 173-204-420.

(2) All applicable persons shall keep sediment sampling and testing records as follows:

(a) Sediment sampling and testing plans which identify sampling dates, sample types, sample composites, sample locations, sample depths, sample positioning method, sampling personnel, sampling equipment and methods, quality assurance/quality control plans, and sampling procedures.

(b) Sediment removal records which identify removal dates, dredging contractor/equipment, volume of sediment removed, analytical data generated during the sediment removal process, and sediment disposal location(s).

(c) Records and results of sediment analyses conducted in accordance with this chapter, or as required under activities authorized under chapter 173-225 WAC, establishment of implementation procedures of application for certification.

(d) Records and results of inspections conducted as required under chapter 173-225 WAC, establishment of implementation procedures of application for certification.

(e) Sediment treatment records.

(f) Sediment onsite capping records.

(g) Sediment disposal records which identify sediment disposal location(s), onsite operating records, sediment volumes, disposal site property owner(s), and the chemical/biological nature of effluent discharges from the disposal location including the name, location, and quality of the receiving water.

(3) All sediment records as required under subsection (2) of this section must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of the department who is designated by the director.

(4) All sediment records as required in this section shall be maintained for a period not less than ten years after the issuance, modification, or renewal of the applicable permit, or administrative order, or certification, or cleanup site delisting under WAC 173-204-540(6), whichever is greater.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-610, filed 3/27/91, effective 4/27/91.]

WAC 173-204-620 Severability. If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of this chapter or the application of the provision to other persons or circumstances shall not be affected.

[Statutory Authority: Chapters 43.21C, 70.105D, 90.48, 90.52, 90.54 and 90.70 RCW. 91-08-019 (Order 90-41), § 173-204-620, filed 3/27/91, effective 4/27/91.]

Chapter 173-205 WAC

WHOLE EFFLUENT TOXICITY TESTING AND LIMITS

WAC

173-205-010	Purpose.
173-205-020	Definitions.
173-205-030	Applicability.
173-205-040	Determining the need for effluent characterization.
173-205-050	Effluent testing for toxicity.
173-205-060	Additional effluent characterizations.
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173-205-080	Samples for whole effluent toxicity testing.
173-205-090	Response to noncompliance with whole effluent toxicity limits.
173-205-100	Toxicity identification/reduction evaluations.
173-205-110	Interruption of a toxicity identification/reduction evaluation.
173-205-120	Permit limit removed for attainment of a whole effluent toxicity performance standard.
173-205-130	Performance-based limits for acute whole effluent toxicity.

WAC 173-205-010 Purpose. The purpose of this chapter is to establish a procedure for deriving whole effluent toxicity limits in accordance with RCW 90.48.520, 40 CFR 122.44(d), and 40 CFR 122.44(e) for inclusion into National Pollutant Discharge Elimination System (NPDES) permits to protect aquatic life through the implementation of all known, available, and reasonable methods of prevention, control and treatment of toxicants and through the attainment of state water quality standards. The goal of this chapter is the eventual elimination of the discharge of toxics in toxic amounts.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-010, filed 10/6/93, effective 11/6/93.]

WAC 173-205-020 Definitions. "Acute critical effluent concentration" means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned in accordance with WAC 173-201A-100. The boundary may be based on distance or a percentage of flow. Where no zone of acute criteria exceedance is allowed, the acute critical effluent concentration shall be one hundred percent effluent.

"Acute statistical power standard" means that the maximum acceptable difference in survival that is not statistically significant between the control and the acute critical effluent concentration is twenty-nine percent. In order to determine if a whole effluent toxicity test with results that are not statistically significant meets the acute statistical power standard:

1. Subtract the mean survival across the replicates in the acute critical effluent concentration from the mean survival across the replicates in the control.

2. Divide this difference between the mean survivals by the mean survival across the control replicates.

3. Multiply the result by one hundred and express the product as a percent difference in survival.

4. If the percent difference in survival is equal to or less than twenty-nine percent, then the whole effluent toxicity test has met the power standard.

"Acute toxicity test" means a toxicity test with the death of test organisms as the measured response.

"Chronic critical effluent concentration" means the maximum concentration of effluent during critical conditions at the boundary of the mixing zone assigned in accordance with WAC 173-201A-100. The boundary may be based on distance or a percentage of flow. Where no mixing zone is allowed, the chronic critical effluent concentration shall be one hundred percent effluent.

"Chronic statistical power standard" means that the maximum acceptable difference in response that is not statistically significant between the control and the acute or chronic critical effluent concentration is thirty-nine percent. The chronic statistical power standard does not apply to Fisher's Exact Test. In order to determine if a whole effluent toxicity test with results that are not statistically significant meets the chronic statistical power standard:

1. Subtract the mean of the responses across the replicates in the acute or chronic critical effluent concentration from the mean of the responses across the replicates in the control.

2. Divide this difference between the mean responses by the mean response across the control replicates.

3. Multiply the result by one hundred and express the product as a percent difference in response.

4. If the percent difference in response is equal to or less than thirty-nine percent, then the whole effluent toxicity test has met the power standard.

"Chronic toxicity test" means a toxicity test which measures a sublethal effect such as failed fertilization, development, growth, or reproduction. Organism survival is also a measured endpoint in some chronic toxicity tests.

"Critical conditions" means those circumstances when the physical, chemical, and biological characteristics of the receiving water environment interact with the effluent to produce the greatest potential adverse impact on aquatic biota and existing and characteristic water uses.

"Department" means the department of ecology of the state of Washington.

"EC_{50}" (effective concentration, fifty percent) means the effluent concentration estimated to cause an adverse effect in fifty percent of the test organisms in a toxicity test involving a series of dilutions of effluent.

"Effluent characterization" means, for whole effluent toxicity, establishing the baseline toxicity level by toxicity testing using multiple species on effluent samples taken over the seasons of one year. The effluent characterization toxicity test results shall also be used to determine the need for water quality-based whole effluent toxicity limits.

"Effluent screening tests" are full duration whole effluent toxicity tests that are conducted as a screen for toxicity in one hundred percent effluent or some other high concentration of effluent. No other effluent concentrations (except the control) are tested until toxicity has been detected in the effluent screening test.

"Hypothesis testing" means the mathematical technique for comparing the average response of the replicates of an effluent concentration to the average response of the control replicates at the end of a toxicity test in order to determine if there is a statistically significant difference in response within a level of certainty such as ninety-five percent or

ninety-nine percent. For purposes of this chapter, Fisher's Exact Test is used as a hypothesis test for analyzing survival in the cladoceran survival and reproduction test.

"IC_{50}" (inhibition concentration, fifty percent) means the effluent concentration estimated to cause a fifty percent reduction in a biological function in a toxicity test involving a series of dilutions of effluent.

"LC_{50}" (lethal concentration, fifty percent) means the effluent concentration estimated to cause death in fifty percent of the test organisms in a toxicity test involving a series of dilutions.

"Multiple species" toxicity testing means conducting separate toxicity tests using different species on the same effluent sample in order to assess its effect on a broad range of organisms such as fish, invertebrates, or plants.

"NOEC" means the "no observed effect concentration" which is the highest concentration of effluent in a toxicity test shown to have no statistically significant adverse effects when compared to an appropriate control.

"Point estimates" are estimates of the concentration of effluent resulting in a specified level of effect and are determined either graphically or statistically from the concentration-response relationship determined from a toxicity test having a series of dilutions.

"Rapid screening test" means a screening toxicity test on one hundred percent effluent or some other high concentration of effluent in order to detect unanticipated increases in toxicity. Examples of rapid screening tests include twenty-four hour EPA acute tests, acute toxicity tests using rotifers produced from cysts, bacterial bioluminescence tests, and two-day life cycle tests with rotifers.

"Reasonable potential" under this chapter means that the department has determined, in accordance with 40 CFR 122.44 (d)(v) and based on a whole effluent toxicity performance standard, that the effluent could cause in-stream toxicity in violation of WAC 173-201A-040(1).

"Species rotation" means the switching to a different toxicity test from the list in a discharge permit for each effluent monitoring sample according to a rotation schedule set by the department.

"Statistically significant" under this chapter means establishing that a difference in response between a control and an effluent concentration is likely due to toxicity and not variability. The statistical technique for making this determination shall be Fisher's Exact Test or a one-tailed hypothesis test specified or approved by the department. These hypothesis tests shall be conducted at the ninety-five percent confidence level although the department may approve tests at the ninety-nine percent confidence level if the statistical power of the test will not be adversely affected.

"Technology-based controls" means methods for the treatment, prevention, or control of pollutants such as best management practices, biological treatment, physical-chemical treatment, use of nontoxic process chemicals, secondary containment for spills, control of site run-on/runoff, equipment maintenance, equipment operation, implementing site-specific pollution prevention plans, and any other technique with the same goals.

"Toxicity identification/reduction evaluation" means the process for determining the effective control of effluent toxicity by identifying the toxicant and/or its source, and developing a method to reduce toxicity by source control or treatment.

"Toxicity test" means a direct measurement of the adverse effect of a substance in a controlled test using living organisms. In the context of this rule, "toxicity test" and "whole effluent toxicity test" are synonymous.

"Whole effluent toxicity" means the total toxic effect of an effluent measured directly with a toxicity test so that the interactions of all toxicants present in the effluent are assessed.

"Whole effluent toxicity performance standard" means a level of effluent toxicity that is consistently so much lower than is necessary to meet state water quality standards (chapter 173-201A WAC) that no reasonable potential exists to violate the water quality standards. For acute toxicity, the performance standard is the median survival in one hundred percent effluent being equal to or greater than eighty percent and no individual test result showing less than sixty-five percent survival in one hundred percent effluent. For chronic toxicity, the performance standard is no chronic toxicity test demonstrating a statistically significant difference in response between the control and a test concentration equal to the acute critical effluent concentration. For permittees that are ineligible for an approved mixing zone, the performance standard will equal or be close to equal (in the case of acute toxicity) the water quality-based effluent toxicity limit.

"Whole effluent toxicity test" means a toxicity test on an effluent.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-020, filed 10/6/93, effective 11/6/93.]

WAC 173-205-030 Applicability. The requirements in this chapter shall apply to all NPDES permits issued by the department of ecology (department).

(1) The department shall evaluate all NPDES permit applications in accordance with WAC 173-205-040 to determine if the discharge needs an effluent characterization for toxicity as described in WAC 173-205-050.

(2) In accordance with WAC 173-205-050 and 173-205-130, the department shall describe in the permit the circumstances under which whole effluent toxicity limits will be applied to the discharge in order to meet:

(a) The requirement for all known, available, and reasonable methods of prevention, control, and treatment of toxicants; or

(b) Appropriate water quality standards.

(3) The determination to require or not to require whole effluent toxicity characterization in a permit shall be explained in the fact sheet of the permit prepared pursuant to WAC 173-220-060.

(4) The department may delay effluent characterization for whole effluent toxicity for existing facilities that are under a compliance schedule in a permit, administrative order, or other legally enforceable mechanism to implement technology-based controls or to achieve compliance with water quality-based effluent limits.

(5) The department may require whole effluent toxicity testing or rapid screening testing as a condition of permit application, as a condition of an NPDES permit, or as a regulatory order.

(a) If an effluent characterization for whole effluent toxicity as described in WAC 173-205-050(1) has been conducted as a condition of permit application, then the permit issued in response to that application shall not contain a requirement for effluent characterization provided that all determinations required by this chapter can be made to the department's satisfaction.

(b) If an effluent characterization for whole effluent toxicity which meets the requirements of WAC 173-205-050(1) has been conducted in a previous permit, permit application, or administrative order, then subsequent permits shall not contain a requirement for effluent characterization provided that all determinations required by this chapter can be made to the department's satisfaction and unless WAC 173-205-060 applies.

(6) The department may conduct or require permittees to conduct toxicity tests on ambient water or may use or require permittees to use ambient water as dilution water in order to facilitate the determination of compliance with WAC 173-201A-100.

(7) A toxicity test conducted on effluent samples taken by parties other than the permittee can be used to make any determination required by this chapter or in a permit issued in accordance with this chapter as long as all appropriate sampling, toxicity testing, and QA/QC requirements specified in the permit have been followed.

(8) The department shall require permittees that have not been assigned a whole effluent toxicity limit because of the determination in WAC 173-205-050 (2)(a), or 173-205-120 (1) to conduct as a part of the application for permit renewal at least one toxicity test on a fish, an invertebrate, and any appropriate plant unless the permittee has been monitoring with rapid screening tests required in accordance with WAC 173-205-120(2).

(9) Permittees may conduct any toxicity test using a full dilution series provided that all of the testing and information requirements of this chapter and the permit are met, including using the statistical analysis specified in the permit.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-030, filed 10/6/93, effective 11/6/93.]

WAC 173-205-040 Determining the need for effluent characterization. (1) A discharge from a facility is considered to have a risk for aquatic toxicity and to need an effluent characterization for acute and chronic whole effluent toxicity if the facility or discharge meet any of the following criteria:

(a) Uses, stores, produces as a product or waste, or transfers any hazardous substance listed in 40 CFR 302.4 with a statutory code of 1 or 2 (referring to Sections 311 (b)(4) or 307(a) of the Clean Water Act) unless:

(i) The permittee demonstrates to the department's satisfaction that the facility is designed and managed so that these substances are kept physically separated at all times, including spills or any other accidental release, from any part of the wastewater collection, treatment, or discharge system; or

(ii) The amount of any hazardous substance at the facility is never more than the statutory reportable quantity listed in 40 CFR 302.4;

(b) Discharges in its effluent any toxic pollutant listed in Appendix D of 40 CFR Part 122 for which there are no water quality criteria for aquatic life protection listed in 40 CFR 131.36 (b)(1) or WAC 173-201A-040(3);

(c) Belongs to an industry category identified in 40 CFR Part 122, Appendix A;

(d) Is a municipal sewage collection and treatment system which receives a discharge from any industry category identified in 40 CFR Part 403, Appendix C;

(e) Except for permittees with whole effluent toxicity limits or permittees that have no whole effluent toxicity limit because of the determination in WAC 173-205-120(1), any facility which exceeded the acute or chronic whole effluent toxicity performance standard within the last five years;

(f) Any facility with suspected toxicity because of apparent damage to aquatic biota; or

(g) Any other discharger that the department determines has the potential to discharge toxics in toxic amounts.

(2) The following types of discharges are excluded from requirements for whole effluent toxicity characterization unless subsection (1) of this section applies:

(a) Once-through noncontact cooling water without biocides;

(b) Drinking water treatment plant effluent;

(c) Dewatering of sand or gravel mining operations;

(d) Sump pump discharges of ground water or rain water only;

(e) Construction dewatering;

(f) Discharges from fish hatcheries and other aquaculture;

(g) Seafood processors; or

(h) Any other discharge that the department determines does not have the potential to contain toxics in toxic amounts.

(3) A chronic whole effluent toxicity characterization is not necessary in any permit if the effluent has been or will be characterized for acute whole effluent toxicity and if the discharge receives at least one thousand to one dilution at the edge of a mixing zone assigned in accordance with WAC 173-201A-100.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-040, filed 10/6/93, effective 11/6/93.]

WAC 173-205-050 Effluent testing for toxicity. (1) The department shall require dischargers meeting the risk definition of WAC 173-205-040(1) to characterize the effluent for toxicity during permit application or during the first year of the permit term.

(a) Each effluent sample during effluent characterization shall be tested for toxicity using multiple species which shall at a minimum include a fish, an invertebrate, and, if deemed appropriate by the department, a plant.

(b) The sampling frequency during effluent characterization and compliance monitoring shall be at least twice per year and sampling shall be timed to cover the seasonal extremes of the year such as wet-dry or cold-hot.

(c) The duration of an acute toxicity test performed for effluent characterization or compliance monitoring shall be forty-eight hours for an invertebrate and ninety-six hours for a fish.

(d) For effluent characterization and compliance monitoring, the department shall use toxicity tests published in 40 CFR Part 136, in EPA toxicity test manuals, or those methods

approved by the department considering the following criteria:

(i) The existence of a detailed written description of the test method;

(ii) Interlaboratory comparisons of the method;

(iii) Adequate testing with complex wastes such as wastewater;

(iv) Measurement of an effect that is clearly adverse to the production of the species such as reduced survival or growth, abnormal development, or failed reproduction; and

(v) Use of test organisms that represent taxonomic families native to the state.

(e) Toxicity testing for effluent characterization under this section, compliance monitoring as described in WAC 173-205-070, and additional monitoring as described in WAC 173-205-090 or 173-205-120 (2)(d) shall be performed by laboratories accredited by the department for the specific toxicity test in accordance with chapter 173-50 WAC.

(f) Upon request, the department may approve the performance of toxicity tests for effluent characterization or compliance monitoring for publicly owned treatment works discharging less than one-half million gallons per day and small businesses as defined in RCW 43.31.025(4) as effluent screening tests using one hundred percent effluent for the acute toxicity tests and the acute critical effluent concentration for the chronic toxicity tests.

(i) If an acute one hundred percent effluent screening test demonstrates less than eighty percent survival, the test shall be repeated as soon as possible on a fresh sample using the full dilution series test described in the permit or regulatory order.

(ii) The chronic screening tests shall be expected to have no statistically significant difference in response between the acute critical effluent concentration and the control using the method in Appendix H of EPA/600/4-89/001 or an equivalent method approved by the department, or the test shall be repeated as soon as possible on a fresh sample using the full dilution series test described in the permit or regulatory order. The chronic effluent screening tests shall also meet the chronic statistical power standard.

(2) Effluent characterization shall be used to establish:

(a) Whether a reasonable potential under 40 CFR 122.44 (d)(v) for acute or chronic toxicity exists which would require a whole effluent toxicity limit.

(i) If at the end of effluent characterization the median survival in one hundred percent effluent is less than eighty percent, or if any individual test result shows less than sixty-five percent survival in one hundred percent effluent, then a reasonable potential for acute conditions in the receiving water has been demonstrated, and the whole effluent acute toxicity limit described in WAC 173-205-070 shall be applied to the discharge.

(ii) If during effluent characterization any chronic toxicity test using the method in Appendix H of EPA/600/4-89/001 or an equivalent method approved by the department demonstrates a statistically significant difference in response between the control and the acute critical effluent concentration, then a reasonable potential for chronic conditions in the receiving water has been demonstrated, and the whole effluent chronic toxicity limit described in WAC 173-205-070 shall be applied to the discharge.

(iii) If the acute critical effluent concentration is unknown during effluent characterization, all chronic toxicity tests shall determine the NOEC for comparison to the acute critical effluent concentration when it becomes available.

(A) The determination of these NOECs shall comply with the chronic statistical power standard.

(B) If effluent characterization is completed and neither the acute critical effluent concentration nor the chronic critical effluent concentration is known, then the department may require the permittee to continue the toxicity testing as conducted in effluent characterization except using single species tests rather than multiple species tests.

(b) The permittee shall analyze the toxicity test data during effluent characterization to establish a baseline toxicity level by calculating appropriate point estimates such as the LC_{50}, the IC_{50}, or the EC_{50}.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-050, filed 10/6/93, effective 11/6/93.]

WAC 173-205-060 Additional effluent characterizations. (1) A permittee that has not been assigned a whole effluent toxicity limit because of attaining the performance standards described in WAC 173-205-050 (2)(a) or 173-205-120(1) will not be required to conduct a new effluent characterization in accordance with WAC 173-205-050(1) unless the department determines that:

(a) The permittee has made changes to processes, materials, or treatment that could result in an increase in effluent toxicity.

(b) A municipal sewage collection and treatment system has experienced the addition of any new source as defined in 40 CFR 403.3(k) that belongs in any industry category identified in 40 CFR Part 403, Appendix C and cannot demonstrate that the new source is nontoxic or that the pretreatment program and local limits are adequate to control toxicity from the new source.

(c) The average dry weather flow volume has changed by ten percent or more due to changes in plant processes, production changes, or increases in the number of users. Changes in flow volume due to water conservation measures would not indicate a need for a new characterization unless this resulted in a final effluent containing a higher concentration of potentially toxic pollutants.

(2) It is the responsibility of the permittee to demonstrate to the department's satisfaction that no change has occurred to the facility which would cause or increase effluent toxicity.

(a) The permittee must make this demonstration as soon as possible after any change listed in subsection (1) of this section has occurred but under no circumstances later than the time of application for permit renewal.

(b) Toxicity testing by the permittee shall be accepted as a demonstration that such facility changes have not increased effluent toxicity providing that the department has approved the number and types of toxicity tests performed.

(c) The department may accept other demonstrations that toxicity has not increased based on other scientific disciplines such as chemistry.

(3) An increase in effluent toxicity is assumed to have occurred and a new effluent characterization shall be required if toxicity in excess of a performance standard has been demonstrated during:

(a) Toxicity testing conducted in accordance with WAC 173-205-030(8); or

(b) Toxicity testing conducted in response to a rapid screening test as required by WAC 173-205-120 (2)(d).

(4) A permittee does not need a new effluent characterization for acute or chronic toxicity if the discharge is being routinely monitored for compliance with a whole effluent toxicity limit using species rotation. This determination only applies to the type of toxicity (acute or chronic) covered by the whole effluent toxicity limit.

(5) A permittee may be required to further characterize effluent toxicity if a new toxicity test method has been approved pursuant to WAC 173-205-050 (1)(d) that, in the opinion of the department, should replace one of or supplement an existing toxicity test in the permit because it:

(a) May be more sensitive to effluent toxicity; or

(b) Has a closer ecological or taxonomic relationship to receiving water species.

(6) Only the new toxicity test method is needed for effluent characterization in the case of a new toxicity test being approved.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-060, filed 10/6/93, effective 11/6/93.]

WAC 173-205-070 Monitoring for compliance with whole effluent toxicity limits. (1) A discharge is in compliance with the narrative water quality standard for acute toxicity when the most recent acute toxicity test has shown no statistically significant difference in response between the acute critical effluent concentration and a control.

(a) Acute toxicity testing shall be performed using one hundred percent effluent, the acute critical effluent concentration, and a control.

(b) The acute critical effluent concentrations in a whole effluent toxicity test shall be compared to the control using the method in Appendix H of EPA/600/4-89/001 or an equivalent method approved by the department.

(c) If a statistically significant difference in response is determined between the control and the acute critical effluent concentration in an acute toxicity test, then the effluent has failed the test for compliance with the whole effluent acute toxicity limit and the permittee shall immediately begin the process described in WAC 173-205-090.

(d) The compliance test for acute toxicity shall be considered to be a maximum daily discharge permit limitation.

(2) A discharge is in compliance with the narrative water quality standard for chronic toxicity when the most recent chronic toxicity test has shown no statistically significant difference in response between the chronic critical effluent concentration and a control.

(a) Chronic toxicity testing shall be performed using the acute critical effluent concentration, the chronic critical effluent concentration, and a control.

(b) The chronic critical effluent concentrations in a whole effluent toxicity test shall be compared to the control using the method in Appendix H of EPA/600/4-89/001 or an equivalent method approved by the department.

(c) If a statistically significant difference in response is determined between the control and the chronic critical effluent concentration in a chronic toxicity test, then the effluent has failed the test for compliance with the whole effluent chronic toxicity limit and the permittee shall immediately begin the process described in WAC 173-205-090.

(d) The compliance test for chronic toxicity shall be considered to be a maximum daily discharge permit limitation.

(3) During compliance monitoring, the one hundred percent effluent concentration in an acute test and the acute critical effluent concentration in a chronic test shall be performed in order to assess the attainment of the performance standards in accordance with WAC 173-205-120(1).

(4) Toxicity tests conducted for monitoring for compliance with whole effluent toxicity limits shall meet, as appropriate, the acute or chronic statistical power standards. If a whole effluent toxicity test does not meet appropriate statistical power standard, then the effluent shall immediately be resampled and the toxicity test repeated with the number of replicates increased in order to meet the statistical power standard.

(5) The permittee shall provide the department with all information and records required in the permit in order to evaluate toxicity test results to determine their adequacy for effluent characterization, compliance monitoring, effluent screening tests, or rapid screening tests.

(a) The result of the most recent reference toxicant test conducted by the laboratory for that toxicity test method shall accompany each whole effluent toxicity test result.

(b) Every reference toxicant test shall be conducted on a minimum of five dilutions.

(c) The response in all replicates at every effluent concentration and the control shall be reported for all tests analyzed by hypothesis testing so that the department can check for compliance with statistical power standards and for anomalous test results which should not be used for the compliance determinations in this chapter.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-070, filed 10/6/93, effective 11/6/93.]

WAC 173-205-080 Samples for whole effluent toxicity testing. (1) All samples taken for whole effluent toxicity testing shall be handled as specified in the permit and in any EPA manuals referenced in the permit.

(a) No attempts shall be made before or during the whole effluent toxicity test to modify the sample to remove or otherwise change any toxicant except as provided in subsection (3) of this section.

(b) Except as provided in subsection (3) of this section, no attempts shall be made before or during the whole effluent toxicity test to adjust the hardness, dissolved oxygen, pH, or any other physical or chemical property of the sample, dilution water, or test solutions except as required in the toxicity test method, in the permit, or in appropriate EPA manuals.

(c) For those permittees who received permits prior to the effective date of this chapter, the department may approve in writing the request of a permittee to modify samples, dilution water, or test solutions as long as such modifications meet the intent of this chapter.

(2) Except as provided in subsection (3) of this section, the department shall require that samples for whole effluent toxicity testing be taken just before the chlorinator for dischargers who meet all of the following:

(a) Add chlorine to treated effluent for the purpose of disinfection;

(b) Have received effluent limits based on the water quality criteria for chlorine; and

(c) Are developing or implementing plans to achieve compliance with the chlorine limits.

(3) If any permittee has begun implementing a plan to install dechlorination, then the sample may, as specified by the department, be chemically dechlorinated by a similar method before whole effluent toxicity testing.

(4) The whole effluent toxicity test shall be run on an unmodified sample of final effluent if the effluent can meet effluent limits based on the water quality criteria for chlorine.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-080, filed 10/6/93, effective 11/6/93.]

WAC 173-205-090 Response to noncompliance with whole effluent toxicity limits. (1) If a toxicity test result fails the compliance test described in WAC 173-205-070, then the permittee shall take a new sample as soon as possible for retesting and begin additional monitoring unless the permittee chooses the option in subsection (4) of this section.

(a) If the noncompliance was with an acute toxicity limit, the additional monitoring shall be conducted weekly for four weeks using the same toxicity test as in the failed compliance test or shall be conducted on the next four discharge events in the case of an intermittent discharge.

(b) If the noncompliance was with a chronic toxicity limit, the additional monitoring shall be conducted monthly for three months using the same toxicity test as in the failed compliance test or shall be conducted on the next three discharge events in the case of an intermittent discharge.

(c) This additional monitoring shall be conducted the same as in effluent characterization and shall determine the LC_{50}, IC_{50}, or EC_{50}, as appropriate, and measure compliance with the permit limit.

(d) If the permittee believes that the compliance test failure will be identified by the department as an anomalous test result in accordance with WAC 173-205-070 (5)(c), the permittee may send the department notification with the compliance test result that the compliance test result might be anomalous and that the permittee intends to take only one additional sample for toxicity testing and wait for notification from the department before completing the additional monitoring required in this subsection.

(i) The notification must identify the reason for considering the compliance test result to be anomalous.

(ii) The permittee shall take the additional sample and retest as soon as possible after receiving the compliance test result.

(iii) The additional test result shall replace the compliance test result upon determination by the department that the compliance test result was anomalous.

(iv) The permittee shall complete all of the additional monitoring required by this subsection as soon as possible after notification by the department that the compliance test result was not anomalous.

(v) If the additional sample fails the compliance test, then the permittee shall proceed without delay to complete all of the additional monitoring required by this subsection.

(e) The department may determine any compliance test result to be anomalous regardless of whether it was accompanied by permittee notification that it may be anomalous.

(f) The department may notify a permittee to take another sample for toxicity testing because a compliance test result was anomalous and could not be used to determine compliance in accordance with this section.

(2) Any permittee failing the compliance test for a whole effluent toxicity limit shall take all reasonable actions to achieve compliance including conducting a toxicity identification/reduction evaluation as defined in WAC 173-205-100.

(3) The discharger shall return to the original monitoring frequency after conducting the additional monitoring described in subsection (1) of this section.

(4) The permittee may proceed directly to a toxicity identification/reduction evaluation and not perform the additional testing.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-090, filed 10/6/93, effective 11/6/93.]

WAC 173-205-100 Toxicity identification/reduction evaluations. (1) If only the routine compliance monitoring toxicity test which initiated the additional monitoring described in WAC 173-205-090 fails the compliance test, then the toxicity can be considered as transient and the discharger shall:

(a) Search all recent facility records which might explain the transient toxicity (operating records, monitoring results, inspection records, spill reports, weather records, production records, etc.); and

(b) Submit a report to the department on the possible causes and preventive measures for the transient toxicity within thirty days of the last additional sample.

(2) If any toxicity test fails the compliance test described in WAC 173-205-070 during the additional monitoring conducted in accordance with WAC 173-205-090(1), then the permittee shall submit a plan to the department within sixty days of the last additional sample for a toxicity identification/reduction evaluation.

(a) As a part of this plan, the permittee may request that the department allow up to six months before beginning the investigation outlined in the EPA manuals for facility personnel to attempt to control the most likely sources of toxicity through efforts such as changes in plant operation, replacement of a toxic material used in the facility, or improvement of best management practices.

(i) The department shall approve the request in writing.

(ii) The department approval may be sent to the permittee before completion of the review of the toxicity identification/reduction evaluation plan.

(b) The toxicity identification/reduction evaluation plan shall be based on procedures in the latest versions of the EPA guidance documents for conducting toxicity reduction evaluations or toxicity identification evaluations.

(i) The toxicity identification/reduction evaluation plan need not include any procedure from the EPA manuals that is not necessary to the goal of controlling the discharge of whole effluent toxicity by the permittee.

(ii) The department may approve any modifications or additions to the EPA procedures that will improve the ability to identify or reduce toxicity.

(c) The permittee shall submit to the department a toxicity identification/reduction evaluation plan revised in accor-

dance with department comments within thirty days after receipt of department comments.

(3) The permittee shall implement the toxicity identification/reduction evaluation plan immediately upon notification by the department of plan approval.

(4) The department may allow a reduction in compliance monitoring for whole effluent toxicity limits during a toxicity identification/reduction evaluation if:

(a) Effluent toxicity is being regularly measured and reported to the department; and

(b) The department determines that the toxicity identification/reduction evaluation is being conducted in a timely manner.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-100, filed 10/6/93, effective 11/6/93.]

WAC 173-205-110 Interruption of a toxicity identification/reduction evaluation. (1) If, in performing a toxicity identification/reduction evaluation, four consecutive acute or chronic toxicity samples taken over at least one month are not sufficiently toxic to perform the toxicity identification/reduction evaluation, then the department may approve the interruption of the toxicity identification/reduction evaluation and require that:

(a) The permittee returns to the monitoring frequency specified in the permit.

(b) Sufficient sample volume be taken each time to allow the lab to perform both a toxicity test and begin a toxicity identification/reduction evaluation.

(c) The extra sample shall be stored at four degrees Celsius in the dark while the toxicity test is being performed.

(d) A toxicity identification/reduction evaluation shall begin as soon as the whole effluent toxicity test demonstrates noncompliance with the limit.

(e) Samples may be discarded from storage after completion of the toxicity test if the whole effluent toxicity limit was not violated.

(2) If toxicity testing shows compliance with whole effluent toxicity limits for one year after interruption of the toxicity identification/reduction evaluation, then the permittee may cease taking the extra sample.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-110, filed 10/6/93, effective 11/6/93.]

WAC 173-205-120 Permit limit removed for attainment of a whole effluent toxicity performance standard. (1) Whole effluent toxicity limits assigned pursuant to WAC 173-205-050(2) are eligible for removal upon permit renewal if:

(a) The permittee has demonstrated compliance with the whole effluent toxicity performance standard associated with that limit for a minimum of three consecutive test years following effluent characterization or for an entire subsequent permit term; and

(b) The permittee has not made any changes within the last three years which would otherwise require additional effluent characterization pursuant to WAC 173-205-060.

(2) The department may condition the nonassignment of a whole effluent toxicity limit for a permittee that has attained a performance standard described in WAC 173-205-050 (2)(a), or subsection (1) of this section on routine monitoring with a rapid screening test.

(a) Before making such condition, the department shall consider the potential for treatment system upsets, control equipment failures, spills, accidental releases to the wastewater system, and any other event which could result in a toxic discharge.

(i) Chemical monitoring may be required to assess increases in effluent toxicity if it:

(A) Can account for the potential sources of toxicity; and

(B) Is associated with water quality-based effluent limits or any other permit mechanism that requires a response to increases in effluent toxicity.

(ii) Rapid screening tests shall be required if the department determines there is the potential for an event at the facility which could result in a toxic discharge that would otherwise go unnoticed.

(b) Rapid screening tests for acute toxicity shall be expected to have a maximum mortality proportion of twenty hundredths in one hundred percent effluent.

(i) The mortality proportion shall be calculated by subtracting the number of test organisms living in one hundred percent effluent at the end of the test from the number of test organisms living in the control and dividing the result by the number of test organisms living in the control.

(ii) The one hundred percent effluent test concentration and the control shall have equal numbers of test organisms.

(c) Rapid screening tests for chronic toxicity shall be expected to have no statistically significant difference in response between the acute critical effluent concentration and the control using the method in Appendix H of EPA/600/4-89/001 or an equivalent method approved by the department. Rapid screening tests for chronic toxicity must meet the chronic statistical power standard.

(d) Whenever a rapid screening test result fails to achieve the standard of (b) or (c) of this subsection, the permittee shall be required to immediately retest with all of the acute or chronic toxicity tests used in the last permit with whole effluent toxicity testing.

(e) The results of the acute or chronic toxicity tests conducted in response to a rapid screening test shall be evaluated by the department to determine the need for new whole effluent toxicity characterization requirements in the next permit or the need for immediate administrative orders to implement the regulatory process which begins in WAC 173-205-090.

(f) All rapid screening tests shall be performed by laboratories accredited by the department in accordance with chapter 173-50 WAC.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-120, filed 10/6/93, effective 11/6/93.]

WAC 173-205-130 Performance-based limits for acute whole effluent toxicity. (1) In accordance with RCW 90.48.520 and 40 CFR 122.44(e), the department shall evaluate all applications for an NPDES permit to determine whether the applicant is applying all known, available, and reasonable methods of prevention, control, and treatment of toxicants.

(2) The department may place the whole effluent toxicity performance standard for acute toxicity into permits as a limit on a case-by-case basis pursuant to 40 CFR § 125.3 (d)(3).

(a) In determining compliance with an acute whole effluent toxicity limit based on the performance standard, a minimum of three toxicity tests shall be used in calculating the median.

(b) For the first two toxicity tests conducted to determine compliance with the performance standard-based acute whole effluent toxicity limit, compliance shall be determined as a minimum of sixty-five percent survival in one hundred percent effluent.

(3) The department may establish performance-based limits for whole effluent toxicity for an entire category of dischargers. Any such limit applied to an entire category of dischargers shall be accomplished by rule making.

[Statutory Authority: Chapter 90.48 RCW and 40 CFR 122.44. 93-20-110 (Order 91-54), § 173-205-130, filed 10/6/93, effective 11/6/93.]

Chapter 173-208 WAC
GRANT OF AUTHORITY SEWERAGE SYSTEMS

WAC

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WAC 173-208-010 Authority. RCW 90.48.165 empowers the department of ecology, as successor to the water pollution control commission to grant to any city, town, or municipal corporation operating a sewerage system including treatment facilities the authority to issue permits for the discharge of wastes into such system, provided that the department finds to its satisfaction that the sewerage system and inspection and control program operated and conducted by the city, town, or municipal corporation will protect the public interest in the quality of the state's water as provided in the Water Pollution Control Act, chapter 90.48 RCW. Permits for the discharge of wastes into publicly operated sewerage systems are required for commercial or industrial operations by virtue of RCW 90.48.160.

[Order DE 75-10, § 173-208-010, filed 4/30/75.]

WAC 173-208-020 Purpose. The purpose of this chapter is to set forth the procedures and criteria for the granting of authority for the administration of the permit program of RCW 90.48.160 as it pertains to waste discharges into publicly operated sewerage systems to the governing bodies of cities, towns, and municipal corporations operating such sewerage systems and receiving into them industrial and commercial wastes as hereinafter defined.

[Order DE 75-10, § 173-208-020, filed 4/30/75.]

WAC 173-208-030 Declaration of policy. (1) The department encourages qualified cities, towns, and other municipal corporations to apply for a grant of authority to conduct and operate a permit system for the regulation of commercial and industrial waste discharges into their sewerage systems in accordance with RCW 90.48.165.

(2) The department is committed to the policy of maintaining the highest possible standards of water quality within the state in compliance with the basic aims expressed in RCW 90.48.010 and national policies and goals expressed by the Federal Water Pollution Control Act Amendments of 1972, (FWPCAA). The implementation of a permit issuance program by any city, town, or municipal corporation shall be continuously evaluated by the department for compliance with these policies, aims, and goals.

(3) In compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES), as provided for in the FWPCAA, the department shall maintain its enforcement of compliance of effluent limitation standards upon publicly owned or operated treatment works under their NPDES permits. Under such permit, any municipality granted authority hereunder to administer a permit program as hereinafter defined shall continue to be primarily responsible for its effluent quality according to the terms of such NPDES permit.

[Order DE 75-10, § 173-208-030, filed 4/30/75.]

WAC 173-208-040 Definitions. As used in this chapter:

(1) "Applicant" shall mean that municipality applying to the department for authority to administer the permit program pursuant to RCW 90.48.165.

(2) "Application for authorization" shall mean that application submitted by a municipality seeking permit-issuing authority pursuant to RCW 90.48.165.

(3) "Application to discharge" shall mean that information required from a discharger in acquiring a permit to discharge commercial and industrial wastes into a municipal sewerage system.

(4) "Commercial and industrial wastes" shall mean the wastes, whether solid or liquid, from any commercial or industrial operation, other than domestic sewage.

(5) "Department" shall mean the department of ecology.

(6) "Discharge" shall mean any commercial or industrial operation which results in the disposal of solid or liquid waste material into a sewerage system operated by a municipality which discharges into the public waters of the state.

(7) "Enforcement action" shall mean any administrative or judicial action initiated to achieve compliance with the conditions of a discharge permit, regulations of the department, and water pollution control laws of this state or of the federal government.

(8) "Municipality" shall mean any city, town, or municipal corporation established according to the applicable laws of this state.

(9) "Permit" shall mean the official authorization to dispose of commercial and industrial wastes into waters, to include all regulatory constraints and conditions described therein, issued to a discharger.

(10) "Permit program" shall mean the process of granting or denying by municipalities, authorized as herein provided, of approval of applications to discharge into the sewerage system of such municipalities, the monitoring and inspection of dischargers, and the taking of appropriate enforcement action.

(11) "Sewerage system" shall mean any system operated by a municipality for the collection, transfer, treatment, and disposal of sewage.

[Order DE 75-10, § 173-208-040, filed 4/30/75.]

WAC 173-208-050 Applications for authorization. No particular form shall be required for an application for authorization. No such decision shall be made on any such application, however, unless the applicant supplies to the department:

(1) A request from the municipality seeking authority to conduct a permit program for the discharge of commercial and industrial wastes into its sewerage system in accordance with state and federal water pollution control laws, regulations, and policies as now exist or are hereafter amended.

(2) A listing of all self-monitoring and reporting procedures to be required, and inspection and other regulatory control criteria and procedures applicant intends to use in administering the permit program.

(3) An estimate of the financial resources the applicant will commit to the permit program on an annual basis and the sources of funding therefor.

(4) A commitment showing the number of personnel who will be assigned to the permit program, either on a full-time or part-time basis, broken down by person-years or person-hours or other appropriate measure of personnel usage, and assurances that such personnel commitment is or will be adequately funded.

(5) An assurance that the background, experience and continuing training of personnel to be assigned to the permit program will be sufficient to achieve and maintain the goals and policies of state and federal water pollution control acts.

(6) A copy of the actual or proposed municipal ordinance or resolution intended for use in establishing and conducting the proposed waste discharge permit system.

(7) An outline of the procedures to be used in processing individual permit applications.

(8) Copies of the application for permit and of the proposed permit format.

(9) A description of enforcement procedures to be followed.

(10) A list of all potential dischargers into the sewerage system which will require permits pursuant to any delegation hereunder.

(11) If the applicant is the recipient of a federal grant for any phase of treatment works construction to be utilized by the discharger, it shall demonstrate to the department that it has adopted a system of charges to assure that each discharger shall pay a proportionate share of the costs of operation and maintenance of any waste treatment services provided by the applicant, and further demonstrate that it has made provision for the payment to the applicant by dischargers of that portion of the cost of construction of such treatment works which is allocable to the treatment of commercial and industrial wastes to the extent attributable to the federal share of the cost of construction.

(12) Any additional information required by the department.

[Order DE 75-10, § 173-208-050, filed 4/30/75.]

WAC 173-208-060 Delegation procedure. (1) Upon receipt of any application for authorization, the department shall review such application, and if necessary, require additional information to make a determination thereon.

(2) Upon notification by the department that all information required by it has been received, the applicant shall twice publish notice of the application for authorization in a newspaper of general circulation in the area to which the request relates, providing thirty days for written comments on the request to be received by the department. Such notice shall be in a form provided by the department. In addition to such publication, a copy of such notice shall be mailed by the applicant to the governing body of each sewer district and of general purpose government, all or a portion of which lies within the jurisdictional boundaries to which the request relates.

(3) After review of the completed application and of comments timely received in response to the notice provided for above, the department shall either deny the request, giving its reasons therefor, find that there is sufficient public interest to warrant holding a public hearing on the application, or issue an order approving the same in whole or in part.

(4) If a public hearing is held upon proper notice, the department shall afford interested parties the opportunity to present their views on the application, and, upon review of all information gathered, shall either deny the application or issue an order approving the same.

(5) Any approval order issued by the department hereunder shall contain conditions and restrictions relative to the administration of the permit program and shall be binding upon the municipality so long as such approval remains in effect. Said approval order may subsequently be altered or amended in whole or in part to reflect changes in applicable laws, regulations, or policies relating to water pollution control. The department shall give the municipality thirty days notice of any contemplated amendments, unless an emergency precludes the giving of such notice, and will invite comments from the municipality.

[Order DE 75-10, § 173-208-060, filed 4/30/75.]

WAC 173-208-070 Scope of authorization. (1) Authority granted hereunder shall be limited to the administration of the permit program within applicant's jurisdictional boundaries as now existing or as hereafter changed.

(2) Grants of authority to municipalities hereunder shall be limited to the conduct of a permit program for the discharge of commercial and industrial wastes into a sewerage system and shall confer no authority to issue permits for the discharge of such wastes into surface or groundwaters of the state. Administration of permit requirements for waste discharges other than commercial and industrial wastes entering a sewerage system, shall remain solely with the department.

(3) No authorization made hereunder shall be construed as limiting or abridging the powers or abrogating the duties required of the department. The department may initiate appropriate enforcement action against a municipality to whom authority has been granted hereunder, or against any discharger for violations of any requirements of chapter 90.48 RCW, the FWPCAA, or regulations thereunder.

[Order DE 75-10, § 173-208-070, filed 4/30/75.]

WAC 173-208-080 Permits under authorized programs. Any municipality to which permit authority has been granted hereunder may use its own application and permit forms when the same have been approved by the department.

[Order DE 75-10, § 173-208-080, filed 4/30/75.]

WAC 173-208-090 Conformity with department rules. (1) It is contemplated that various applicants may present to the department differing regulatory criteria designed to cope with particular local needs and conditions. For the purposes of determining whether an applicant intends to administer the permit program in accordance with applicable state and federal laws, regulations, and policies, the department shall evaluate proposed regulatory criteria on the basis of whether such criteria, if implemented, would be at least as stringent as state or federal requirements.

(2) All implementing ordinances or resolutions shall contain a proviso requiring that the permit program as administered by any municipality be revised, as necessary and to the satisfaction of the department, to conform with any changes in applicable rules and regulations which may be adopted by the department or the federal government subsequent to the effective date of the grant of authority. All amendments of implementing ordinances or resolutions shall be submitted to the department for approval prior to passage.

(3) Any municipality granted authority hereunder to administer a permit program shall adhere to, as a minimum requirement for commercial and industrial dischargers, the state or federal pretreatment standards and regulations, as now exist or are hereafter amended. If necessary to impose more stringent standards in order to meet the effluent limitations contained in its National Pollutant Discharge Elimination System (NPDES) permit, the municipality shall impose and enforce such stricter pretreatment requirements as necessary to meet these limitations pursuant to the authority preserved to the state by section 510 of the FWPCAA.

(4) Nothing in this grant of authority shall relieve the municipality of its obligation of compliance with the terms and conditions of its NPDES permit or the requirements of state and federal laws and rules pertaining to water pollution control.

[Order DE 75-10, § 173-208-090, filed 4/30/75.]

WAC 173-208-100 Withdrawal of authorization. Whenever the department shall determine that a municipality to which a grant of authority has been made hereunder is not administering the permit system in accordance with an approval order issued hereunder, state and/or federal water pollution control acts and regulations or the applicable implementing ordinance or resolution of the municipality, the department shall notify such local government and, if corrective action is not taken within a reasonable time, not to exceed sixty days, the department by order, shall withdraw the authority. Permits issued under this program shall automatically terminate if the authority to issue the same is revoked by the department and the provisions of RCW 90.48.160 shall apply.

[Order DE 75-10, § 173-208-100, filed 4/30/75.]

WAC 173-208-110 Requirement of program review. It is the objective of the department to place reliance for internal system controls upon any municipality granted authority hereunder and to avoid complex procedures for the measuring and evaluating the effectiveness of a municipal permit system, insofar as is consistent with statutory responsibilities of the department under the provisions of chapter 90.48 RCW. A program review shall be necessary, however, to fulfill those responsibilities and shall be accomplished through the following actions:

(1) The municipality shall immediately provide the department with a copy of each application for discharge, together with a copy of each permit issued thereupon, or notice of denial thereof.

(2) The municipality will devise and submit a quarterly written report to the department within thirty days after the end of each calendar year quarter to reflect the following:

(a) A listing of all permits issued by the municipality during the previous quarter.

(b) A report on the status of compliance by dischargers having permits that incorporate compliance schedules.

(c) A brief narrative covering violations and enforcement actions, if any, occurring during the reporting period, to include specifics as to cause and effect of the violation and preventative measures taken.

(d) Maintain copies of monitoring reports submitted by all permit holders for purposes of inspection by department personnel.

(e) Identification of problem areas or potential problem areas which may be resolved with the assistance of the department.

(3) The municipality and the department shall hold joint staff meetings involving personnel from municipal and department staff no less than semiannually for purposes of discussing functional problems and solutions related to industrial and commercial waste discharge permit systems.

[Order DE 75-10, § 173-208-110, filed 4/30/75.]

WAC 173-208-120 Appeal. Any person aggrieved by a final ruling by a municipality upon an application for a permit or violations of the same under a delegated program may obtain review thereof by filing an appeal, within thirty days, with the pollution control hearings board, pursuant to chapter 43.21B RCW and chapter 371-08 WAC. The defense of any such appeal shall be the responsibility of the municipality.

[Order DE 75-10, § 173-208-120, filed 4/30/75.]

Chapter 173-216 WAC
STATE WASTE DISCHARGE PERMIT PROGRAM

WAC

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WAC 173-216-010 Purpose. (1) The purpose of this chapter is to implement a state permit program, applicable to the discharge of waste materials from industrial, commercial, and municipal operations into ground and surface waters of the state and into municipal sewerage systems. However, this regulation does not apply to the following:

(a) The point source discharge of pollutants into navigable waters of the state which are regulated by the National Pollutant Discharge Elimination System (NPDES) Permit Program, chapter 173-220 WAC.

(b) The discharge of pollutants into waters of the state which are regulated by the Waste discharge general permit program, chapter 173-226 WAC.

(2) Permits issued under this chapter are designed to satisfy the requirement for discharge permits under the Water Pollution Control Act, chapter 90.48 RCW and to implement applicable pretreatment requirements under section 307 of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.).

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-216-010, filed 1/3/06, effective 2/3/06. Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-216-010, filed 5/5/93, effective 5/19/93. Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-216-010, filed 3/4/86. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-216-010, filed 2/29/84. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-010, filed 11/18/83. Formerly chapter 372-24 WAC.]

WAC 173-216-020 Policy enunciated. (1) It shall be the policy of the department in carrying out the requirements of this chapter, to maintain the highest possible standards to ensure the purity of all waters of the state and to require the use of all known, available and reasonable methods to prevent and control the discharge of wastes into the waters of the state. Notwithstanding that standards of quality established for the waters of the state would not be violated, wastes and other materials shall not be allowed to enter such waters which will reduce the existing quality thereof, except in those situations where it is clear that overriding considerations of public interest will be served.

(2) Consistent with this policy, the discharge of waste materials into municipal sewerage systems which would interfere with, pass through, or otherwise be incompatible with such systems or which would contaminate the sludge will not be permitted.

(3) Consistent with this policy, the department will act to prevent the disposal of wastes that present a risk to human health, including the potential, chronic effects of lifetime exposure to waste materials.

[Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-216-020, filed 3/4/86. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-216-020, filed 2/29/84. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-020, filed 11/18/83.]

WAC 173-216-030 Definitions. For the purposes of this chapter the following definitions shall be applicable:

(1) "Beneficial uses" shall include, but not be limited to, use for domestic water, irrigation, fish, shellfish, game, and other aquatic life, municipal, recreation, industrial water, generation of electric power, and navigation.

(2) "Dangerous wastes" means any discarded, useless, unwanted, or abandoned nonradioactive substances, including but not limited to certain pesticides, or any residues or containers of such substances which are disposed of in such quantity or concentration as to pose a substantial present or potential hazard to human health, wildlife, or the environment because such wastes or constituents or combinations of such wastes:

(a) Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or

(b) Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means (Hazardous Waste Disposal Act, chapter 70.105 RCW).

(3) "Department" means department of ecology.

(4) "Domestic wastewater" means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments or other places, together with such ground water infiltration or surface waters as may be present (submission of plans and reports for construction of wastewater facilities, chapter 173-240 WAC).

(5) "Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater together with such industrial waste as may be present. In case of subsurface sewage treatment and disposal, the term is restricted to mean those facilities treating and disposing of domestic wastewater only from:

(a) A septic tank with subsurface sewage treatment and disposal and an ultimate design capacity exceeding fourteen thousand five hundred gallons per day at any common point; or

(b) A mechanical treatment system or lagoon followed by subsurface disposal with an ultimate design capacity exceeding three thousand five hundred gallons per day at any common point (submission of plans and reports for construction of wastewater facilities, chapter 173-240 WAC).

(6) "FWPCA" means Federal Water Pollution Control Act as amended by 1981 amendment (33 U.S.C. §466 et seq.).

(7) "General permit" means a permit which covers multiple dischargers within a designated geographical area, in lieu of individual permits being issued to each discharger.

(8) "Industrial wastewater" means water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated stormwater and, also, leachate from solid waste facilities (Submission of plans and reports for construction of wastewater facilities, chapter 173-240 WAC).

(9) "Interfere with" means a discharge by an industrial user which, alone or in conjunction with discharges by other sources, inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal

and which is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal by the POTW in accordance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the FWPCA, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D or the SWDA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection Research and Sanctuaries Act.

(10) "Municipal sewerage system" or "publicly owned treatment works (POTW)" means a publicly owned domestic wastewater facility or a privately owned domestic wastewater facility that is under contract to a municipality.

(11) "NPDES" means National Pollutant Discharge Elimination System permit program under section 402 of FWPCA.

(12) "New source" means any building, structure, facility, or installation from which there is or may be a discharge, the construction of which commenced; after proposal of Pretreatment Standards under section 307(c) of the FWPCA which are applicable to such sources.

(13) "Pass through" means the discharge of pollutants through a municipal sewerage system into waters of the state in quantities or concentrations which are a cause of or significantly contribute to a violation of any requirement of water quality standards for waters of state of Washington, chapter 173-201 WAC, or of the NPDES or state waste discharge permit, including an increase in the magnitude or duration of a violation (section 307 of FWPCA). Failure to obtain approval of an application for a new or increased discharge or change in the nature of the discharge according to WAC 173-216-110(5) would constitute such a violation.

(14) "Person" includes any political subdivision, local, state or federal government agency, municipality, industry, public or private corporation, partnership, association, firm, individual, or any other entity whatsoever.

(15) "Pretreatment" means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW.

(16) "Pretreatment requirements" means any substantive or procedural state, local, or federal requirements or standards developed under chapter 90.48 RCW and sections 307 and/or 402 of the FWPCA.

(17) "Pretreatment standards," "categorical standards," or "standards," means any pollutant discharge limitations, including those developed under section 307 (b) and (c) of the FWPCA and implemented through regulations in 40 CFR Subchapter N, that apply to the discharge of nondomestic wastes to POTWs. This term includes prohibitive discharge limits established pursuant to WAC 173-216-060.

(18) "Subsurface sewage treatment and disposal" means the physical, chemical, or biological treatment and disposal of domestic wastewater within the soil profile by placement beneath the soil surface in trenches, beds, seepage pits, mounds, or fills (Submission of plans and reports for construction of wastewater facilities, chapter 173-240 WAC).

(19) "Waste materials" means any discarded, abandoned, unwanted or unrecovered material(s), except the following are not waste materials for the purposes of this chapter:

(a) Discharges into the ground or ground water of return flow, unaltered except for temperature, from a ground water heat pump used for space heating or cooling: Provided, That such discharges do not have significant potential, either individually, or collectively, to affect ground water quality or uses.

(b) Discharges of stormwater that is not contaminated or potentially contaminated by industrial or commercial sources.

(20) "Waters of the state" means all lakes, rivers, ponds, streams, inland waters, ground waters, salt waters, and all other waters and water courses within the jurisdiction of the state of Washington.

(21) In the absence of other definitions as set forth herein, the definitions as set forth in 40 CFR Part 403.3 shall be used for circumstances concerning the discharge of waste into sewerage systems.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-216-030, filed 5/5/93, effective 5/19/93. Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-216-030, filed 3/4/86. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-030, filed 11/18/83.]

WAC 173-216-040 Authorization required. (1) No waste materials may be discharged from any commercial or industrial operation into waters of the state, or into any municipal sewerage system, nor may waste materials be discharged from any municipal sewerage system into waters of the state, except as authorized pursuant to this chapter, chapter 173-220 or 173-226 WAC.

(2) Any person who constructs or modifies or proposes to construct or modify wastewater facilities must first comply with the regulations for submission of plans and reports for construction of wastewater facilities, chapter 173-240 WAC.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-216-040, filed 5/5/93, effective 5/19/93. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-040, filed 11/18/83.]

WAC 173-216-050 Discharges not subject to permits. (1) The following discharges are not subject to permits under this chapter:

(a) Discharges to municipal sewerage systems of domestic wastewater from residential, commercial, or industrial structures.

(b) Any industrial or commercial discharge to a municipal sewerage system for which authority to issue permits has been granted to the municipality under RCW 90.48.165.

(c) Any industrial or commercial discharge to a municipal sewerage system operating under, and in compliance with, the applicable requirements of a local pretreatment program approved under section 307 of FWPCA and WAC 173-216-150. In the event of noncompliance, this exemption no longer applies and the discharger is immediately subject to enforcement action under chapter 90.48 RCW for discharging without a waste discharge permit.

(d) Discharges to municipal sewerage systems of wastes from industrial or commercial sources whose wastewater is similar in character and strength to normal domestic wastewater: Provided, That such discharges do not have the potential to adversely affect performance of the system. Examples of this type of discharge sources may include hotels, restaurants, laundries and food preparation establishments.

(e) Discharges for which an NPDES permit from the department is required pursuant to chapter 173-220 WAC.

(f) Discharges which are otherwise subject to the permit requirements of this chapter but which are covered under a general permit issued pursuant to chapter 173-226 WAC.

(g) Discharges of domestic wastewater from a septic tank with subsurface sewage treatment and disposal and an ultimate design capacity less than or equal to fourteen thousand five hundred gallons per day. These systems are governed by on-site sewage disposal systems, chapter 246-272 WAC which is administered by the Washington state department of health.

(h) Discharges of domestic wastewater from a mechanical treatment system or lagoon followed by subsurface disposal with an ultimate design capacity less than or equal to three thousand five hundred gallons per day. These systems are governed by on-site sewage disposal systems, chapter 246-272 WAC which is administered by the Washington state department of health.

(2) A permit is required for any source subject to pretreatment standards promulgated under section 307 of FWPCA, unless exempted under subsections (1)(b) and (c) of this section.

(3) These exemptions shall not relieve any discharger from the requirement to apply all known, available, and reasonable methods to prevent and control waste discharges to the waters of the state, nor the requirement to obtain approval of plans and reports for the construction of wastewater facilities. Nothing herein shall limit the authority of the department to take enforcement action for any unlawful discharge of waste materials or other violations of the Water Pollution Control Act, chapter 90.48 RCW.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-216-050, filed 5/5/93, effective 5/19/93. Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-216-050, filed 3/4/86. Statutory Authority: Chapter 90.48 RCW. 85-04-006 (Order 84-51), § 173-216-050, filed 1/25/85. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-050, filed 11/18/83.]

WAC 173-216-060 Prohibited discharges. (1) The discharge restrictions and prohibitions of dangerous waste regulations, chapter 173-303 WAC shall apply to this chapter.

(2) In addition, the following are prohibited:

(a) The discharge into a municipal sewerage system of substances prohibited from such discharge by section 307 of FWPCA.

(b) All of the following discharges to a municipal sewerage system:

(i) Waste materials that pass through the treatment works untreated or interfere with its operation or performance.

(ii) Any liquids, solids or gases which by reason of their nature or quantity are or may be sufficient either alone or by interaction to cause fire or explosion or be capable of creating a public nuisance or hazard to life or are sufficient to prevent entry into the sewers for their maintenance and repair or be injurious in any other way to the operation of the system or the operating personnel.

(iii) Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the system.

(iv) Any wastewater having a pH less than 5.0 or greater than 11.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel of the system, unless the system is specifically designed to accommodate such discharge and the discharge is authorized by a permit under this chapter.

(v) Wastewater which would cause the influent temperature to exceed 40°C (104°F), unless the system is specifically designed to accommodate such discharge and the discharge is authorized by a permit under this chapter. In any case, any wastewater having a temperature which will interfere with the biological activity in the system is prohibited.

(vi) Any waste materials, including oxygen demanding waste materials (BOD, etc.), released in either a slug load or continuous discharge of such volume or strength as to cause interference to the system.

(vii) Any of the following discharges unless approved by the department under extraordinary circumstances, such as lack of direct discharge alternatives due to combined sewer service or need to augment sewage flows due to septic conditions:

(A) Noncontact cooling water in significant volumes.

(B) Stormwater, and other direct inflow sources.

(C) Wastewaters significantly affecting system hydraulic loading, which do not require treatment or would not be afforded a significant degree of treatment by the system.

[Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-216-060, filed 3/4/86. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-060, filed 11/18/83.]

WAC 173-216-070 Application for a permit. (1) Any person not exempt under WAC 173-216-050, who proposes to discharge waste materials into waters of the state or into a municipal sewerage system, must file an application with the department at least sixty days prior to discharging, or in the case of an expiring permit, at least sixty days prior to the expiration of the permit.

(2) Applications for permits shall be on forms as prescribed by the department.

(3) The applicant must pay applicable fees pursuant to Wastewater discharge permit fees, chapter 173-224 WAC.

(4) The requirement for a permit application will be satisfied, if the discharger files:

(a) A completed permit application;

(b) When applicable, signature of approval by an authorized representative of the municipal sewerage system; and

(c) Any other information determined as necessary by the department.

(5) The application shall be signed in case of:

(a) Corporations, by a principal executive officer of at least the level of vice-president;

(b) A partnership, by a general partner;

(c) A sole proprietorship, by the proprietor;

(d) A municipal, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

(6) In the case of application by a corporation, the principal executive officer shall personally examine the application and certify its truth, accuracy, and completeness.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-216-070, filed 5/5/93, effective 5/19/93. Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-216-070, filed 3/4/86. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-070, filed 11/18/83.]

WAC 173-216-080 Confidentiality of information. (1) Any information submitted pursuant to this chapter may be claimed as confidential by the applicant. Any such claim must be asserted at the time of application or notification by placing the words "confidential business information" or similar words, on each page containing such information. If no claim is made, the department may make the information available to the public without further notice. Claims of confidentiality for the following information will be denied:

(a) Name and address of applicant;

(b) Description of proposal;

(c) Description of proposed receiving waters;

(d) Description of quality and quantity of receiving water; and

(e) Description of project's environmental impacts as provided in the State Environmental Policy Act, chapter 43.21C RCW;

(f) Description of quantity and characteristics of the effluent.

(2) Claims of confidentiality will be handled in accordance with the provisions of Disclosure—Campaign finances—Lobbying—Records, chapter 42.17 RCW, Public records, chapter 173-03 WAC, and Request for certification of records as confidential—Procedure, RCW 43.21A.160.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-080, filed 11/18/83.]

WAC 173-216-090 Public notice. (1) The applicant shall publish notice for each application in such a manner to inform and seek comments from interested and potentially interested persons.

(2) The public notice shall be in a form provided by the department and shall include at least the following:

(a) Name, address, and phone number of the office of the department issuing the public notice;

(b) Name and address of the applicant, and if different, of the facility or activity to be permitted;

(c) Brief description of the applicant's activities or operations which result in the discharge described in the application (e.g. municipal waste treatment plant, steel manufacturing, drainage from mining activities);

(d) A brief description of the discharge point(s);

(e) A statement of any tentative determination to issue or deny a permit for the discharge described in the application;

(f) A brief description of the procedures for the formulation of final determinations, including the thirty-day comment period required by subsection (6) of this section and any other means by which interested persons may influence or comment upon those determinations; and

(g) Address and phone number of the office of the department at which interested persons may obtain further information.

(3) Circulation of public notice shall include at least publishing once each week for two consecutive weeks, at applicants' expense, a public notice in a newspaper of general circulation in the county of the proposal. The department shall also, in the case of a discharge into a municipal sewerage system, notify the municipality of the intent to issue or deny a permit.

(4) The department may require the following additional public notification requirements:

(a) Mailing the notice to persons who have expressed an interest in being notified;

(b) Mailing the notice to other state agencies and local governments with a regulatory interest in the proposal;

(c) Posting the notice on the premises.

(5) The public notification requirements do not apply for permit renewal, if there are no increases in volume or changes in characteristics of discharge beyond those previously authorized.

(6) The public notice shall include a statement that any person may express their views in writing to the department within thirty days of the last date of publication.

(7) Any person submitting written comment or any other person may, upon request, obtain a copy of the department's final decision.

(8) The applicant shall provide the department with an affidavit of publication.

(9) The department shall add the name of any person, upon request, to a mailing list to receive copies of notices for all applications within the state or within a geographical area.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-090, filed 11/18/83.]

WAC 173-216-100 Public hearings. (1) Any interested person may request a public hearing with respect to permit applications for which notice is required pursuant to WAC 173-216-090. Any such request for a public hearing shall be filed within the thirty-day period prescribed in WAC 173-216-090(6) and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted.

(2) The department shall hold a hearing if it determines there is a significant public interest.

(3) Any hearing held pursuant to this subsection shall be held at a time and place deemed appropriate by the department.

(4) Public notice of any hearing held pursuant to this section shall be circulated at least as widely as was the notice of the application.

(5) Procedures for the circulation of public notice for hearings held shall include at least the following:

(a) Notice shall be published, at the applicant's expense, in at least one newspaper of general circulation within the area of the discharge;

(b) Notice shall be sent to all persons who received a copy of the notice given under WAC 173-216-090;

(c) Notice shall be mailed to any person upon request;

(d) Notice shall be given at least thirty days in advance of the hearing.

(6) The contents of public notice of any hearing held pursuant to this section shall include at least the following:

(a) Name, address, and phone number of the office of the department holding the public hearing;

(b) The purpose of the hearing;

(c) Name and address of the applicant;

(d) A brief description of the point(s) of discharge;

(e) Information regarding the time and location for the hearing;

(f) A brief description of the nature of the hearing;

(g) A concise statement of the issues raised by the persons requesting the hearing, when applicable;

(h) A brief reference to the public notice issued for each application, including identification number and date of issuance; and

(i) Address and phone number of premises at which interested persons may obtain information.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-100, filed 11/18/83.]

WAC 173-216-110 Permit terms and conditions. (1) Any permit issued by the department shall specify conditions necessary to prevent and control waste discharges into the waters of the state, including the following, whenever applicable:

(a) All known, available, and reasonable methods of prevention, control, and treatment;

(b) Pretreatment requirements;

(c) Requirements pursuant to other laws, including the state's Hazardous Waste Disposal Act, chapter 70.105 RCW, the Solid waste management—Recovery and recycling, chapter 70.95 RCW, the Resource Conservation and Recovery Act of 1976, Public Law 95.190 or any other applicable local ordinances, state, or federal statute, to the extent that they pertain to the prevention or control of waste discharges into the waters of the state;

(d) Any conditions necessary to meet applicable water quality standards for surface waters or to preserve or protect beneficial uses for ground waters;

(e) Requirements necessary to avoid conflict with a plan approved pursuant to section 208(b) of FWPCA;

(f) Any conditions necessary to prevent and control pollutant discharges from plant site runoff, spillage or leaks, sludge or waste disposal, or raw material storage;

(g) Any appropriate monitoring, reporting and record keeping requirements as specified by the department, including applicable requirements under sections 307 and 308 of FWPCA;

(h) Schedules of compliance, including those required under sections 301 and 307 of FWPCA, which shall set forth the shortest reasonable time period to achieve the specified requirements; and

(i) Prohibited discharge requirements as contained in WAC 173-216-060.

(2) The permits shall be for a fixed term, not exceeding five years.

(3) Representatives of the department shall have the right to enter at all reasonable times in or upon any property, public or private, for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times shall include normal business hours, hours during which production, treatment, or discharge occurs, or times when the department suspects a violation requiring immediate inspection. Representatives of the department shall be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit, to inspect any monitoring equipment or method required in the permit and to sample the discharge, waste treatment processes, or internal waste streams.

(4) The permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed by the permittee to achieve compliance with the terms and conditions of the permit. Where design criteria have been established, the permittee shall not permit flows or waste loadings to exceed approved design criteria or approved revisions thereto.

(5) A new application, or supplement to the previous application, shall be submitted, along with required engineering plans and reports, whenever a new or increased discharge or change in the nature of the discharge is anticipated which is not specifically authorized by the current permit. Such application shall be submitted at least sixty days prior to any proposed changes.

(6) In the event the permittee is unable to comply with any of the permit terms and conditions due to any cause, the permittee shall:

(a) Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;

(b) Immediately notify the department of the failure to comply; and

(c) Submit a detailed written report to the department within thirty days, unless requested earlier by the department, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, and any other pertinent information.

(7) In the case of discharge into a municipal sewerage system, the department shall consider in the final permit documents the requirements of the municipality operating the system.

(8) Permits for domestic wastewater facilities shall be issued only to a public entity, except in the following circumstances:

(a) Facilities existing or approved for construction with private operation on or before the effective date of this chapter, until such time as the facility is expanded;

(b) Facilities that serve a single nonresidential, industrial, or commercial establishment. Commercial/industrial complexes serving multiple owners or tenants and multiple residential dwelling facilities such as mobile home parks, apartments, and condominiums are not considered single commercial establishments for the purpose of the preceding sentence.

(c) Facilities that are owned by nonpublic entities and under contract to a public entity shall be issued a joint permit to both the owner and the public entity.

[Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-216-110, filed 3/4/86. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-110, filed 11/18/83.]

WAC 173-216-120 Transfer of a permit. (1) A permit is automatically transferred to a new owner or operator if:

(a) A written agreement between the old and new owner or operator containing a specific date for transfer of permit

responsibility, coverage, and liability is submitted to the department; and

(b) The department does not notify the permittee of the need to modify, or revoke and reissue the permit.

(2) Unless a permit is automatically transferred according to subsection (1) of this section, a permit may be transferred only if modified or revoked and reissued to identify the new permittee and to incorporate such other requirements as determined necessary by the department.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-120, filed 11/18/83.]

WAC 173-216-125 Monitoring. Use of registered or accredited laboratories:

(1) Except as established in subsection (3) of this section, monitoring data submitted to the department in accordance with this chapter shall be prepared by a laboratory accredited under the provisions of chapter 173-50 WAC no later than July 1, 1993, for all state permittees with a permitted average flow rate greater than five million gallons per day.

These requirements are effective and binding on all permittees under the authority of rule, regardless of whether they have been included as conditions of a permit.

(2) Except as established in subsection (3) of this section, monitoring data submitted to the department in accordance with this chapter shall be prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC no later than July 1, 1994, for all state permittees not covered under subsection (1) of this section.

These requirements are effective and binding on all permittees under the authority of rule, regardless of whether they have been included as conditions of a permit.

(3) The following parameters need not be accredited or registered:

(a) Flow;

(b) Temperature;

(c) Settleable solids;

(d) Conductivity, except that conductivity shall be accredited if the laboratory must otherwise be registered or accredited;

(e) pH, except that pH shall be accredited if the laboratory must otherwise be registered or accredited;

(f) Turbidity, except that turbidity shall be accredited if the laboratory must otherwise be registered or accredited; and

(g) Parameters which are used solely for internal process control.

[Statutory Authority: RCW 90.48.035. 02-05-055 (Order 01-08), § 173-216-125, filed 2/15/02, effective 3/18/02. Statutory Authority: RCW 43.21A.230. 93-20-011 (Order 92-53), § 173-216-125, filed 9/22/93, effective 10/23/93; 90-21-090 (Order 90-21), § 173-216-125, filed 10/19/90, effective 11/19/90.]

WAC 173-216-130 Modification, suspension, and revocation of permits. (1) Any permit issued under this chapter can be modified, suspended, or revoked, in whole or in part by the department for the following causes:

(a) Violation of any permit term or condition;

(b) Obtaining a permit by misrepresentation or failure to fully disclose all relevant facts;

(c) A material change in quantity or type of waste disposal;

(d) A material change in the condition of the waters of the state; or

(e) Nonpayment of permit fees assessed pursuant to RCW 90.48.610.

(2) The department may modify a permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, which includes promulgation or revisions of categorical standards.

(3) Any permit issued under this chapter shall remain in effect until terminated in writing by the department, except that continuation of an expired permit (pursuant to RCW 90.48.200), shall terminate upon coverage under a general permit issued pursuant to chapter 173-226 WAC.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-216-130, filed 5/5/93, effective 5/19/93. Statutory Authority: Chapter 43.21A RCW. 88-12-035 (Order 88-8), § 173-216-130, filed 5/26/88, effective 7/1/88; 86-06-040 (Order 86-03), § 173-216-130, filed 3/4/86. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-130, filed 11/18/83.]

WAC 173-216-140 Relationship with NPDES permits. For a given facility, permit requirements under this chapter and NPDES permit requirements under Water Pollution Control Act, RCW 90.48.260, shall under normal circumstances, be contained in a single permit document.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-216-140, filed 5/5/93, effective 5/19/93. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-073 (Order DE 83-29), § 173-216-140, filed 11/18/83.]

WAC 173-216-150 Delegation of authority to issue permits for discharges into sewer systems. Qualified cities, towns, and other municipal corporations who administer a local permit program shall fulfill the requirements of chapter 173-208 WAC and 40 CFR Part 403.

[Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-216-150, filed 3/4/86.]

Chapter 173-218 WAC

UNDERGROUND INJECTION CONTROL PROGRAM

WAC

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WAC 173-218-010 Purpose. The purpose of this chapter is to protect ground water quality by:

(1) Preventing ground water contamination by regulating the discharge of fluids into Underground Injection Control (UIC) wells; and

(2) Satisfying the intent and requirements of Part C of the Federal Safe Drinking Water Act (SDWA) and the Washington state Water Pollution Control Act, chapter 90.48 RCW.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-010, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-010, filed 2/29/84.]

WAC 173-218-020 Policy. (1) The policy of the department of ecology for this chapter is:

(a) To preserve and protect ground waters by preventing the injection of fluids that will endanger ground water;

(i) That contains fewer than 10,000 mg/L of total dissolved solids and is obtainable for beneficial uses as defined in WAC 173-218-030;

(ii) That contains greater than 10,000 mg/L of total dissolved solids and is obtainable for beneficial uses if the practices meet the requirements of this chapter;

(b) To require the use of all known, available, and reasonable methods of prevention, control and treatment (AKART) to the discharge of fluids and waste fluids into the waters of the state as authorized by RCW 90.48.010; and

(c) To prohibit the injection of fluids through wells except as authorized by this chapter.

(2) Consistent with this policy, the disposal of fluids from industrial, commercial, or municipal sources, or multifamily dwellings, into wells will be authorized by the department, providing these operations satisfy this chapter and are in compliance with local, state, and federal laws.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-020, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-020, filed 2/29/84.]

WAC 173-218-030 Definitions. "Abandoned well" means a well that is unused, unmaintained, or is in such disrepair as to be unusable.

"AKART" is an acronym that means all known, available and reasonable methods of prevention, control and treatment. AKART shall represent the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge. The concept of AKART applies to both point and nonpoint sources of pollution. The term "best management practices" typically applies to nonpoint source pollution controls, and is considered a subset of the AKART requirement. The storm water management manuals (see definition in this section) may be used as a guideline, to the extent appropriate, for developing best management practices to apply AKART for storm water discharges.

"Aquifer" means a geologic formation, group of formations or part of a formation capable of yielding a significant amount of ground water to wells or springs.

"Beneficial uses" mean uses of the waters of the state which include, but are not limited to, use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

"Best management practices" mean approved physical, structural, and/or managerial practices that, when used singularly or in combination, prevent or reduce pollutant discharges.

"Caprock" means geologic confining formation(s) that has sufficiently low permeability and lateral continuity to prevent the migration of injected carbon dioxide and other fluids out of the geologic containment system.

"Cesspool" means a drywell that receives untreated sanitary waste containing human excreta, and that sometimes has an open bottom and/or perforated sides that discharge to the subsurface.

"Commercial business" means a type of business activity that may distribute goods or provide services, but does not involve the manufacturing, processing or production of goods.

"Contaminant" means any chemical, physical, biological, or radiological substance that does not occur naturally in ground water or that occurs at concentrations greater than those found naturally.

"Contamination" means introduction of a contaminant.

"Dangerous waste" means those solid wastes designated in WAC 173-303-070 through 173-303-100 as dangerous, or extremely hazardous or mixed waste. As used in chapter 173-303 WAC, Dangerous waste regulations, the words "dangerous waste" will refer to the full universe of wastes regulated by chapter 173-303 WAC.

"Decommission" means to fill or plug a UIC well so that it will not result in an environmental or public health or safety hazard, nor serve as a channel for movement of water or pollution to an aquifer.

"Department" means department of ecology.

"Dispersion" means the release of surface and storm water runoff from a drainage facility system such that the flow spreads over a wide area and is located so as not to allow flow to concentrate anywhere upstream of a drainage channel with erodible underlying granular soils.

"Drywell" means a well, other than an improved sinkhole or subsurface fluid distribution system, completed above the water table so that its bottom and sides are typically dry except when receiving fluids.

"Existing well" means a well that is in use at the adoption date of this chapter.

"Fluid" means any material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state.

"Geologic containment system" means the geologic formations that both receive the injected carbon dioxide (CO_2) and contains or sequesters it within the system's physical boundaries. The containment system is a three-dimensional area with defined boundaries that includes one or more geologic formations.

"Geologic sequestration of carbon dioxide" means the injection of carbon dioxide into subsurface geologic formations to permanently prevent its release into the atmosphere.

"Geologic sequestration project" means the surface and underground facilities used to inject carbon dioxide for sequestration and includes: Geologic containment system,

monitoring zone(s) and surface facilities described in the permit application.

"Geologic sequestration project boundary" means a three-dimensional boundary defined in permit that encloses all surface and underground facilities of the geologic sequestration project and extends vertically to the overlying ground surface.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"Ground water protection area" means a geographic area that is by or close by a surrounding community and nontransient noncommunity water system, that uses ground water as a source of drinking water (40 CFR 144.87) and other sensitive ground water areas critical to protecting underground sources of drinking water from contamination; such as sole source aquifers, highly productive aquifers supplying private wells, critical aquifer recharge areas and/or other state and local areas determined by state and local governments.

"Hazardous substances" mean any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6) or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous substance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42 U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment.

"High threat to ground water" means, for this chapter, a UIC well is a high threat to ground water when it receives fluids that cannot meet the criteria in chapter 173-200 WAC Water quality standards for ground waters of Washington (GWQS) at the top of the aquifer, which include, but are not limited to, the following examples: A UIC well that receives drainage, that has not been pretreated and does not meet the GWQS; such as, from an area where storm water comes into contact with a vehicle fueling area, airport deicing activities, storage of treated lumber or vehicle washing; or a UIC well that receives a discharge that is determined to be an imminent public health hazard by a legal authority or is prohibited in this chapter.

"Improved sinkhole" means a naturally occurring karst depression or other natural crevice found in volcanic terrain and other geologic settings that has been modified by man for the purpose of directing and emplacing fluids into the subsurface.

"Infiltration pond" means an earthen impoundment used for the collection, temporary storage and infiltration of incoming storm water runoff.

"Infiltration trench" means a trench used to infiltrate fluid into the ground, is generally at least twenty-four inches wide and backfilled with a coarse aggregate. Perforated pipe or a product with similar use may also be installed.

"Industrial wastewater" means water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feedlots, poultry houses or dairies. The term includes contaminated storm water and leachate from solid waste facilities.

"Monitoring zone(s)" means the geologic formations, identified in the application for a geologic sequestration project, where chemical, physical and other characteristics are measured to establish the location, behavior and effects of the injected carbon dioxide in the subsurface and to detect leakage from the geologic containment system. At a minimum, a monitoring zone must be established beneath the ground surface but outside of the geologic containment system to detect leakage of injected CO_2 except where other monitoring is approved by the director.

"Motor vehicle waste disposal well" means a Class V injection well that is typically a shallow disposal system that receives or has received fluids from vehicular repair or maintenance activities such as auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shops or any facility that does any vehicular repair work (40 CFR 144.81).

"New injection well" means an injection well that is put in use following the adoption date of this chapter.

"Nonendangerment standard" means to prevent the movement of fluid containing any contaminant into the ground water if the contaminant may cause a violation of the Water quality standards for ground waters of the state of Washington, chapter 173-200 WAC or may cause health concerns.

"Nonpollution-generating surface" means a surface considered to be an insignificant source of pollutants in storm water runoff and/or a surface not defined as a pollution-generating surface.

"Person" means any political subdivision, local, state, or federal government agency, municipality, industry, public or private corporation, partnership, association, firm, individual, or any other entity whatsoever.

"Point of compliance" means the location where the facility must be in compliance with chapter 173-200 WAC Water quality standards for ground waters of the state of Washington; the top of the aquifer, as near to the source as technically, hydrogeologically, and geographically feasible.

"Pollution" means contamination or other alteration of the physical, chemical, or biological properties of waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state as will, or is likely to, create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

"Pollution-generating surfaces" mean the surfaces are considered a significant source of pollutants in storm water runoff. Pollution generating surfaces include pollution generating pervious surfaces and pollution generating impervious surfaces such as surfaces that are subject to: Regular vehicular use, industrial activities, or storage of erodible or leachable materials that receive direct rainfall, or the run-on or

blow-in of rainfall, use of pesticides or fertilizers or loss of soil; or leaching such as from metal roofs not coated with an inert, nonleachable material, roofs that are subject to venting of manufacturing, commercial, or other indoor pollutants. Examples of commercial indoor pollutants are commercial facilities such as restaurants where oils and other solid particles are expected to be expelled. It does not include normal indoor air venting at commercial facilities where activities such as cooking, processing, etc., do not take place. Examples are: Roads, unvegetated road shoulders, bike lanes within the traveled lane of a roadway, driveways, parking lots, unfenced fire lanes, vehicular equipment storage yards, airport runways, lawns, and landscaped areas that apply pesticide applications; such as golf courses, parks, cemeteries, and sports fields except for landscaped areas that are approved infiltrative best management practices.

"Proper management of storm water" means AKART has been provided or the well owner has demonstrated that the discharge will meet the nonendangerment standard.

"Radioactive waste" means any waste which contains radioactive material in concentrations that exceed those listed in 10 Code of Federal Regulations Part 20, Appendix B, Table II, and Column 2.

"Retrofit" means taking actions to reduce the pollutant load from a UIC well to meet the statutory requirements of 40 CFR 144.12 and RCW 90.48.010. These actions may include, but are not limited to: Changes to the source control activities and/or structures around the well; an upgrade to the well such as adding a catch basin or spill control device; and/or addition of pretreatment facilities or decommissioning. The selection of actions is based on local priorities, required by the department or the local jurisdiction to address a documented water quality problem.

"Rule authorized" means a UIC well that is registered with the department and meets the nonendangerment standard. If a well is rule authorized, it does not require a state waste discharge permit from the department.

"Sanitary waste" means liquid or solid wastes originating solely from humans and human activities, such as wastes collected from toilets, showers, wash basins, sinks used for cleaning domestic areas, sinks used for food preparation, clothes washing operations, and sinks or washing machines where food and beverage serving dishes, glasses, and utensils are cleaned. Sources of these wastes may include single or multiple residences, hotels and motels, restaurants, bunkhouses, schools, ranger stations, crew quarters, guard stations, campgrounds, picnic grounds, day-use recreation areas, other commercial facilities, and industrial facilities provided the waste is not mixed with industrial waste.

"Septic system" means a well that is used to discharge sanitary waste below the surface and is typically comprised of a septic tank and subsurface fluid distribution system or disposal system. (Also called on-site sewage system.)

"Sequestration" means to set apart or remove.

"State waste discharge permit" means a permit issued in accordance with chapter 173-216 WAC, State waste discharge permit program.

"Storm water" means the portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes and other features of a storm water drainage system into a defined surface water body, or a constructed treatment, evaporation, or infiltration facility.

"Storm water manuals" mean the *Stormwater Management Manual for Eastern or Western Washington* or other manuals approved by the department.

"Storm water pollution prevention plan" means a documented plan to implement measures to identify, prevent, and control the contamination of storm water and its discharge to UIC wells.

"Subsurface fluid distribution system" means an assemblage of perforated pipes, drain tiles, or other similar mechanisms intended to distribute fluids below the surface of the ground.

"Underground source of drinking water" means ground waters that contain fewer than 10,000 mg/L of total dissolved solids and/or supplies drinking water for human consumption.

"UIC well" or **"underground injection control well"** means a well that is used to discharge fluids into the subsurface. A UIC well is one of the following: (1) A bored, drilled or driven shaft, or dug hole whose depth is greater than the largest surface dimension; (2) an improved sinkhole; or (3) a subsurface fluid distribution system.

"Waste fluid" means any fluid that cannot meet the nonendangerment standard at the point of compliance, which is the top of the aquifer.

"Well assessment" means an evaluation of the potential risks to ground water from the use of UIC wells. A well assessment includes information such as the land use around the well which may affect the quality of the discharge and whether the UIC well is located in a ground water protection area. It may include the local geology and depth of the ground water in relation to the UIC well if the well is considered a high threat to ground water.

"Well injection" means the subsurface emplacement of fluids through a well.

"You" means the owner or operator of the UIC well.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-218-030, filed 6/19/08, effective 7/20/08. Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-030, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-030, filed 2/29/84.]

WAC 173-218-040 UIC well classification including allowed and prohibited wells. The most common type of UIC well in Washington is a Class V well. A Class V well is usually a shallow disposal well such as a drywell, drainfield or French drain (see subsection (5) of this section).

(1) "Class I injection well" means a well used to inject dangerous and/or radioactive waste, beneath the lowermost formation containing an underground source of drinking water within one-quarter mile of the well bore. All Class I wells are prohibited in Washington and must be decommissioned.

(2) "Class II injection well" means a well used to inject fluids:

(a) Brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production. It may be mixed with wastewaters from gas plants that are an integral part of production operations, unless those

waters are classified as hazardous wastes at the time of injection;

(b) For enhanced recovery of oil or natural gas; or

(c) For storage of hydrocarbons that are liquid at standard temperature and pressure.

(3) "Class III injection well" means a well used for extraction of minerals. All Class III wells are prohibited in Washington and must be decommissioned. Examples of Class III injection wells include, but are not limited to, the injection of fluids for:

(a) In situ production of uranium or other metals that have not been conventionally mined;

(b) Mining of sulfur by Frasch process; or

(c) Solution mining of salts or potash.

(4) "Class IV injection well" means a well used to inject dangerous or radioactive waste into or above an underground source of drinking water. Class IV wells are prohibited and must be decommissioned except for Class IV wells reinjecting treated ground water into the same formation from where it was drawn as part of a removal or remedial action if such injection is approved by EPA in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act or the Resource Conservation and Recovery Act, 40 CFR 144.13(c). Other examples of Class IV wells include:

(a) Dangerous or radioactive waste into or above a formation that contains an underground source of drinking water within one quarter mile of the well. This includes disposal of dangerous waste into a septic system or cesspool regardless of the size; or

(b) Dangerous or radioactive waste that cannot be classified as a Class I well type or (a) of this subsection.

(5) "Class V injection well" means all injection wells not included in Classes I, II, III, or IV. Class V wells are usually shallow injection wells that inject fluids above the uppermost ground water aquifer. Some examples are dry wells, French drains used to manage storm water and drain fields.

(a) The following are examples of Class V injection wells that are allowed in Washington:

(i) Drainage wells used to drain surface fluids, primarily storm water runoff, into or below the ground surface, such as, but not limited to, a drywell or infiltration trench containing perforated pipe;

(ii) Heat pump or cooling water return flow wells used to inject water previously used for heating or cooling;

(iii) Aquifer recharge wells used to replenish the water in an aquifer;

(iv) Salt water intrusion barrier wells used to inject water into a fresh water aquifer to prevent the intrusion of salt water into the fresh water;

(v) Septic systems serving multiple residences or nonresidential establishments that receive only sanitary waste and serve twenty or more people per day or an equivalent design capacity of 3,500 gallons or larger per day;

(vi) Subsidence control wells (not used for the purpose of oil or natural gas production) used to inject fluids into a nonoil or gas producing zone to reduce or eliminate subsidence associated with the removal of fresh water;

(vii) Injection wells associated with the recovery of geothermal energy for heating, aquaculture and production of electric power;

(viii) Injection wells used in experimental technologies;

(ix) Injection wells used for in situ recovery of lignite, coal, tar sands, and oil shale;

(x) Injection wells used for remediation wells receiving fluids intended to clean up, treat or prevent subsurface contamination;

(xi) Injection wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts;

(xii) Injection wells used to control flooding of residential basements;

(xiii) Injection wells used for testing geologic reservoir properties for potential underground storage of natural gas or oil in geologic formations; if the injected water used is of equivalent or better quality than the ground water in the targeted geologic formation and the ground water in the targeted geologic formation is nonpotable and/or toxic because of naturally occurring ground water chemistry;

(xiv) Injection wells used as part of a reclaimed water project as allowed under a permit; and

(xv) Injection wells used to inject carbon dioxide for geologic sequestration.

(b) The following are examples of Class V wells that are prohibited in Washington:

(i) New and existing cesspools including multiple dwelling, community or regional cesspools, or other devices that receive sanitary wastes that have an open bottom and may have perforated sides that serve twenty or more people per day or an equivalent design capacity of 3,500 gallons or larger per day. The UIC requirements do not apply to single family residential cesspools or to nonresidential cesspools which receive solely sanitary waste and have the capacity to serve fewer than twenty persons a day or an equivalent design capacity of less than 3,500 gallons per day;

(ii) Motor vehicle waste disposal wells that receive or have received fluids from vehicular repair or maintenance activities (see definition of motor vehicle waste disposal wells in WAC 173-218-030). UIC wells receiving storm water located at vehicular repair, maintenance or dismantling facilities shall not be considered waste disposal wells if the wells are protected from receiving vehicle waste;

(iii) Wells used for solution mining of conventional mines such as stopes leaching;

(iv) Backfill wells used to inject a mixture of water and sand, mill tailings or other solids into mined out portions of subsurface mines whether what is injected is a radioactive waste or not;

(v) UIC wells receiving fluids containing hazardous substances (see definition for hazardous substances in WAC 173-218-030) except for wells:

(A) Allowed under (a)(x) of this subsection; or

(B) Receiving storm water that meets the nonendangerment standard by applying the best management practices and requirements in WAC 173-218-090 or storm water authorized under a permit; and

(vi) UIC wells receiving industrial wastewater except for industrial wastewater authorized under a permit.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-218-040, filed 6/19/08, effective 7/20/08. Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-040, filed

1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-040, filed 2/29/84.]

WAC 173-218-050 Exemptions from UIC well status. The following are not considered UIC wells and are not regulated under this chapter.

(1) Single-family residential septic systems, handling only sanitary wastes and have the capacity to serve less than twenty people per day or an equivalent design capacity of less than 3,500 gallons per day;

(2) Nonresidential septic systems and cesspools handling only sanitary wastes and have the capacity to serve less than twenty people per day or an equivalent design capacity of less than 3,500 gallons per day;

(3) Any dug, blasted or drilled hole, bored shaft that is not used for the subsurface placement of fluids in accordance with 40 CFR 144.1 (g)(1)(ii);

(4) Infiltration ponds, dispersion systems, or infiltration trenches that do not contain perforated pipe; or

(5) Storm drain components that contain perforated pipes, drain tiles or other similar mechanisms designed and intended to convey water directly or indirectly to a surface water body.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-050, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-050, filed 2/29/84.]

WAC 173-218-060 Requirements to operate a UIC well. To operate an existing or new UIC well in Washington, the UIC well must be registered and either rule authorized or receive a state waste discharge permit from the department to operate, except as noted below, and the following must be met:

(1) Class I UIC wells are prohibited and must be decommissioned.

(2) Class II UIC wells must be registered and have a state waste discharge permit issued by the department to operate, and the following must occur:

(a) The well must be reported to the department of natural resources in accordance with the provisions of chapter 344-12 WAC General rules by any person who proposes to conduct or is conducting a Class II injection well operation, as defined in chapter 173-218 WAC;

(b) The department of natural resources will perform review, evaluation, and approval in accordance with the provisions of chapter 344-12 WAC General rules; and

(c) The department of ecology will process a Class II injection well application, in accordance with applicable requirements as contained in 40 Code of Federal Regulations Parts 124 and 144 as published in Federal Register Volume 48, #64 (April 1, 1983) and Part 146 as published in Federal Register Volume 45, #123 (June 24, 1980), Volume 46, #166 (August 27, 1981) and Volume 47, #23 (February 3, 1982).

(3) Class III UIC wells are prohibited and must be decommissioned.

(4) Class IV UIC wells that are not prohibited (see WAC 173-218-040) must be registered and approved under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or the Resource Conservation and Recovery Act (RCRA), 40 CFR 144.13 (a)(4)(c). Approved Class IV UIC wells are wells used at:

(a) CERCLA sites conducting a cleanup under an EPA order, consent order or consent decree or where the cleanup is being conducted by EPA; or

(b) RCRA sites conducting a cleanup under an order, agreed order or consent decree.

(5) Class V UIC wells, except as noted below, must be registered and either rule authorized (see WAC 173-218-070) or receive a state waste discharge permit issued by the department to operate including wells used in independent remedial actions under MTCA. The following Class V wells do not need a permit but do have to register with the UIC program if they are authorized in accordance with:

(a) CERCLA conducting a cleanup under an EPA order, consent order or consent decree or where the cleanup is being conducted by EPA; and

(b) RCRA or MTCA conducting a cleanup under a MTCA order, agreed order or consent decree or where the cleanup is being conducted by the department.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-060, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-060, filed 2/29/84.]

WAC 173-218-070 Rule authorization and registration. In order to receive rule authorization, your well must meet the nonendangerment standard (see WAC 173-218-080 and 173-218-090) and must be registered with the department unless otherwise noted below. If your UIC well is rule authorized, it does not need a state waste discharge permit to operate. Rule authorization can be rescinded if a UIC well no longer meets the nonendangerment standard of this chapter.

(1) Registering your UIC well:

(a) The UIC well owner or operator must register the UIC well with the department and the wells only need to be registered once. Registration forms are available for single and multiple sites and can be found on the department's web site at http://www.ecy.wa.gov/programs/wq/grndwtr/uic. When completing the form, the following information must be included:

(i) Operator/owner information;

(ii) Site location;

(iii) Best management practices used to protect ground water quality;

(iv) UIC well description;

(v) Other information the department determines is necessary to meet the nonendangerment standard.

(b) Owners of UIC wells used to manage storm water must:

(i) Complete a well assessment for existing wells (see WAC 173-218-090) except for UIC wells authorized for use at CERCLA facilities; and

(ii) Provide to the department an annual update on any well status changes, such as a change in the legal owner or if the well has been closed, after the initial well registration is sent to the department.

(c) Owners of existing UIC wells that are not used for storm water management must complete a survey provided by the department except for wells in WAC 173-218-100 and UIC wells authorized for use at CERCLA facilities.

(d) UIC wells on tribal land must be registered with the Environmental Protection Agency, Region 10. Tribal land means the land within Indian reservations and federal land located off-reservation which is held in trust for Indians, unless specifically delegated by EPA.

(e) UIC wells at single-family homes that only receive residential roof runoff, or are used to control basement flooding, do not have to register with the department.

(f) Septic systems that serve twenty or more people per day or an equivalent design capacity of 3,500 gallons or larger per day that receive operating permits, meet the requirements and are permitted in accordance with chapter 246-272B WAC Large on-site sewage system regulations will be registered after the Washington state department of health provides to the department:

(i) Registration information for all systems with valid operating permits as of the effective date of this chapter; and

(ii) Annual updates on newly permitted systems and closed systems.

(g) The following types of Class V UIC wells that require an associated permit still need to register with the department:

(i) Aquifer recharge wells that meet the requirements and are permitted in accordance with chapter 173-157 WAC Underground artificial storage and recovery;

(ii) Septic systems that serve twenty or more people per day or an equivalent design capacity of 3,500 gallons or larger per day that meet the requirements and are permitted in accordance with chapter 246-272A WAC On-site sewage systems;

(iii) UIC wells used for geothermal fluid return flow into the same aquifer and that meet chapter 173-200 WAC Water quality standards for ground waters of the state of Washington and chapter 173-216 WAC State waste discharge permit program requirements; and

(iv) UIC wells that are used as part of a reclaimed water project that meet the requirements of the water reclamation and reuse standards as authorized by RCW 90.46.042.

(2) The department will determine if the UIC well is rule authorized based on the information provided in the registration packet and will take one of the following actions within sixty days:

(a) Provide written notification that your UIC well is registered and rule authorized;

(b) Contact you or conduct a site visit if additional information is needed;

(c) Provide written notification if rule authorization of your UIC well is denied. The denial letter will include one of the following:

(i) Written notification that improvements to your on-site practices are needed to meet the nonendangerment standards for rule authorization;

(ii) Written notification indicating that you must decommission the UIC well (see WAC 173-218-120); or

(iii) Written notification indicating that you will have to apply for a state waste discharge permit to operate your UIC well under chapter 173-216 WAC State waste discharge permit program.

(d) If you do not hear from the department within sixty days, the well will be automatically registered.

(3) Class IV wells that are not prohibited (see WAC 173-218-040) are rule authorized, after the UIC well is registered, for the life of the well if such subsurface emplacement of fluids is authorized under the Comprehensive Environmental Response, Compensation, and Liability Act or the Resource Conservation Recovery Act, 40 CFR 144.23(c).

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-070, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-070, filed 2/29/84.]

WAC 173-218-080 The nonendangerment standard for UIC wells. To meet the nonendangerment standard you must prevent the movement of fluid containing any contaminant into the ground water if the contaminant may cause a violation of chapter 173-200 WAC Water quality standards for the ground waters of the state of Washington. In order to meet the nonendangerment standard, you must meet the following:

(1) Be in compliance with the following sections in RCW 90.48.010, 90.48.080, 90.48.160, 90.48.162, and 90.48.455;

(2) Be in compliance with chapter 173-200 WAC Water quality standards for ground waters of the state of Washington; such as, but not limited to, providing best management practices at the site that will fulfill the AKART requirement; and

(3) Be constructed, operated, maintained and decommissioned in a manner that protects ground water quality as described in 40 CFR 144.12(a).

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-080, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-080, filed 2/29/84.]

WAC 173-218-090 Specific requirements for Class V wells to meet the nonendangerment standard. Specific requirements for Class V wells are organized by wells that are used for storm water management and wells that are used for other purposes. This section does not apply to the Class V wells in WAC 173-218-100.

(1) **New** Class V UIC wells used for **storm water management** must:

(a) Meet additional ground water protection area requirements as determined by other state laws or by local ordinances;

(b) Not directly discharge into ground water. A separation between the bottom of the well and the top of the ground water is required. The treatment capacity of the unsaturated zone or the zone where the fluid is discharged, and the pollutant loading of the discharge must be considered when determining the vertical separation; and

(c) The owner or operator of a new Class V well used to manage storm water must meet the nonendangerment standard as defined under WAC 173-218-080. The owner or operator of a new Class V well must show compliance with the nonendangerment standard prior to placing a new well into service. Compliance with the nonendangerment standard may be met through one or a combination of the following two approaches:

(i) Presumptive approach: The presumptive approach means compliance with the nonendangerment standard is presumed, unless discharge monitoring data or other site specific information shows that a discharge causes or contributes to a violation of chapter 173-200 WAC Water quality standards for ground waters of the state of Washington, when:

(A) The well activity is in compliance with this chapter; and either

(B) The well is designed and installed to the storm water manual current at the time of construction and is operated in conformance with storm water best management practices including the proper selection, implementation, and maintenance of all on-site pollution control using the current storm water manual published by the department for your region or an equivalent department approved local manual.

(C) Owners or operators of municipal separate storm sewer systems regulated under section 1342(p) of the Federal Water Pollution Control Act which also own or operate Class V UIC wells may satisfy the presumptive approach by applying the storm water management programs developed to comply with the Federal Water Pollution Control Act to their new UIC wells. For new UIC wells, construction phase and postconstruction storm water controls must be applied in accordance with applicable storm water manuals.

(D) The presumptive approach may not be used when best management practices do not exist to remove or reduce a contaminant, the vadose zone has no treatment capacity and/or the storm water quality is such that a best management practice does not exist to reduce or eliminate the concentration.

(ii) Demonstrative approach: The demonstrative approach means that the technical bases for the selection of storm water best management practices are documented. The documentation must include:

(A) The method and reasons for choosing the storm water best management practices selected;

(B) The pollutant removal performance expected from the practices selected;

(C) The technical basis supporting the performance claims for the practices selected, including any available existing data concerning field performance of the practices selected;

(D) An assessment of how the selected practices will satisfy the requirements of WAC 173-218-080 and chapter 173-200 WAC; and

(E) An assessment of how the selected practices will satisfy state requirements to use all known, available, and reasonable methods of prevention, control and treatment.

(2) **Existing** Class V UIC wells used for **storm water management** do not have to meet the new well requirements. If the UIC wells are not already registered, the owner or operator must register the wells with the department and complete a well assessment. The following timelines must be met unless otherwise approved from the department:

(a) If you own or operate less than or equal to fifty wells:

(i) You have three years after the adoption date of this rule to register your UIC wells unless an extension has been approved by the department;

(ii) You have five years after the adoption date of this rule to complete a well assessment. The approach to conducting the well assessment will be determined by the owner. The well assessment evaluates the potential risks to ground water from the use of UIC wells and includes information such as the land use around the well which may affect the quality of the discharge and whether the UIC well is located in a ground water protection area. It may include the local geology, and depth of the ground water in relation to the UIC well if the well is considered a high threat to ground water. The well assessment requirements will be met if an owner or operator applies the storm water best management practices contained in a guidance document approved by the department to their UIC wells and determines if the UIC well is located in a ground water protection area;

(iii) Any well assessment that identifies a well as a high threat to ground water must include a retrofit schedule; and

(iv) You must immediately take action to correct the use of a well that is determined to be an imminent public health hazard, for example when a drinking water supply is contaminated and causes a public health emergency. The department must be notified within thirty days from the determination and may determine a retrofit schedule. The department's enforcement procedure (see WAC 173-218-130) will be followed when a retrofit schedule is needed.

(b) If you own or operate more than fifty wells:

(i) You have five years after the adoption date of this rule to register your UIC wells unless an extension has been approved from the department;

(ii) You have seven years after the adoption date of this rule to complete a well assessment. The approach to conducting the well assessment will be determined by the owner. The well assessment evaluates the potential risks to ground water from the use of UIC wells and includes information such as the land use around the well which may affect the quality of the discharge, and whether the UIC well is located in a ground water protection area. It may include the local geology, and depth of the ground water in relation to the UIC well if the well is considered a high threat to ground water. The well assessment requirements will be met if an owner or operator applies the storm water best management practices contained in a guidance document approved by the department to their UIC wells and determines if the UIC well is located in a ground water protection area;

(iii) Any well assessment that identifies a well as a high threat to ground water must include a retrofit schedule; and

(iv) You must immediately take action to correct the use of a well that is determined to be an imminent public health hazard, for example when a drinking water supply is contaminated and causes a public health emergency. The department must be notified within thirty days from the determination and may establish a retrofit schedule. The department's enforcement procedure will be followed when a retrofit schedule is needed.

(c) If you own or operate a site that uses, stores, loads, or treats hazardous substances or is an industrial facility that has a Standard Industrial Classification as regulated by Federal Regulations, 40 CFR Subpart 122.26 (b)(14) (excluding construction sites), you may use the following to satisfy the documentation requirements for meeting the nonendangerment standard:

(i) If the facility has or will have a waste water discharge permit issued pursuant to chapter 90.48 RCW, including a National Pollutant Discharge Elimination System (NPDES)

permit, the associated storm water pollution prevention plan may be used in place of the well assessment to meet the nonendangerment standard provided the storm water pollution prevention plan specifically addresses storm water discharges to UIC wells; or

(ii) For unpermitted facilities, the preparation and implementation of a storm water pollution prevention plan can be used in place of the well assessment to meet the nonendangerment standard if applied to the UIC wells or documentation must be provided to show that the well does not pose a threat to ground water. Examples of documentation include, but are not limited to, a site drainage map for the UIC wells or a no-exposure certification form completed for discharges to ground.

(d) Owners or operators of municipal separate storm sewer systems regulated under section 1342(p) of the federal Water Pollution Control Act which also own or operate Class V UIC wells may satisfy the nonendangerment standard by applying the storm water management programs developed to comply with the federal Water Pollution Control Act to their UIC wells. For existing UIC wells receiving new sources of storm water, construction phase and post-construction storm water controls must be applied to all development and redevelopment projects in accordance with applicable storm water manuals.

(3) Class V UIC wells **not** used for **storm water management:**

(a) **New** UIC wells that are **not** used for storm water management must:

(i) Not directly discharge into an aquifer, except for wells listed in WAC 173-218-040 (5)(a)(ii) through (iv), (vii) through (xi), (xiii), (xiv) and (xv). A separation between the bottom of the well and the top of the aquifer is required; and

(ii) Meet additional ground water protection requirements if the UIC well is located in a ground water protection area (see WAC 173-218-030) as determined by other state laws or by local ordinances.

(b) **Existing registered** UIC wells that are **not** used for storm water management are already considered to be rule authorized. To verify that current site practices are protective of ground water quality, the owner or operator must complete a survey from the department except for UIC wells used at CERCLA sites. The department will provide written notification that the current site practices are adequate.

(c) **Existing** UIC wells that are **not registered** and **not** used for storm water management must meet the requirements for new wells.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-218-090, filed 6/19/08, effective 7/20/08. Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-090, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-090, filed 2/29/84.]

WAC 173-218-100 UIC wells that automatically meet the nonendangerment standard. (1) The following new and existing Class V UIC wells automatically meet the nonendangerment standard and are considered rule authorized after the well is registered. These Class V wells are not subject to the requirements of WAC 173-218-090:

(a) UIC wells which inject fluids that meet chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington, to control subsidence;

(b) UIC wells that temporarily inject fluids or other material for the purpose of maintaining a properly functioning water extraction well or dewatering well;

(c) Closed loop heating and cooling water return flow wells that have not added any chemicals or product to the water;

(d) Air conditioning or heat pump return flow wells that have not added any chemical or product to the water, and are used to return fluid to the supply aquifer. The fluids must not impair beneficial uses of ground water or surface water;

(e) Aquifer recharge wells that meet the requirements in chapter 173-157 WAC Underground artificial storage and recovery;

(f) UIC wells used as part of a reclaimed water project that meet the requirements of the Water reclamation and reuse standards as authorized by RCW 90.46.042;

(g) Septic systems that serve twenty or more people per day or an equivalent design capacity of 3,500 gallons or larger per day; and

(i) Receive operating permits, meet the requirements and are permitted in accordance with chapter 246-272B WAC Large on-site sewage system regulations; or

(ii) Meet the requirements of chapter 246-272A WAC On-site sewage systems.

(h) UIC wells receiving storm water from nonpollution generating surfaces; and

(i) UIC wells that only receive runoff from a roof coated with an inert, nonleachable material and a roof that is not subject to venting of manufacturing, commercial, or other indoor pollutants.

(2) The following Class V UIC wells automatically meet the nonendangerment standard, are considered rule authorized and are exempt from registering:

(a) UIC wells used in residential settings that receive water from sump pumps, for basement flood control; and

(b) UIC wells that only receive runoff from a residential roof.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-100, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-100, filed 2/29/84.]

WAC 173-218-110 Permit terms and conditions if a UIC well is not rule authorized. If you are denied rule authorization and you are operating a UIC well, you must obtain a state waste discharge permit under chapter 173-216 WAC State waste discharge permit program or chapter 173-226 WAC Waste discharge general permit program or close the well.

(1) Permit terms and conditions must meet the requirements of chapter 173-216 or 173-226 WAC and this chapter.

(2) All injection activities including construction of an injection well are prohibited until the well is rule authorized or issued a permit 40 CFR 144.31 (October 4, 2001).

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-110, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. 84-06-023 (Order DE 84-02), § 173-218-110, filed 2/29/84.]

WAC 173-218-115 Specific requirements for Class V wells used to inject carbon dioxide for permanent geologic sequestration. (1) **Permit required:**

(a) Class V UIC wells used for the geologic sequestration of carbon dioxide are not rule authorized and must obtain a state waste discharge permit under chapter 173-216 WAC, State waste discharge permit program or chapter 173-226 WAC, Waste discharge general permit program.

(b) Class V injection wells used for the geologic sequestration of carbon dioxide may directly discharge into an aquifer only if:

(i) The aquifer contains "naturally nonpotable ground water" as defined in WAC 173-200-020(18) and is beneath the lowermost geologic formation containing potable ground water within the vicinity of the geologic sequestration project area;

(ii) The operator has obtained a permit under the state waste discharge permit program or the waste discharge general permit program establishing enforcement limits which may exceed the ground water quality criteria, as allowed under WAC 173-200-050 (3)(b)(vi);

(iii) The operator uses all known, available and reasonable methods of prevention, control and treatment (AKART) to remove contaminants, such as sulfur compounds and other contaminants, from the injected CO_2. Geologic sequestration of carbon dioxide shall not be used for the disposal of non-CO_2 contaminants that can be removed with known treatment technologies; and

(iv) The operator is in compliance with all conditions of their state waste discharge permit or their waste discharge general permit.

(2) **Permit application:** A licensed geologist or engineer shall conduct the geologic and hydrogeologic evaluations required under this section. Technical evaluations shall reflect the best available scientific data as well as existing geologic, geophysical, geomechanical, geochemical, hydrogeological and engineering data available on the proposed project area. Existing data may be used in evaluations provided their source and chronology is identified and the effects of any subsequent modifications due to natural (seismic or other) or human induced (hydraulic fracturing, drilling or other) events are analyzed. The waste discharge permit application, under chapter 173-216 or 173-226 WAC, for a permit authorizing the geologic sequestration of carbon dioxide shall include information supporting the demonstration required by WAC 173-200-050 (3)(b)(vi) and all of the following:

(a) A description of how the project will address:

(i) All jurisdictional boundaries within ten miles of the geologic sequestration project boundary such as: International borders, state borders, local jurisdictions, tribal land, national parks or state parks;

(ii) Accessibility for operations and monitoring in areas where access is restricted by: Shorelines, flood plains, urban or other development, and any other natural or man-made limiting factors;

(iii) Active Holocene faults within five miles and seismic risks;

(b) A current site map showing:

(i) The boundaries of the geologic sequestration project which shall be calculated to include the area containing ninety-five percent of the injected CO_2 mass one hundred years after the completion of all CO_2 injection or the plume boundary at the point in time when expansion is less than one percent per year, whichever is greater, or another method approved by the department;

(ii) Location and well number of all proposed CO_2 injection wells;

(iii) Monitoring wells;

(iv) Location of all other wells including cathodic protection boreholes; and

(v) Location of all pertinent surface facilities, including atmospheric monitoring within the boundary of the project;

(c) A technical evaluation of the proposed project, including but not limited to, the following:

(i) The names and lithologic descriptions of the geologic containment system;

(ii) The name, description, and average depth of the reservoir or reservoirs to be used for the geologic containment system;

(iii) A geophysical, geomechanical, geochemical and hydrogeologic evaluation of the geologic containment system, including:

(A) An evaluation of all existing information on all geologic strata overlying the geologic containment system including, the immediate caprock containment characteristics as well as those of other caprocks if included in the containment system and all designated subsurface monitoring zones;

(B) Geophysical data and assessments of any regional tectonic activity, local seismicity and regional or local fault zones; and

(C) A comprehensive description of local and regional structural or stratigraphic features;

(iv) The evaluation shall focus on the proposed geologic sequestration reservoir or reservoirs and a description of mechanisms of geologic containment, including but not limited to:

(A) Rock properties;

(B) Regional pressure gradients;

(C) Structural features; and

(D) Absorption characteristics or geochemical reaction/mineralization processes, with regard to the ability to prevent migration of CO_2 beyond the proposed geologic containment system;

(v) The evaluation shall also identify:

(A) Any productive oil and natural gas zones occurring stratigraphically above, below, or within the geologic containment system;

(B) All water-bearing horizons known in the immediate vicinity of the geologic sequestration project;

(C) The evaluation shall include a method to identify unrecorded wells that may be present within the project boundary;

(vi) The evaluation shall include exhibits, plans and maps showing the following:

(A) All wells, including but not limited to, water, oil, and natural gas exploration and development wells, injection wells and other man-made subsurface structures and activities, including any mines, within one mile of the geologic sequestration project;

(B) All man-made surface structures that are intended for temporary or permanent human occupancy within one mile of the geologic sequestration project;

(C) Any regional or local faulting within the boundary of the geologic sequestration project;

(D) An isopach map of the proposed CO_2 storage reservoir or reservoirs that make up the geologic containment system;

(E) An isopach map of the primary and any secondary caprock or containment barrier;

(F) A structure map of the top and base of the storage reservoir or reservoirs that make up the geologic containment system;

(G) Identification of all structural spill points or stratigraphic discontinuities controlling the isolation of CO_2 or associated fluids;

(H) An evaluation of the potential displacement of in situ fluids and the potential impact on ground water resources, if any; and

(I) Structural and stratigraphic cross-sections that describe the geologic conditions at the geologic containment system;

(vii) An operations and maintenance plan including, but not limited to, a diagram of the entire injection system and a description of the proposed operating and maintenance procedures;

(viii) A review of the data of public record for all wells within the geologic sequestration project boundary which penetrate the geologic containment system including the primary and/or all other caprocks and those wells that penetrate these geologic formations within one mile of the geologic sequestration project boundary, or any other distance deemed necessary by the department. This review shall determine if all abandoned wells have been plugged in a manner that prevents the movement of CO_2 or associated native fluids away from the geologic containment system;

(ix) The proposed maximum bottom hole injection rate and injection pressure to be used at the geologic containment system. The maximum allowed injection pressure shall be no greater than eighty percent of the formation fracture pressure as determined by a mini-frac injection test or multiple-stage, minimum threshold fracture injection test or other method approved by the department. The geologic containment system shall not be subjected to injection pressures in excess of the calculated fracture pressure even for short periods of time. Higher operating pressures may only be allowed if approved in writing by the department;

(x) The proposed maximum long-term geologic containment system pressure and the necessary technical data to support the proposed geologic containment system storage pressure request;

(xi) The evaluation and data quality shall be sufficient to establish with a high degree of confidence that the geologic containment system has sufficient capacity, injectivity and other geologic characteristics to permanently sequester CO_2;

(d) The predicted extent of the injected CO_2 plume determined with modeling tools acceptable to the department that use all available geologic and reservoir engineering information, and the projected response and storage capacity of the geologic containment system. The assumptions used in the model and a discussion of the uncertainty associated with the estimate shall be clearly presented;

(e) An analysis and selection of proposed treatment technology for non-CO_2 contaminant that identifies the technology which meets the requirement that all known, available and reasonable methods of prevention, control and treatment (AKART) to remove contaminants from the injected CO_2;

(f) A detailed description of the proposed project public safety and emergency response plan. The plan shall detail the safety procedures concerning the facility and residential, commercial, and public land use within one mile, or any other distance as deemed necessary by the department, of the boundary of geologic sequestration project area. The public safety and emergency response procedures shall include contingency plans for leakage from any well, flow lines, or other permitted facility. The public safety and emergency response procedures also shall identify specific contractors and equipment vendors capable of providing necessary services and equipment to respond to incidents such as: Injection well leaks or loss of containment from injection wells or releases from the geologic containment system. These emergency response procedures shall be updated as necessary throughout the operational life of the permitted storage facilities;

(g) A detailed worker safety plan that addresses safety training and safe working procedures at the facility;

(h) A corrosion monitoring and prevention plan for all wells and surface facilities;

(i) A leak detection and monitoring plan for all wells and surface facilities. The approved leak detection and monitoring plan shall define the threshold for determining that a leak has occurred and shall address:

(i) Identification of any failure of the containment system;

(ii) Identification of release to the atmosphere;

(iii) Identification of degradation of any ground water or surface water resources; and

(iv) Identification of migration of CO_2 or other contaminants into any overlying oil and natural gas reservoirs;

(j) A geologic sequestration project leak detection and monitoring plan using subsurface measurements to monitor movement of the CO_2 plume both within and to detect migration outside of the permitted geologic containment system. This must include:

(i) Collection of baseline information on formation pressure and background concentrations in ground water, surface soils, and chemical composition of in situ waters within the geologic containment system and monitoring zone(s);

(ii) Monitoring of pressure responses and other appropriate information immediately above caprock of the geologic containment system;

(k) The approved subsurface leak detection and monitoring plan shall be based on the site-specific characteristics as documented by materials submitted in the permit application and shall address:

(i) Identification of any failure in the containment system;

(ii) Identification of release to the atmosphere;

(iii) Identification of degradation of any ground or surface water resources; and

(iv) Identification of migration of CO_2 or other contaminants into any overlying oil and natural gas reservoirs;

(l) A risk assessment that identifies and quantifies hazards, probabilities, features, events and processes that might result in undesirable impacts to public health and the environment;

(m) A mitigation and remediation plan that identifies trigger thresholds and corrective actions to be taken prior to a containment system failure, if ground water quality in the monitoring zone or above is degraded, or if carbon dioxide is released to the atmosphere. The mitigation and remediation plan must conform to the standards set by subsection (8) of this section and must be approved by the department before injection begins;

(n) The proposed well casing, cementing and integrity testing program;

(o) A closure and post-closure plan, including a closure and post-closure cost estimate;

(p) The application shall designate a financial assurance mechanism sufficient to cover the cost to the department for the abandonment of the project or remediation of facility leaks should the operator not perform as required or cease to exist;

(q) The application shall designate a financial assurance mechanism sufficient to provide financial assurance to the department to cover the plugging and abandonment or the remediation of a CO_2 injection and/or subsurface observation well should the operator not perform as required in accordance with the permit or cease to exist;

(r) The payment of the application fee; and

(s) Any other information that the department requires.

(3) **Geologic sequestration well standards.** (Note: In statutory references to chapter 344-12 WAC, the word "gas" shall include all injected carbon dioxide for geologic sequestration, including supercritical CO_2.) Wells used for geologic sequestration projects must meet the following:

(a) Casing materials and cement must be designed and tested to withstand the reactive fluids and expected conditions encountered during the geologic sequestration project, including the post-closure period.

(b) Minimum standards for construction and maintenance of wells. Chapter 173-160 WAC.

(c) Drilling fluid standards of WAC 344-12-098.

(d) Directional or other appropriate surveys shall be completed for all wells to verify location at depth.

(e) Wells must be logged with appropriate geophysical methods which include: Cement bonding and evaluation logs, and casing inspection logs. In addition a standard suite of wireline logs shall be run on each well to document physical properties of the well, the well integrity and any potential leakage points. The wireline logging suite must include: Gamma ray, resistivity, temperature, formation pressure, both p- and v-sonic and neutron-density. The department may approve alternate logging suites that provide equivalent information or allow the use of improved methods as new technologies are developed.

(f) All collected geologic data, including geophysical logs, geologists logs, mud logs, and drilling logs, core, drill cuttings, and all other logs and surveys shall be submitted to the department of natural resources, division of geology and earth resources, within thirty days after well completion. Submitted information shall include one paper and one digital copy of logs. (Note: The department of natural resources maintains geologic records in the state to enhance the scientific, economic and environmental values of the people of the state.)

(g) One paper and one digital copy of all reports and data collected from surface geological and geophysical surveys of sequestration sites shall be submitted to the department of natural resources, division of geology and earth resources within thirty days after completion.

(h) Wells that are completed within or below the geologic containment system must in addition:

(i) Meet the well casing and cementing standards of WAC 344-12-087;

(ii) Verify the integrity of cement behind casings, including the location of any channels, contamination or missing cement, by a cement map that incorporates data from a cement bond log, a variable density display, and an ultrasonic image, unless an alternative evaluation has been approved in writing by the department;

(iii) Meet the blowout prevention standards of WAC 344-12-092;

(iv) Wells shall be periodically tested to assess their structural integrity. Annual tests shall include wireline surveys for casing integrity/corrosion assessment and other appropriate tests. An injection well casing pressure test will be conducted prior to use and retested at least once prior to each permit renewal or when casing integrity/corrosion assessments identify risks. Any finding of inadequate structural integrity shall be reported to the department within twenty-four hours.

(i) Notify the department thirty days prior to beginning any substantial work on wells including, deepening, repair or closure. Advance notice period may be reduced by the department when the work is intended to address immediate threats to public health, safety or the environment.

(4) **Permit terms and conditions.** All terms and conditions listed in WAC 173-216-110, state waste discharge permit program, apply. In addition, the following terms and conditions shall apply to injection permits for the geologic sequestration of carbon dioxide:

(a) To be issued a permit, an applicant must demonstrate the following:

(i) That the geology, including geochemistry, of the site and all proposed plans developed for the permit application will:

(A) Provide "permanent sequestration" of carbon dioxide as defined by WAC 173-407-110; and

(B) The caprock and other features of the geologic containment system have the appropriate characteristics to prevent migration of carbon dioxide, other contaminants and nonpotable water.

(ii) A monitoring program has been developed to identify leakage from the geologic containment system to the atmosphere, surface water and ground water. The monitoring program must be able to identify ground water quality degradation in aquifers prior to degradation of any potable aquifer. The monitoring program shall include observations in the monitoring zone(s) that can identify migration to aquifers as

close stratigraphically to the geologic containment system as practicable.

(iii) Design and construction standards of all facility structures and wells are sufficient to prevent migration of carbon dioxide or nonpotable water that will degrade water quality or impact beneficial uses outside the geologic containment system.

(iv) All known, available and reasonable methods of prevention, control and treatment (AKART) will be used to remove contaminants from the injected CO_2. Geologic sequestration of carbon dioxide shall not be used for the disposal of non-CO_2 contaminants that can be removed with known treatment technologies.

(b) Pilot studies at potential geologic sequestration project sites shall be encouraged to collect site characterization, risk assessment and feasibility information. Permits for pilot studies may be issued without meeting all the Class V geologic sequestration project requirements only when:

(i) The pilot study is for a limited time duration;

(ii) Public health and the environment are protected;

(iii) The pilot study will collect detailed site-specific information used to establish the feasibility of permanent sequestration in developing a permit application that meets the standards of this section. The pilot study permit shall be based upon an operator submitted pilot study plan that addresses:

(A) Site-specific geologic information including reasons for selecting a site as a potential geologic sequestration project;

(B) Site-specific hydrogeologic information that includes information on potable aquifers and how their water quality will be protected;

(C) A detailed plan of work for the pilot study that includes monitoring and quarterly reporting;

(D) The information to be gained by the study;

(E) The total quantity of CO_2 to be injected and an estimated injection schedule for the study. CO_2 injections for pilot studies shall be limited to no more than 1,000 metric tons CO_2, unless the operator demonstrates in the plan that a larger quantity is necessary to determine the feasibility and risks of a project;

(F) The procedures to be implemented to protect public health and the environment;

(iv) Pilot study permits shall not be used for a full scale carbon sequestration project. Injection of carbon dioxide associated with a pilot study permit shall be of limited quantity and duration, not to exceed five years.

(c) The permit shall include an injection pressure limitation and a maximum working pressure in the geologic containment system, calculated from information provided in the application, that assures that the pressure in the injection zone does not initiate new fractures or propagate existing fractures in the injection zone or caprock. In no case shall the injection pressure initiate fractures in the caprock or cause the movement of injected fluids or formation fluids into shallower aquifers. Controlled artificial fracturing of the injection zone of the geologic containment system may be allowed with a plan that has been approved by the department.

(d) If the operator identifies leakage in excess of the thresholds established in the mitigation and remediation plan, water quality degradation in shallower aquifers or leaks to the surface, including those around wells or within well casing, the operator must:

(i) Notify the department within twenty-four hours;

(ii) Take all necessary actions to protect public health, safety and the environment;

(iii) Stop injecting immediately, until the project obtains approval for redefining the geologic containment system and its relevant dimensions by the department;

(iv) Implement the mitigation and remediation plan to arrest and reverse environmental impacts. Amendments to the mitigation plan shall be developed in consultation with the department;

(e) Monitoring for geologic sequestration projects shall include:

(i) Characterization of injected fluids;

(ii) Continuous recording of injection pressure, flow rate and volume;

(iii) Continuous recording of pressure on annulus between tubing and long string casing;

(iv) Monitoring zone leak detection identified in (a)(ii) of this subsection;

(v) Sufficient monitoring to confirm the spatial distribution of the CO_2 in the subsurface.

(f) Quarterly reports shall be submitted to the department that include the following:

(i) Physical, chemical and other relevant characterization of the injected fluids;

(ii) Monthly average, maximum and minimum values for injection pressure, flow rate, volume injected and annular pressure;

(iii) Updated data for modeling that will project and/or establish the spatial distribution of CO_2 in the subsurface;

(iv) Results from monitoring zone leak detection;

(v) Results from any other tests/work completed during the reporting period, such as mechanical integrity tests, geophysical surveys, acoustic monitoring, well repairs, etc.

(g) Annual reports shall be submitted to the department that include:

(i) A summary of the data collected throughout the year, including any trends, observations, predictions as well as calculated spatial distribution of injected CO_2;

(ii) List of all noncompliance with the permit along with an explanation of the cause(s) and subsequent remedial measures taken;

(iii) Updated modeling based on the monitoring observations and measurements including a summary of calculated spatial distribution of CO_2 and all other conditions in the subsurface necessary to establish the effectiveness of the geologic containment system, as well as a discussion of history matching and an assessment of the model's accuracy to date. Updated projections of project response and capacity based on operational experience, including all new geologic data and information;

(iv) Observed anomalies from predicted behavior shall be identified and explained;

(v) Discussion of suggested changes in project management or suggested amendment of permit conditions;

(vi) A report on the financial assurance account which includes updated calculation of cost estimates for all closure

and post-closure activities and documentation that the account is adequately funded to cover the calculated cost.

(5) **Closure.** If all of the project's carbon dioxide injections are interrupted for a period of one hundred eighty consecutive days, the operator shall begin implementing the approved closure plan. Injection project management may include injection and resting periods possibly exceeding one hundred eighty days for individual injection wells. The closure triggers are for the entire injection facility, not individual wells. The department may extend this one hundred eighty day period, in writing, upon the request of the operator, if the operator demonstrates that carbon dioxide injection will resume within a period of not more than two years. The operator shall review and amend the closure plan as needed, at a minimum the plan shall be reviewed at each permit renewal. Proposed amendments shall be effective only after approved in writing by the department. Approval of proposed amendments shall not delay the commencement of closure activities using the most recent approved closure plan. If the operator fails to begin closure, or is not able to begin closure, the department shall use the financial assurance account to begin closure activities.

(6) **Post-closure activities.** The operator is obligated to renew and be covered under permit and pay all appropriate permit fees throughout the post-closure period. The operator shall continue all required monitoring and reporting throughout the closure and post-closure period. The operator shall review and amend the post-closure plan as needed, at a minimum the plan shall be reviewed at each permit renewal. The post-closure period shall continue until the department determines that modeling and monitoring demonstrate that conditions in the geologic containment system indicate that there is little or no risk of future environmental impacts and there is high confidence in the effectiveness of the containment system and related trapping mechanisms. The post-closure period shall be complete only after the operator has received written approval from the department. If the operator fails to or is not able to continue the post-closure activities as required, the department shall use the financial assurance account to complete post-closure activities. Any funds remaining in the financial assurance account shall be released to the operator upon the department's approval of the completion of the post-closure period.

(7) **Financial assurance.**

(a) The owner or operator shall establish a closure and post-closure account to cover all closure and post-closure expenses. The performance security held in the account may be:

(i) Bank letters of credit;

(ii) Cash deposits;

(iii) Negotiable securities;

(iv) An assignment of savings account;

(v) A savings certificate in a Washington bank;

(vi) A corporate surety bond executed in favor of the department by a corporation authorized to do business in the state of Washington; or

(vii) Other financial instruments or performance security acceptable to the department.

(b) The department may for any reason refuse any performance security not deemed adequate.

(c) The cost of the closure and post-closure activities shall be calculated using current cost of hiring a third party to close all existing facilities and to provide post-closure care, including monitoring identified in the closure and post-closure plan.

(d) The closure and post-closure cost estimate shall be revised annually to include any changes in the facility and to include cost changes due to inflation.

(e) The obligation to maintain the account for closure and post-closure care survives the termination of any permits and the cessation of injection. The requirement to maintain the closure and post-closure account is enforceable regardless of whether the requirement is a specific condition of the permit.

(8) **Mitigation and remediation.** Each project must develop a mitigation and remediation plan that identifies trigger thresholds and corrective actions to be taken if the containment system fails, if water quality outside the geologic containment system is degraded, if carbon dioxide is released to the atmosphere or if any other factor poses an unacceptable risk to public health or the environment. A mitigation and remediation plan must be approved by the department before injection begins and amended as needed. The operator shall review and amend the mitigation and remediation plan as needed, at a minimum the plan shall be thoroughly reviewed at each permit renewal. The mitigation and remediation plan shall:

(a) Define leakage (i.e., trigger threshold), leak detection and identification;

(b) Address caprock and spill-point leaks;

(c) Address well bore leaks from project wells or previously unidentified wells;

(d) Identify immediate responses to protect public health, safety and the environment;

(e) Provide a detailed list of notifications and surveys;

(f) Address remedial measures such as: Well repairs, reduced injection pressure, reservoir or formation pressure, creation of a pressure barrier through increased pressure above geologic containment system, interception, recovery and reinjection of CO_2 or the removal of injected materials;

(g) Address redefining the geologic containment system or closure and abandonment of the sequestration project.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-218-115, filed 6/19/08, effective 7/20/08.]

WAC 173-218-120 Decommissioning a UIC well. (1) Decommissioning standards for all UIC wells:

(a) Wells must be decommissioned in a manner that prevents movement of fluid containing any contaminant into the ground water (40 CFR 144.82); and

(b) When decommissioning wells, the owner or operator must dispose or otherwise manage any soil, gravel, sludge, liquids or other materials removed from or adjacent to the wells in accordance with all applicable federal, state, and local requirements (40 CFR 144.82b).

(2) Decommissioning standards for UIC wells that are determined to be an imminent public health hazard or prohibited:

(a) Class I wells are prohibited and must be decommissioned in accordance with 40 CFR 146;

(b) Class III wells are prohibited and must be decommissioned in accordance with 40 CFR 146;

(c) Class IV wells that are prohibited must be decommissioned in accordance with 40 CFR 144, 146; or

(d) Class V wells that are determined to be an imminent public health hazard or are prohibited in this rule must be decommissioned at the earliest extent possible as approved by the department and meet the decommissioning standards, except for:

(i) Existing cesspools that serve twenty or more people per day or an equivalent design capacity of 3,500 gallons or larger per day must be decommissioned immediately (40 CFR 144.88); and

(ii) Motor vehicle waste disposal wells must be decommissioned immediately.

(3) Decommissioning standards for allowed UIC wells:

(a) Class II wells must meet the closure requirements found in chapter 344-12 WAC General rules;

(b) Class V wells must be decommissioned by filling or plugging the well so that it will not result in an environmental, public health or safety hazard, and will not serve as a channel for movement of water or pollution to an aquifer:

(i) UIC wells that are in contact with an aquifer, even if they are in contact with only the seasonal high aquifer, must be decommissioned in accordance with the most applicable method found in chapter 173-160 WAC Minimum standards for construction and maintenance of wells; or

(ii) UIC wells that are not in contact with an aquifer must be decommissioned by:

(A) Removing any structure within three feet of the land surface;

(B) Backfilling up to three feet below the land surface with material that is uncontaminated, chemically and biologically inert, and that drains equal to or more slowly than the native material surrounding the UIC well; and

(C) Filling the remaining three feet directly below the land surface with native soil or other structurally sound material common with current engineering practices.

(c) Septic systems that receive only sanitary waste and serve twenty or more people per day or an equivalent design capacity of 3,500 gallons or larger per day must be decommissioned in accordance with chapter 246-272B WAC Large on-site sewage system regulations or chapter 246-272A WAC On-site sewage systems;

(d) The department may require additional measures to those above prior to the decommissioning of a UIC well if such measures are deemed necessary to protect the public health and safety.

(4) Decommissioning recordkeeping requirements for UIC wells:

(a) The owner or operator of a Class I, II, III, or IV well must notify the department thirty days prior to decommissioning the UIC well;

(b) An owner or operator of a Class V well that is determined to be an imminent public health hazard or that is prohibited must notify the department thirty days prior to decommissioning the well (40 CFR 144.88); or

(c) After adoption of this rule, an owner or operator of a Class V well that is determined not to be an imminent public health hazard and is not prohibited must notify the department within one year of the closure except for existing UIC wells used for storm water management and septic systems that are permitted and meet the requirements of chapter 246-272B WAC Large on-site sewage system regulations. The owner or operator must submit to the department, on an annual basis, an update on the wells that have been decommissioned, once the initial well registration(s) has been sent to the department.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-120, filed 1/3/06, effective 2/3/06.]

WAC 173-218-130 Enforcement. (1) For violations of this chapter, the department shall rely upon the provisions of the Water Pollution Control Act, chapter 90.48 RCW, and all other applicable statutes.

(2) All injection well operations not operated in accordance with the provisions of this chapter, that cause or tend to cause entry of fluids into the waters of the state as a result of a violation of these provisions, constitutes pollution of the waters of the state in violation of RCW 90.48.080.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 06-02-065 (Order 01-10), § 173-218-130, filed 1/3/06, effective 2/3/06.]

Chapter 173-220 WAC

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT PROGRAM

WAC

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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-220-045	General permits. [Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-045, filed 11/1/88. Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-220-045, filed 3/4/86. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-045, filed 12/1/82.] Repealed by 93-10-099 (Order 92-55), filed 5/5/93, effective 5/19/93. Statutory Authority: Chapter 90.48 RCW.
173-220-220	Control of disposal of pollutants into wells. [Statutory Authority: Chapter 90.48 RCW. 84-11-024 (Order DE 84-19), § 173-220-220, filed 5/11/84. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-220, filed 12/1/82; Order DE 74-1, § 173-220-220, filed 2/15/74.] Repealed by 88-22-

059 (Order 88-9), filed 11/1/88. Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW.

WAC 173-220-010 Purpose. The purpose of this chapter is to establish a state individual permit program, applicable to the discharge of pollutants and other wastes and materials to the surface waters of the state, operating under state law as a part of the National Pollutant Discharge Elimination System (NPDES) created by section 402 of the Federal Water Pollution Control Act (FWPCA). Permits issued under this chapter are designed to satisfy the requirements for discharge permits under both section 402(b) of the FWPCA and chapter 90.48 RCW.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-010, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-010, filed 11/1/88; Order DE 74-1, § 173-220-010, filed 2/15/74.]

WAC 173-220-020 Permit required. No pollutants shall be discharged to any surface water of the state from a point source, except as authorized by an individual permit issued pursuant to this chapter or as authorized by a general permit issued pursuant to chapter 173-226 WAC.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-020, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-020, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-020, filed 12/1/82; Order DE 74-1, § 173-220-020, filed 2/15/74.]

WAC 173-220-030 Definitions. For purposes of this chapter, the following definitions shall be applicable:

(1) "Administrator" means the administrator of the United States Environmental Protection Agency.

(2) "Combined waste treatment facility" means any publicly owned waste treatment facility in which the maximum monthly average influent from any one industrial category, or categories producing similar wastes, constitutes over eighty-five percent of the design load for biochemical oxygen demand or suspended solids. Each single industrial category must contribute a minimum of ten percent of the applicable load.

(3) "Department" means department of ecology.

(4) "Director" means the director of the department of ecology or his/her authorized representative.

(5) "Discharge of pollutant" and the term "discharge of pollutants" each means (a) any addition of any pollutant or combination of pollutants to surface waters of the state from any point source, (b) any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source, other than a vessel or other floating craft which is being used as a means of transportation.

(6) "Discharger" means owner or operator of any facility or activity subject to regulation under the NPDES program.

(7) "Domestic wastewater" means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments or other places, together with such ground water infiltration or surface waters as may be present.

(8) "Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim or dispose of domestic wastewater together with such industrial waste as may be present. This term applies only to facilities discharging to surface water.

(9) "Effluent limitation" means any restriction established by the state or administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into surface waters of the state.

(10) "FWPCA" means the Federal Water Pollution Control Act as amended, 33 U.S.C. 1251 et seq.

(11) "General permit" means a permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

(12) "Individual permit" means a permit for a single point source or a single facility.

(13) "Major discharger" means any discharger classified as such by the administrator in conjunction with the director and published in the annual state-EPA agreement.

(14) "Minor discharger" means any discharger not designated as major or covered under a general permit.

(15) "NPDES" means the National Pollutant Discharge Elimination System.

(16) "Permit" means an authorization, license, or equivalent control document issued by the director to implement this chapter.

(17) "Person" includes any political subdivision, local, state, or federal government agency, municipality, industry, public or private corporation, partnership, association, firm, individual, or any other entity whatsoever.

(18) "Point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

(19) "Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water. This term does not include sewage from vessels within the meaning of section 312 of the FWPCA nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the FWPCA.

(20) "Regional administrator" means the regional administrator of Region X of the Environmental Protection Agency (EPA) or his/her authorized representative.

(21) "Surface waters of the state" means all waters defined as "waters of the United States" in 40 CFR 122.2 that are within the boundaries of the state of Washington. This includes lakes, rivers, ponds, streams, inland waters, wetlands, ocean, bays, estuaries, sounds, and inlets.

(22) "Water quality standards" means the state of Washington's water quality standards for surface waters of the state, which are codified in chapter 173-201 WAC.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-030, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-030, filed 11/1/88. Statutory Authority: Chapter 90.48 RCW. 84-11-024 (Order DE

84-19), § 173-220-030, filed 5/11/84. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-030, filed 12/1/82; Order DE 74-1, § 173-220-030, filed 2/15/74.]

WAC 173-220-040 Application for permit. (1) Any person presently discharging pollutants to surface waters of the state must file an application with the department on a form prescribed by the department. For the purpose of satisfying the requirements of this subsection, any completed application filed with the Environmental Protection Agency prior to the approval by the administrator under section 402(b) of the FWPCA of this state permit program shall constitute a filing with the department.

(2) Any person proposing to commence a discharge of pollutants to surface waters of the state must file an application with the department on a form prescribed by the department, (a) no less than one hundred eighty days in advance of the date on which it is desired to commence the discharge of pollutants, or (b) in sufficient time prior to commencement of the discharge of pollutants to insure compliance with the requirements of section 306 of the FWPCA and any other applicable water quality standards or effluent standards and limitations.

(3) The applicant must pay any applicable fees required pursuant to RCW 90.48.610.

(4) The requirement for permit application will be satisfied if the discharger files:

(a) A complete application form which is appropriate for the type, category, or size of discharge per 40 CFR 122.21; or

(b) A complete request for coverage under a general permit; and

(c) Any additional information required by the department pertaining to pollutant discharge.

(5) The application form shall bear a certification of correctness to be signed:

(a) In the case of corporations, by a responsible corporate officer.

(b) In the case of a partnership, by a general partner.

(c) In the case of sole proprietorship, by the proprietor.

(d) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

(6) Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity.

(7) No discharge of pollutants into the surface waters of the state is authorized until such time as a permit has been issued consistent with the terms and conditions of this chapter.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-040, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-040, filed 11/1/88. Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-220-040, filed 3/4/86. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-040, filed 12/1/82; Order DE 74-1, § 173-220-040, filed 2/15/74.]

WAC 173-220-050 Public notice. (1) Public notice of every draft permit determination regarding an individual permit shall be circulated in a manner designed to inform interested and potentially affected persons of the proposed discharge and of the proposed determination to issue or deny a permit for the proposed discharge, as follows:

(a) Notice shall be circulated within the geographical area of the proposed discharge; such circulation may include any or all of the following, as directed by the department:

(i) Posting by the applicant for a period of thirty days in the post office, public library, and public places of the municipality nearest the premises of the applicant in which the effluent source is located;

(ii) Posting by the applicant for a period of thirty days near the entrance of the applicant's premises and nearby places;

(iii) Publishing by the applicant, at his own cost within such time as the director shall prescribe, through a notice form provided by the department, in major local newspapers of general circulation serving the area in which the discharge occurs: Provided, That if an applicant fails to publish notice within thirty days of the time prescribed by the director, the department may publish the notice and bill the applicant for the cost of publication;

(iv) Publishing by the applicant of paid advertisements;

(v) Publishing by the department of news releases or newsletter articles.

(b) Notice shall be mailed to any person upon request; and

(c) The department shall add the name of any person upon request to a mailing list to receive copies of notices within the state or within a certain geographical area.

(2) The department shall provide a period of not less than thirty days following the date of the public notice during which time interested persons may submit their written views on a draft permit determination. All written comments submitted during the thirty-day comment period shall be retained by the department and considered in the formulation of its final determination with respect to the application. The period for comment may be extended at the discretion of the department.

(3) The department shall prepare the contents of the public notice, which shall, at a minimum, summarize the following:

(a) Name, address, phone number of agency issuing the public notice;

(b) Name and address of each applicant, and if different, of the facility or activity to be regulated;

(c) Each applicant's activities or operations which result in a discharge (e.g., municipal waste treatment, steel manufacturing, drainage from mining activities);

(d) Name of waterway to which each discharge is made and the location of each discharge on the waterway, indicating whether such discharge is a new or an existing discharge;

(e) The tentative determination to issue or deny a permit for the discharge;

(f) The procedures for the formulation of final determinations, including the thirty-day comment period required by subsection (2) of this section and any other means by which interested persons may comment upon those determinations; and

(g) Address and phone number of state premises at which interested persons may obtain further information.

(4) The department shall provide copies of permit applications, draft permit determinations, and final permits.

(5) The department shall notify the applicant and persons who have submitted written comments or requested notice of the final permit decision. This notification shall include response to comments received and reference to the procedures for contesting the decision.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-050, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-050, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-050, filed 12/1/82; Order DE 76-20, § 173-220-050, filed 5/19/76; Order 74-7, § 173-220-050, filed 5/1/74; Order DE 74-1, § 173-220-050, filed 2/15/74.]

WAC 173-220-060 Fact sheets. (1) The department shall prepare a fact sheet for every draft permit determination. Such fact sheets shall, at a minimum, summarize the following:

(a) The type of facility or activity which is the subject of the application;

(b) The location of the discharge in the form of a sketch or detailed description;

(c) The type and quantity of the discharge, including at least the following:

(i) The rate or frequency of the proposed discharge;

(ii) For thermal discharges, the average summer and winter temperatures; and

(iii) The average discharge in pounds per day, or other appropriate units, of any pollutants which are present in significant quantities or which are subject to limitations or prohibition under RCW 90.48.010, 90.52.040, 90.54.020 and sections 301, 302, 306, or 307 of the FWPCA and regulations published thereunder;

(d) The conditions in the proposed permit;

(e) The legal and technical grounds for the draft permit determination, including an explanation of how conditions meet both the technology-based and water quality-based requirements of the FWPCA and chapters 90.48, 90.52, and 90.54 RCW;

(f) The effluent standards and limitations applied to the proposed discharge;

(g) The applicable water quality standards, including identification of the uses for which receiving waters have been classified;

(h) How the draft permit addresses use or disposal of residual solids generated by wastewater treatment; and

(i) The procedures for the formulation of final determinations (in more detailed form than that given in the public notice) including:

(i) The thirty-day comment period required by WAC 173-220-050(2);

(ii) Procedures for requesting a public hearing and the nature thereof; and

(iii) Any other procedures by which the public may participate in the formulation of the final determinations.

(2) The department shall send a fact sheet to the applicant and, upon request, to any other person.

(3) The department shall add the name of any person upon request to a mailing list to receive copies of fact sheets.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-060, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-060, filed 11/1/88. Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-220-060, filed 3/4/86. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-060, filed 12/1/82; Order DE 74-1, § 173-220-060, filed 2/15/74.]

WAC 173-220-070 Notice to other government agencies. The department shall notify other appropriate government agencies of each draft permit determination and shall provide such agencies an opportunity to submit their written views and recommendations. Such notification shall include the following:

(1) Unless the regional administrator has agreed to waive review, transmission of an application, fact sheet, and draft permit to the regional administrator for comment or objection within thirty days, or a longer period if requested up to a maximum of ninety days.

(2) At the time of issuance of public notice pursuant to WAC 173-220-050, transmission of the public notice to any other states whose waters may be affected by the issuance of a permit. Each affected state shall be afforded an opportunity to submit written recommendations to the department and to the regional administrator which the department may incorporate into the permit if issued. Should the department fail to incorporate any written recommendations thus received, it shall provide to the affected state or states (and to the regional administrator) a written explanation of its reasons for failing to accept any of the written recommendations.

(3) Unless waived by the respective agency, the public notice shall be sent to the appropriate district engineer of the Army Corps of Engineers, the United States Fish and Wildlife Service, the National Marine Fisheries Service, the state departments of fisheries, natural resources, wildlife, and social and health services, the archaeology and historic preservation office, the agency responsible for the preparation of an approved plan pursuant to section 208(b) of the FWPCA, applicable Indian tribes and any other applicable government agencies.

(4) A copy of any written agreement between the department and an agency identified in subsection (3) of this section which waives the receipt of public notices shall be forwarded to the regional administrator and shall be made available to the public for inspection and copying.

(5) Copies of public notices shall be mailed to any other federal, state, or local agency, Indian tribe or any affected country, upon request. Such agencies shall have an opportunity to respond, comment, or request a public hearing pursuant to WAC 173-220-090.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-070, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-070, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-070, filed 12/1/82; Order DE 74-1, § 173-220-070, filed 2/15/74.]

WAC 173-220-080 Public access to information. (1) In accordance with chapter 42.17 RCW, the department shall make records relating to NPDES permits available to the public for inspection and copying.

(2) The department shall protect any information (other than information on the effluent) contained in its NPDES permit records as confidential upon a showing by any person that such information, if made public, would divulge methods or

processes entitled to protection as trade secrets of such person.

(3) Any information accorded confidential status, whether or not contained in an application form, shall be disclosed, upon request, to the regional administrator.

(4) The department shall provide facilities for the inspection of information relating to NPDES permits and shall insure that employees honor requests for such inspection promptly without undue requirements or restrictions. The department shall either (a) insure that a machine or device for the copying of papers and documents is available for a reasonable fee, or (b) otherwise provide for or coordinate with copying facilities or services such that requests for copies of nonconfidential documents may be honored promptly.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-080, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-080, filed 12/1/82; Order DE 74-1, § 173-220-080, filed 2/15/74.]

WAC 173-220-090 Public hearings. The applicant, any affected state, any affected interstate agency, any affected country, the regional administrator, or any interested agency or person may request a public hearing with respect to a draft permit determination. Any such request for a public hearing shall be filed within the thirty-day period prescribed in WAC 173-220-050(2) and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted. The department shall hold a hearing if it determines there is a significant public interest. Instances of doubt will be resolved in favor of holding the hearing. Any hearing brought pursuant to this subsection shall be held at a time and place deemed appropriate by the department.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-090, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-090, filed 11/1/88. Statutory Authority: RCW 90.48.010, 90.48.035, and 90.58.260. 83-10-063 (Order DE 83-14), § 173-220-090, filed 5/4/83; Order DE 74-1, § 173-220-090, filed 2/15/74.]

WAC 173-220-100 Public notice of public hearings. (1) The department shall circulate public notice of any hearing held pursuant to WAC 173-220-090 at least as widely as was the notice pursuant to WAC 173-220-050. Procedures for the circulation of public notice for hearings held under WAC 173-220-090 shall include at least the following:

(a) Notice shall be published in at least one major local newspaper of general circulation within the geographical area of the discharge;

(b) Notice shall be sent to all persons and government agencies who received a copy of the notice pursuant to WAC 173-220-050 or the fact sheet;

(c) Notice shall be mailed to any person upon request; and

(d) Notice shall be effected pursuant to (a) and (c) of this subsection at least thirty days in advance of the hearing.

(2) The contents of public notice of any hearing held in pursuant to WAC 173-220-090 shall include at least the following:

(a) Name, address, and phone number of agency holding the public hearing;

(b) A reference to the public notice issued pursuant to WAC 173-220-050, including identification number and date of issuance;

(c) The time and location for the hearing;

(d) The purpose of the hearing;

(e) Address and phone number of premises at which interested persons may obtain information;

(f) The nature of the hearing;

(g) The issues raised by the persons requesting the hearing, and any other appropriate issues which may be of interest to the public;

(h) The name and address of each applicant whose proposed discharge will be considered at the hearing;

(i) The name of waterway to which each discharge is made and the location of each discharge on the waterway.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-100, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-100, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-100, filed 12/1/82; Order DE 74-1, § 173-220-100, filed 2/15/74.]

WAC 173-220-110 Permit preparation. The department will prepare tentative staff determinations with respect to a permit application in advance of public notice of the proposed issuance or denial of a permit. Such tentative determinations shall include at least the following:

(1) A proposed determination to issue or deny a permit for the discharge described in the application; and

(2) If the determination is to issue the permit, the following shall be included in a draft permit:

(a) Proposed effluent limitations for those pollutants proposed to be limited;

(b) A proposed schedule of compliance, including interim dates and requirements, for meeting the proposed effluent limitations; and

(c) A brief description of any other proposed special conditions which will have a significant impact upon the discharge described in the application.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-110, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.48.-035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-110, filed 12/1/82; Order DE 74-1, § 173-220-110, filed 2/15/74.]

WAC 173-220-120 Prohibited discharges. No permit issued by the department shall authorize any person to:

(1) Discharge any radiological, chemical or biological warfare agent or high-level radioactive waste into surface waters of the state;

(2) Discharge any pollutants which the secretary of the army acting through the chief, corps of engineers, finds would substantially impair anchorage and navigation;

(3) Discharge any pollutant to which the regional administrator, not having waived his/her right to object pursuant to section 402(e) of the FWPCA, has objected in writing pursuant to section 402(d) of the FWPCA;

(4) Discharge from a point source any pollutant which is in conflict with the plan or amendment thereto approved pursuant to section 208(b) of the FWPCA;

(5) Discharge any pollutant subject to a toxic pollutant discharge prohibition under section 307 of FWPCA.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-120, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-120, filed 12/1/82; Order DE 74-1, § 173-220-120, filed 2/15/74.]

WAC 173-220-130 Effluent limitations, water quality standards and other requirements for permits. (1) Any permit issued by the department shall apply and insure compliance with all of the following, whenever applicable:

(a) All known, available, and reasonable methods of treatment required under RCW 90.52.040, 90.54.020 (3)(b), and 90.48.520; including effluent limitations established under sections 301, 302, 306, and 307 of the FWPCA. The effluent limitations shall not be less stringent than those based upon the treatment facility design efficiency contained in approved engineering plans and reports or approved revisions thereto. The effluent limitations shall reflect any seasonal variation in industrial loading. Modifications to technology-based effluent limitations for specific discharge categories are as follows:

(i) For combined waste treatment facilities, the effluent limitations for biochemical oxygen demand or suspended solids may be adjusted upwards to a maximum allowed by applying effluent limitations pursuant to sections 301 (b)(1)(B) of the FWPCA to the domestic portion of the influent and effluent limitations pursuant to sections 301 (b)(1)(A)(i), 301 (b)(2)(A), and 301 (b)(2)(E) of the FWPCA or standards of performance pursuant to section 306 of the FWPCA to the industrial portion of the influent: Provided, That the following additional condition is met:

Fecal coliform levels shall not exceed a monthly geometric mean of 200 organisms per 100 ml with a maximum weekly geometric mean of 400 organisms per 100 ml;

(ii) For municipal water treatment plants located on the Chehalis, Columbia, Cowlitz, Lewis, or Skagit river, the effluent limitations shall be adjusted, in accordance with RCW 90.54.020 (3)(b), to reflect credit for substances removed from the plant intake water if:

(A) The municipality demonstrates that the intake water is drawn from the same body of water into which the discharge is made; and

(B) The municipality demonstrates that no violation of receiving water quality standards or appreciable environmental degradation will result.

(b) Any more stringent limitation, including those necessary to:

(i) Meet water quality standards, treatment standards or schedules of compliance established pursuant to any state law or regulation under authority preserved to the state by section 510 of the FWPCA; or

(ii) Meet any federal law or regulation other than the FWPCA or regulations thereunder; or

(iii) Implement any applicable water quality standards; such limitations to include any legally applicable requirements necessary to implement total maximum daily loads established pursuant to section 303(d) and incorporated in the continuing planning process approved under section 303(e) of the FWPCA and any regulations and guidelines issued pursuant thereto;

(iv) Prevent or control pollutant discharges from plant site runoff, spillage or leaks, sludge or waste disposal, or materials handling or storage; and

(v) Meet the permit by rule provisions of the state dangerous waste regulation, WAC 173-303-802 (4) or (5).

(c) Any more stringent legal applicable requirements necessary to comply with a plan approved pursuant to section 208(b) of the FWPCA; and

(d) Prior to promulgation by the administrator of applicable effluent standards and limitations pursuant to sections 301, 302, 306, and 307 of the FWPCA, such conditions as the department determines are necessary to carry out the provisions of the FWPCA.

(2) In any case where an issued permit applies the effluent standards and limitations described in subsection (1)(a) of this section, the department shall make a finding that any discharge authorized by the permit will not violate applicable water quality standards.

(3) In the application of effluent standards and limitations, water quality standards and other legally applicable requirements pursuant to subsections (1) and (2) of this section, each issued permit shall specify:

(a) For industrial wastewater facilities, average monthly and maximum daily quantitative mass and/or concentration limitations, or other such appropriate limitations for the level of pollutants and the authorized discharge;

(b) For domestic wastewater facilities, average weekly and monthly quantitative concentration and mass limitations, or other such appropriate limitations for the level of pollutants and the authorized discharge; and

(c) If a dilution zone is authorized within which water quality standards are modified, the dimensions of such dilution zone.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-130, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-130, filed 12/1/82; Order DE 74-1, § 173-220-130, filed 2/15/74.]

WAC 173-220-135 Signing of permits. Permits authorized for issuance under chapter 173-220 WAC may be signed by the director or any person designated in WAC 173-06-030.

[Order DE 74-1, § 173-220-135, filed 2/15/74.]

WAC 173-220-140 Schedules of compliance. (1) The department shall establish schedules and permit conditions as follows to achieve compliance with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements:

(a) With respect to any discharge which is found not to be in compliance with applicable effluent standards and limitations, applicable water quality standards, or other legally applicable requirements listed in WAC 173-220-130, the permittee shall be required to take specific steps to achieve compliance with the following:

Any legally applicable schedule of compliance contained in:

(i) Section 301 of FWPCA;

(ii) Applicable effluent standards and limitations;

(iii) Water quality standards; and

(iv) Applicable requirements listed in WAC 173-220-130, 173-220-150, and 173-220-210;

(b) Schedules of compliance, shall set forth the shortest, reasonable period of time, to achieve the specified requirements, such period to be consistent with the guidelines and requirements of the FWPCA.

(2) In any case where the period of time for compliance specified in subsection (1)(a) of this section exceeds one year, a schedule of compliance shall be specified in the permit which will set forth interim requirements and the dates for their achievement; however, in no event shall more than one year elapse between interim dates. If the time necessary for completion of the interim requirement (such as construction of a treatment facility) is more than one year and is not readily divided into stages of completion, interim dates shall be specified for the submission of reports of progress toward completion of the interim requirement.

(3) Either before or up to fourteen days following each interim date and the final date of compliance, the permittee shall provide the department with written notice of the permittee's compliance or noncompliance with the interim or final requirement.

(4) On the last day of the months of February, May, August, and November, the department shall transmit to the regional administrator a list of all instances in the previous ninety days of failure or refusal of a major permittee to comply with an interim or final requirement. Such list shall be available to the public for inspection and copying and shall contain at least the following information on each instance of noncompliance:

(a) Name and address of each noncomplying permittee;

(b) A short description of each instance of noncompliance (e.g., failure to submit preliminary plans, delay in commencement of construction of treatment facility, failure to notify department of compliance with an interim requirement, etc.)

(c) A short description of any actions or proposed actions by the permittee or the department to comply or enforce compliance with the interim or final requirement; and

(d) Any details which explain or mitigate an instance of noncompliance with an interim or final requirement.

(5) If a permittee fails or refuses to comply with an interim or final requirement in a permit, such noncompliance shall constitute a violation of the permit for which the department may modify or revoke the permit or take direct enforcement action.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-140, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-140, filed 12/1/82; Order DE 74-1, § 173-220-140, filed 2/15/74.]

WAC 173-220-150 Other terms and conditions. (1) In addition to the requirements of WAC 173-220-130 and 173-220-140, each issued permit shall require that:

(a) All discharges authorized by the permit shall be consistent with the terms and conditions of the permit;

(b) Any facility expansions, production increases or process modifications which would result in new or increased discharges of pollutants causing effluent limitations in the permit to be exceeded must be reported to the department by submission of a new application or supplement thereto; or, if such discharge does not violate effluent limitations specified in the permit, by submission to the department of notice of such new or increased discharges of pollutants;

(c) Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the permit shall constitute a violation of the terms and conditions of the permit;

(d) The permit may be modified or revoked in whole or in part during its terms for cause including, but not limited to, the following:

(i) Violation of any term or condition of the permit;

(ii) Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts;

(iii) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

(iv) A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations;

(v) Incorporation of an approved local pretreatment program into a municipality's permit;

(vi) Establishment of a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) under section 307(a) of the FWPCA for a toxic pollutant which is more stringent than any limitation upon such pollutant in the permit;

(vii) Failure or refusal of the permittee to allow entry as required in RCW 90.48.090; and

(viii) Nonpayment of permit fees assessed pursuant to RCW 90.48.610.

(e) The permittee shall allow the department or its authorized representative upon the presentation of credentials and at reasonable times:

(i) To enter upon permittee's premises in which an effluent source is located or in which any records are required to be kept under terms and conditions of the permit, subject to any access restrictions due to the nature of the project;

(ii) To have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit;

(iii) To inspect any monitoring equipment or method required in the permit; and

(iv) To sample any discharge of pollutants.

(f) If the permit is for a discharge from a publicly owned treatment works, the permittee shall provide notice to the department of the following:

(i) Any new introduction of pollutants into such treatment works from a source which would be a new source as defined in section 306 of the FWPCA if such source were discharging pollutants;

(ii) Except as to such categories and classes of point sources or discharges specified by the department, any new introduction of pollutants into such treatment works from a source which would be subject to section 301 of the FWPCA if such source were discharging pollutants;

(iii) Any substantial change in volume or character of pollutants being introduced into such treatment works by a source existing at the time of issuance of the permit.

Such notice shall include information on:

(A) The quality and quantity of effluent to be introduced into such treatment works; and

(B) Any anticipated impact of such change in the quantity or quality of effluent to be discharged from such publicly owned treatment works.

(g) The permittee shall at all times properly operate and maintain any facilities or systems of control installed by the permittee to achieve compliance with the terms and conditions of the permit. Where design criteria have been established, the permittee shall not allow flows or waste loadings to exceed approved design criteria, or approved revisions thereto.

(2) Every permit shall be conditioned to insure that any industrial user of any publicly owned treatment works will comply with sections 204(b), 307, and 308 of the FWPCA.

(3) When deemed necessary by the department, any publicly owned treatment works shall be required to develop a full or partial local pretreatment program as specified in 40 CFR Part 403. Permit conditions for a municipality which has received full local pretreatment program approval shall include:

(a) Granting of authority to issue permits under chapter 173-208 WAC;

(b) A requirement to develop, adopt, and enforce a program that is at least as stringent as the department's program under chapter 173-216 WAC; and

(c) A requirement to report to the department at a specified frequency on the status of its implementation.

(4) Permits for domestic wastewater facilities shall be issued only to a public entity, except in the following circumstances:

(a) Facilities existing or approved for construction with private operation on or before the effective date of this chapter, until such time as the facility is expanded; or

(b) Facilities that serve a single nonresidential, industrial, or commercial establishment. Commercial/industrial complexes serving multiple owners or tenants and multiple residential dwelling facilities such as mobile home parks, apartments, and condominiums are not considered single commercial establishments for the purpose of the preceding sentence.

(5) For facilities that are owned by nonpublic entities and under contract to a public entity, the permit shall be issued to the public entity.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-150, filed 11/1/88. Statutory Authority: Chapter 43.21A RCW. 88-12-035 (Order 88-8), § 173-220-150, filed 5/26/88, effective 7/1/88; 86-06-040 (Order 86-03), § 173-220-150, filed 3/4/86. Statutory Authority: Chapter 90.48 RCW. 84-11-024 (Order DE 84-19), § 173-220-150, filed 5/11/84. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-150, filed 12/1/82; Order DE 74-1, § 173-220-150, filed 2/15/74.]

WAC 173-220-160 Transmission of issued permit to regional administrator. Immediately following issuance, the department shall transmit a copy of every issued permit along with any and all terms, conditions, requirements, or documents which are a part of such permit or which affect the authorization by the permit of the discharge of pollutants to the regional administrator.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-160, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-160, filed 12/1/82; Order DE 74-1, § 173-220-160, filed 2/15/74.]

WAC 173-220-170 Relationship with non-NPDES permits. Discharges of pollutants or other wastes that require permits from the department under RCW 90.48.160, which are not satisfied through permits issued under this chapter, shall be subject to the permit requirements of RCW 90.48.-160, et seq. Except where permits under RCW 90.48.160 are issued by a municipal corporation pursuant to chapter 173-208 WAC, permit requirements under this chapter and permit requirements under RCW 90.48.160 shall be contained in a single permit document.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-170, filed 12/1/82; Order DE 74-1, § 173-220-170, filed 2/15/74.]

WAC 173-220-180 Duration and replacement of existing permit. (1) Permits shall be issued for fixed terms not exceeding five years.

(2) Any permittee shall make application for replacement to an existing permit or continuation of a discharge beyond the expiration date of his/her permit by filing with the department an application for replacement of the permit at least one hundred eighty days prior to its expiration.

(3) The scope and manner of any review of an application for replacement of a permit by the department shall be sufficiently detailed as to insure the following:

(a) That the permittee is in substantial compliance with all of the terms, conditions, requirements and schedules of compliance of the expired permit;

(b) That the department has up-to-date information on the permittee's production levels; permittee's waste treatment practices; nature, content and frequencies of permittee's discharge; either pursuant to the submission of new forms and applications or pursuant to monitoring records and reports resubmitted to the department by the permittee; and

(c) That the discharge is consistent with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements listed in WAC 173-220-130.

(4) The notice and public participation procedures specified in WAC 173-220-050 through 173-220-100 are applicable to each draft replacement permit.

(5) When a permittee has made timely and sufficient application for the renewal of a permit, an expiring permit remains in effect and enforceable until the application has been denied or a replacement permit has been issued by the department.

(6) Notwithstanding any other provision in this chapter, any point source, the construction of which is commenced after the date of enactment of the Federal Water Pollution Control Act amendments of 1972 and which is so constructed as to meet all applicable standards of performance, shall not be subject insofar as the FWPCA is concerned to any more stringent standard of performance during a ten year period beginning on the date of completion of such construction or during the period of depreciation or amortization of such facility for the purposes of section 167 or 169 (or both) of the Internal Revenue Code of 1954, whichever period ends first.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-180, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-180, filed 12/1/82; Order DE 74-1, § 173-220-180, filed 2/15/74.]

WAC 173-220-190 Modification and revocation of permits. (1) Any permit issued under this chapter can be modified or revoked in whole or in part by the department for cause including, but not limited to, the causes listed in WAC 173-220-150 (1)(d) or when remanded to the department for modification by the pollution control hearings board.

(2) The department may, upon request of the permittee, modify a schedule of compliance or an operating condition in an issued permit if it determines good and valid cause exists for such revision (such as an act of God, strike, flood, materials shortage, or other event over which the permittee has little or no control and for which there is no other reasonably available remedy).

(3) The department shall modify or revoke permits only after public notice and opportunity for public hearing as provided in this chapter in those instances where changes are proposed which lessen the stringency of effluent limitations. In all other instances, the form of public notice and public participation, if any, shall be determined by the department on a case-by-case basis according to the significance of the proposed action.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-190, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-190, filed 12/1/82; Order DE 74-1, § 173-220-190, filed 2/15/74.]

WAC 173-220-200 Transfer of permit. (1) A permit is automatically transferred to a new discharger if:

(a) A written agreement between the old and new discharger containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to the director; and

(b) The director does not notify the old and new discharger of his/her intent to modify, or revoke and reissue the permit. If this notice is not given, the transfer is effective on the date specified in the agreement mentioned in (a) of this subsection.

(2) Unless a permit is automatically transferred according to subsection (1) of this section, a permit may be transferred only if modified or revoked and reissued to identify the new permittee and incorporate such other requirements as may be necessary.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-200, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-200, filed 12/1/82; Order DE 74-1, § 173-220-200, filed 2/15/74.]

WAC 173-220-210 Monitoring, recording and reporting. (1) Monitoring.

(a) Any discharge authorized by a permit may be subject to such monitoring requirements as may be reasonably required by the department, including the installation, use, and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). These monitoring requirements would normally include:

(i) Flow (in gallons per day);

(ii) Pollutants (either directly or indirectly through the use of accepted correlation coefficients or equivalent measurements) which are subject to reduction or elimination under the terms and conditions of the permit;

(iii) Pollutants which the department finds could have a significant impact on the quality of surface waters; and

(iv) Pollutants specified by the administrator, in regulations issued pursuant to the FWPCA, as subject to monitoring.

(b) Each effluent flow or pollutant required to be monitored pursuant to (a) of this subsection shall be monitored at intervals sufficiently frequent to yield data which reasonably characterizes the nature of the discharge of the monitored effluent flow or pollutant.

Variable effluent flows and pollutant levels may be monitored at more frequent intervals than relatively constant effluent flows and pollutant levels which may be monitored at less frequent intervals.

(c) Monitoring of intake water, influent to treatment facilities, internal waste streams, and/or receiving waters may be required when determined necessary by the department to verify compliance with net discharge limitations or removal requirements, to verify that proper waste treatment or control practices are being maintained, or to determine the effects of the discharge on the surface waters of the state.

(2) Recording of monitoring activities and results. Any permit which requires monitoring of the authorized discharge shall require that:

(a) The permittee shall maintain records of all information resulting from any monitoring activities required of him in his permit;

(b) Any records of monitoring activities and results shall include for all samples:

(i) The date, exact place, and time of sampling;

(ii) The dates analyses were performed;

(iii) Who performed the analyses;

(iv) The analytical techniques/methods used; and

(v) The results of such analyses; and

(c) The permittee shall be required to retain for a minimum of three years any records of monitoring activities and results including all original strip chart recording for continuous monitoring instrumentation and calibration and maintenance records. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the department or regional administrator.

(3) Reporting of monitoring results.

(a) The permittee shall periodically report (at a frequency of not less than once per year) on the proper reporting form, the monitoring results obtained pursuant to monitoring requirements in a permit. In addition to the required reporting form, the department at its discretion may require submission of such other results as it determines to be necessary.

(b) Monitoring reports shall be signed by:

(i) In the case of corporations, by a responsible corporate officer or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates.

(ii) In the case of a partnership, by a general partner.

(iii) In the case of a sole proprietorship, by the proprietor.

(iv) In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

(4) Use of registered or accredited laboratories:

(a) Except as established in (c) of this subsection, monitoring data submitted to the department in accordance with this chapter shall be prepared by a laboratory accredited under the provisions of chapter 173-50 WAC no later than indicated by the appropriate date below:

July 1, 1992, major dischargers;

July 1, 1993, all permittees with a permitted average flow rate greater than five million gallons per day.

These requirements are effective and binding on all permittees under the authority of rule, regardless of whether they have been included as conditions of a permit.

(b) Except as established in (c) of this subsection, monitoring data submitted to the department in accordance with this chapter shall be prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC no later than July 1, 1994, for all NPDES permittees not covered under (a) of this subsection.

These requirements are effective and binding on all permittees under the authority of rule, regardless of whether they have been included as conditions of a permit.

(c) The following parameters need not be accredited or registered:

(i) Flow;

(ii) Temperature;

(iii) Settleable solids;

(iv) Conductivity, except that conductivity shall be accredited if the laboratory must otherwise be registered or accredited;

(v) pH, except that pH shall be accredited if the laboratory must otherwise be registered or accredited;

(vi) Turbidity, except that turbidity shall be accredited if the laboratory must otherwise be registered or accredited; and

(vii) Parameters which are used solely for internal process control.

[Statutory Authority: RCW 90.48.035. 02-05-055 (Order 01-08), § 173-220-210, filed 2/15/02, effective 3/18/02. Statutory Authority: RCW 43.21A.-230. 93-20-011 (Order 92-53), § 173-220-210, filed 9/22/93, effective 10/23/93; 90-21-090 (Order 90-21), § 173-220-210, filed 10/19/90, effective 11/19/90. Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-210, filed 11/1/88. Statutory Authority: Chapter 90.48 RCW. 84-11-024 (Order DE 84-19), § 173-220-210, filed 5/11/84. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-210, filed 12/1/82; Order DE 74-1, § 173-220-210, filed 2/15/74.]

WAC 173-220-225 Appeals. Individual permits are subject to appeals as specified in chapter 43.21B RCW.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-220-225, filed 5/5/93, effective 5/19/93. Statutory Authority: RCW 90.54.-020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-225, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-225, filed 12/1/82.]

WAC 173-220-230 Enforcement. (1) The department, with the assistance of the attorney general, may sue in courts of competent jurisdiction to enjoin any threatened or continuing violations of any permits or conditions thereof without the necessity of a prior revocation of the permit;

(2) The department may enter any premises in which an effluent source is located or in which records are required to be kept under terms or conditions of a permit, and otherwise be able to investigate, inspect, or monitor any suspected violations of water quality standards, or effluent standards and limitations, or of permits or terms or conditions thereof;

(3) The department may assess or, with the assistance of the attorney general, sue to recover in court, such civil fines, penalties, and other civil relief as may be appropriate for the violation by any person of (a) any effluent standards and limitations or water quality standards, (b) any permit or term or condition thereof, (c) any filing requirements, (d) any duty to permit or carry out inspection, entry, or monitoring activities, or (e) any rules, regulations, or orders issued by the department.

(4) The department may request the prosecuting attorney to seek criminal sanctions for the violation by such persons of (a) any effluent standards and limitations or water quality standards, (b) any permit or term or condition thereof, (c) any filing requirements.

(5) The department, with the assistance of the prosecuting attorney, may seek criminal sanctions against any person who knowingly makes any false statement, representation, or certification in any form or any notice or report required by the terms and conditions of any issued permit or knowingly renders inaccurate any monitoring device or method required to be maintained by the department.

[Order DE 74-1, § 173-220-230, filed 2/15/74.]

WAC 173-220-240 Relationship of department of ecology to permits issued by the energy facility site evaluation council. (1) The energy facility site evaluation council (EFSEC) shall be the state agency to receive applications for, issue, and modify permits for energy facilities subject to chapter 80.50 RCW. Processing of such applications shall be controlled by chapter 463-38 WAC. Application for issuance and modification of permits for all other energy facilities shall be the responsibility of the department.

(2) Monitoring, recording, and reporting activities required of operators of all energy facilities by the terms of a permit issued by EFSEC shall be supervised and enforced by the department.

(3) The department shall carry on an inspection program for the periodic inspection (to be performed not less than once every year) of discharges of pollutants from energy facilities authorized by a permit issued by EFSEC. Such inspections shall determine compliance or noncompliance with issued permits and, in particular, compliance or noncompliance with specific effluent limitations and schedules of compliance in such permits.

(4) The department shall carry on a surveillance program with respect to energy facility discharges for the random sampling and analysis of the discharge for the purpose of identifying occasional and continuing violations of permit conditions and the accuracy of information submitted by permittees in reporting forms.

(5) Enforcement activities regarding the NPDES program, including the levying of civil and criminal fines pertaining to all thermal power plants, whether the permit is issued by the department or EFSEC, shall be undertaken by the department, EFSEC, the attorney general, or the prosecuting attorney, as appropriate.

(6) Nothing in this section shall authorize the department to undertake enforcement or monitoring activities in a man-

ner not consistent with the terms and conditions of any EFSEC-issued NPDES permit.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-240, filed 12/1/82; Order DE 74-1, § 173-220-240, filed 2/15/74.]

Chapter 173-221 WAC

DISCHARGE STANDARDS AND EFFLUENT LIMITATIONS FOR DOMESTIC WASTEWATER FACILITIES

WAC

173-221-010 Purpose and scope.
173-221-020 Policy.
173-221-030 Definitions.
173-221-040 Domestic wastewater facility discharge standards.
173-221-050 Alternative domestic wastewater facility discharge standards and effluent limitations.
173-221-100 Severability.

WAC 173-221-010 Purpose and scope. (1) The purpose of this chapter is to implement RCW 43.21A.010, 90.48.010, and 90.52.040 by setting discharge standards which represent "all known, available, and reasonable methods" of prevention, control, and treatment for domestic wastewater facilities which discharge to waters of the state. This chapter supplements WAC 173-220-130. Guidelines or policies of the department not included in this chapter are not affected by this chapter, except that if such guidelines or policies are in conflict, the requirements of this chapter shall take precedence.

(2) This chapter also supplements 40 CFR Part 133; Secondary Treatment Regulation. Wherever this chapter is more stringent than the federal regulation, the requirements of this chapter shall take precedence.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 87-23-020 (Order 87-26), § 173-221-010, filed 11/12/87.]

WAC 173-221-020 Policy. Waters of the state shall be of the highest possible quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for discharge into said waters shall be provided with all known, available, and reasonable methods of treatment prior to discharge. Even though standards of quality established for the waters of the state would not be violated, wastes and other materials and substances shall not be allowed to enter such waters which will reduce the existing quality thereof, except (1) in those situations where it is clear that overriding considerations of the public interest will be served, and (2) they receive all known, available, and reasonable methods of treatment prior to discharge.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 87-23-020 (Order 87-26), § 173-221-020, filed 11/12/87.]

WAC 173-221-030 Definitions. As used in this chapter, unless the context indicates otherwise:

(1) "Seven-day average" means the arithmetic mean of pollutant parameter values for samples collected in a period of seven consecutive days. The department may use pollutant parameter values for samples collected in a calendar week for determining compliance with permit conditions.

(2) "Thirty-day average" means the arithmetic mean of pollutant parameter values for samples collected in a period of thirty consecutive days. The department may use pollutant parameter values for samples collected in a calendar month for determining compliance with permit conditions.

(3) "BOD" means five-day biochemical oxygen demand.

(4) "CBOD" means five-day carbonaceous biochemical oxygen demand.

(5) "Combined sewer" means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

(6) "Department" means the Washington department of ecology.

(7) "Director" means the director of the Washington department of ecology.

(8) "Discharge standard" means a minimum performance requirement established in regulation by the department. Effluent limitations for a pollutant parameter shall not be less stringent than the applicable discharge standard.

(9) "Domestic wastewater" means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground water infiltration or surface waters as may be present.

(10) "Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater together with such industrial waste as may be present. In the case of subsurface sewage treatment and disposal, the term is restricted to mean those facilities treating and disposing of domestic wastewater only from:

(a) A septic tank system with subsurface sewage treatment and disposal and an ultimate design capacity exceeding fourteen thousand five hundred gallons per day at any common point; or

(b) A mechanical treatment system or lagoon followed by subsurface disposal with an ultimate design capacity exceeding three thousand five hundred gallons per day at any common point.

Where the proposed system utilizing subsurface disposal has received a state construction grant or a federal construction grant under the Federal Water Pollution Control Act as amended, such system is a "domestic wastewater facility" regardless of size.

(11) "Effluent concentrations consistently achievable through proper operation and maintenance" means:

(a) For a given pollutant parameter, the 95th percentile value for the thirty-day average effluent quality achieved by a wastewater facility in a period of at least twenty-four consecutive months, excluding values attributable to equipment failures, operational errors, overloading, and other unusual conditions; and

(b) A seven-day average value equal to 1.5 times the value derived under (a) of this subsection.

(12) "Effluent limitation" means any restriction, prohibition, or specification established by the department in a permit or administrative order on:

(a) Quantities, rates, percent removals, and/or concentrations of physical, chemical, or biological characteristics of wastes which are discharged into waters of the state; and

(b) Management practices relevant to the prevention or control of such waste discharges.

Effluent limitations shall be derived from discharge standards and other relevant factors identified in chapter 173-220 WAC.

(13) "Expansion" means the construction of additional treatment units to accommodate hydraulic flow and/or pollutant load for the purpose of increasing the existing design capacity of the wastewater facility.

(14) "Fecal coliform" means the group of coliform bacteria which originate in the intestinal tract of warm-blooded animals.

(15) "Industrial wastewater" means the water or liquid carried wastes from industrial or commercial processes as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade, or business, from the development of any natural resource, or from animal operations such as feedlots, poultry houses, or dairies. The term includes contaminated stormwater and also leachate from solid waste facilities.

(16) "Infiltration" means the addition of ground water into a sewer through joints, the sewer pipe material, cracks, and other defects.

(17) "Inflow" means the addition of rainfall-caused surface water drainage from roof drains, yard drains, basement drains, street catch basins, etc., into a sewer.

(18) "Interfere with" means a discharge by an industrial user which, alone or in conjunction with discharges by other sources, inhibits or disrupts the domestic wastewater facility, its treatment processes or operations, or its sludge processes, use or disposal and which is a cause of a violation of any requirement of the domestic wastewater facility's permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal by the domestic wastewater facility in accordance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Federal Water Pollution Control Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA)), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D or the SWDA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection Research and Sanctuaries Act.

(19) "Permittee" means the entity to which the department issues a permit.

(20) "pH" means the negative logarithm of the hydrogen ion concentration.

(21) "Sanitary sewer" means a sewer which is designed to convey domestic wastewater and infiltration.

(22) "State" means the state of Washington.

(23) "Trickling filter" means a fixed growth biological treatment system in which wastewater is sprayed over the top surface of a column of rock or synthetic media. This definition does not include fixed growth biological systems which have a supplemental biological treatment system, other than a waste stabilization pond(s), for the principal wastewater stream.

(24) "TSS" means total suspended solids.

(25) "TSS concentrations achievable with waste stabilization ponds" means a TSS value, determined by the department, which is equal to the effluent concentrations achieved ninety percent of the time within the state or appropriate contiguous geographical area by waste stabilization ponds that are achieving the levels of effluent quality for BOD specified in WAC 173-221-050 (2)(a).

(26) "Waste stabilization pond" means basins built by excavating the ground and by diking for the purpose of treating wastewater under conditions that favor natural biological treatment and accompanying bacterial reduction. This includes domestic wastewater facilities which are classified as stabilization ponds, or aerated lagoons per the department's Criteria for Sewage Works Design.

(27) "Wastewater facility" means all structures and equipment required to collect, transport, treat, reclaim, or dispose of domestic, industrial, or combined domestic/industrial wastewaters.

(28) "Waters of the state" means all lakes, rivers, ponds, streams, inland waters, ground waters, salt waters, and all other waters and watercourses within the jurisdiction of the state of Washington.

(29) "Water quality standards" means the standards set forth in chapter 173-201 WAC.

(30) "Wet weather" means the time during and immediately following rainfall events which cause large quantities of inflow.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 87-23-020 (Order 87-26), § 173-221-030, filed 11/12/87.]

WAC 173-221-040 Domestic wastewater facility discharge standards. (1) Except as allowed under WAC 173-221-050, domestic wastewater facilities which discharge to surface waters shall not exceed a thirty-day average of 30 milligrams per liter (mg/L) BOD, 30 mg/L TSS. Seven-day averages shall not exceed 45 mg/L BOD, 45 mg/L TSS. Additionally, the thirty-day average percent removals of BOD and TSS shall not be less than eight-five percent of influent concentrations.

(2) Fecal coliform limits shall not exceed a monthly geometric mean of 200 organisms/100 milliliters (mL), and a weekly geometric mean of 400 organisms per 100 mL.

(3) The effluent pH value shall be between 6.0 and 9.0 standard units unless the permittee demonstrates that:

(a) Inorganic chemicals are not added to the waste stream as part of the treatment process; and

(b) Contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0; and

(c) The discharge does not cause water quality violations outside of an approved dilution zone.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 87-23-020 (Order 87-26), § 173-221-040, filed 11/12/87.]

WAC 173-221-050 Alternative domestic wastewater facility discharge standards and effluent limitations. (1) Alternative discharge standards for trickling filters which were constructed and/or expanded prior to November 1984 are:

(a) Up to a thirty-day average of 45 mg/L BOD, 45 mg/L TSS. Seven-day averages shall not exceed 65 mg/L BOD, 65 mg/L TSS. In addition, the thirty-day average percent removals of BOD and TSS shall not be less than sixty-five percent of influent concentrations;

(b) Notwithstanding (a) of this subsection, not any less stringent than "effluent concentrations consistently achievable through proper operation and maintenance" of the wastewater facility based on an analysis of the past performance, the design, and the design capacity of the wastewater facility;

(c) Fecal coliform and pH discharge standards are as established in WAC 173-221-040.

(2) Alternative discharge standards for waste stabilization ponds which are the principal treatment process and which either have less than a two million gallon per day design capacity or have received, prior to the effective date of this regulation, the department's approval under chapter 173-240 WAC, for a greater design capacity, are:

(a) Up to a thirty-day average of 45 mg/L BOD, 45 mg/L TSS. Seven-day averages shall not exceed 65 mg/L BOD, 65 mg/L TSS. Additionally, the thirty-day average percent BOD removal shall not be less than sixty-five percent of influent concentrations.

(b) The discharge standards for TSS in (a) of this subsection may be adjusted by the department to conform to the "TSS concentrations achievable with waste stabilization ponds," provided that operation and maintenance data indicate that the TSS values specified in (a) of this subsection cannot be achieved.

(c) Notwithstanding (a) and (b) of this subsection, not any less stringent than "effluent concentrations consistently achievable through proper operation and maintenance" of the wastewater facility based upon an analysis of the past performance.

(d) Fecal coliform and pH discharge standards shall be as established in WAC 173-221-040.

(3) For domestic wastewater facilities which receive flows from combined sewers, the department shall decide on a case-by-case basis whether any attainable percent removal can be defined during wet weather. If it can be defined, the department will set an alternative percent removal effluent limitation for the wet weather period. A permittee who requests such alternative limits shall submit supporting documentation to the department.

(4)(a) For domestic wastewater facilities which receive less concentrated influent wastewater, permittees can request and submit supporting documentation for:

(i) A lower percent removal effluent limitation than the discharge standards set forth in WAC 173-221-040, or subsections (1) and (2) of this section; or

(ii) A mass loading limit based upon the lower percent removal.

(b) To qualify for alternative effluent limitations because of less concentrated influent wastewater, the permittee must demonstrate:

(i) The wastewater facility is consistently achieving, and/or will consistently achieve, the effluent concentration limits and mass limits based upon the effluent concentrations in its permit; and

(ii) That to meet the percentage removal requirements set forth in WAC 173-221-040 or subsections (1) and (2) of this section, the wastewater facility would have to achieve an effluent concentration at least 5 mg/L below the effluent concentration which is otherwise required; and

(iii) The less concentrated influent is not the result of excessive infiltration and/or inflow. The department will use federal regulations and guidance in defining excessive infiltration and inflow; and

(iv) The development and implementation of a program, subject to the department's approval, for ongoing wastewater facility maintenance, repair, and replacement, including infiltration and inflow control. A goal of the program shall be eventual achievement of the percent removal requirements specified in WAC 173-221-040 and subsection (1) or (2) of this section, whichever is applicable. The department shall incorporate the approved infiltration and inflow control program into the permit for the wastewater facility.

(5) Subject to the department's approval, a request for alternative effluent limitations pursuant to subsections (1) through (4) of this section must meet all of the following conditions:

(a) The effluent shall not cause water quality violations; and

(b) The permittee shall identify effluent concentrations consistently achievable through proper operation and maintenance; and

(c) The permittee shall demonstrate that industrial wastewater does not interfere with the domestic wastewater facility; and

(d) The wastewater facility must be within department approved hydraulic and organic design capacity; and

(e) The permittee must complete an analysis of whether seasonal alternative effluent limits are more appropriate than year-round; and

(f) The wastewater facility must be able to meet all other permit requirements and conditions.

(6)(a) At the option of the department, in lieu of the parameter BOD and the levels of the BOD effluent quality specified in WAC 173-221-040, the parameter CBOD may be substituted as an effluent limitation with the following levels of the CBOD effluent quality provided: The thirty-day average shall not exceed 25 mg/L. The seven-day average shall not exceed 40 mg/L. Additionally, the thirty-day average percent removal shall not be less than eighty-five percent of the influent concentration.

(b) At the option of the department, in lieu of the parameter BOD and the levels of the BOD effluent quality specified in subsections (1) and (2) of this section, the parameter CBOD may be substituted as an effluent limitation on a case-by-case basis where data are available. The levels of CBOD effluent quality shall not be less stringent than the following: The thirty-day average shall not exceed 40 mg/L. The seven-day average shall not exceed 60 mg/L. The thirty-day average percent removal shall not be less than sixty-five percent of the influent concentration.

(c) Permittee applications for substitution of CBOD for BOD under (b) of this subsection shall include parallel CBOD and BOD data.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 87-23-020 (Order 87-26), § 173-221-050, filed 11/12/87.]

WAC 173-221-100 Severability. If any provision of this chapter or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this chapter which can be given effect without the invalid provision or application.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 87-23-020 (Order 87-26), § 173-221-100, filed 11/12/87.]

Chapter 173-221A WAC

WASTEWATER DISCHARGE STANDARDS AND EFFLUENT LIMITATIONS

WAC

173-221A-010 Purpose and scope.
173-221A-020 Policy.
173-221A-030 Definitions.
173-221A-100 Upland finfish facilities.
173-221A-110 Marine finfish rearing facilities.
173-221A-150 Enforcement.

WAC 173-221A-010 Purpose and scope. This chapter implements chapters 43.21A, 90.48, 90.52, and 90.54 RCW by setting minimum discharge standards which represent "known, available, and reasonable methods" of prevention, control, and treatment for industrial wastewater facilities that discharge to waters of the state. This chapter supplements WAC 173-216-110, 173-218-100, and 173-220-130.

[Statutory Authority: Chapter 90.48 RCW. 90-14-078 (Order 90-11), § 173-221A-010, filed 7/3/90, effective 8/3/90.]

WAC 173-221A-020 Policy. Waters of the state shall be of the high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry. Notwithstanding that standards of quality established for waters of the state would not be violated, wastes and other materials and substances shall not be allowed to enter such waters which will reduce the existing quality thereof, except in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapter 90.48 RCW. 90-14-078 (Order 90-11), § 173-221A-020, filed 7/3/90, effective 8/3/90.]

WAC 173-221A-030 Definitions. As used in this chapter, unless the context indicates otherwise:

"Department" means the department of ecology.

"Director" means the director of the department of ecology, or designee.

"General NPDES permit" means a permit designed to cover multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

"Individual NPDES permit" means a permit for a single point source or a single facility.

"Marine finfish rearing facilities" means those private and public facilities located within the salt water of the state where finfish are fed, nurtured, held, maintained, or reared to the size of release or for market sale.

"NPDES" means National Pollutant Discharge Elimination System.

"Permit or wastewater discharge permit" means an authorization, license, or equivalent control document issued by the department to implement chapters 173-220, 173-226, and/or 173-216 WAC.

"Sediment quality standards" means the standards set forth in chapter 173-204 WAC.

"Upland finfish facility" means those facilities not located within waters of the state where finfish are hatched, fed, nurtured, held, maintained, or reared to reach the size of release or for market sale. This includes fish hatcheries, rearing ponds, spawning channels, and other similarly constructed or fabricated public or private facility.

"Wastewater" means the water or liquid carried waste. These wastes may result from any process or activity, including but not limited to, of industry, manufacturer, trade, business, development of any natural resource, or from animal operations such as feed lots, poultry houses, dairies, or fish rearing operations. The term also includes contaminated storm water and leachate from solid waste facilities.

"Water quality standards" means as applicable: Chapter 173-201A WAC for surface waters, chapter 173-200 WAC for ground waters, and chapter 173-204 WAC for sediment.

"Waters of the state" includes those waters as defined as "waters of the United States" in 40 CFR 122.2 within the geographic boundaries of Washington state and "waters of the state" as defined in RCW 90.48.020.

"40 CFR" means Title 40 of the Code of Federal Regulations, as presently promulgated and subsequently amended or repromulgated.

[Statutory Authority: RCW 90.48.220. 95-22-079 (Order 93-26), § 173-221A-030, filed 10/31/95, effective 12/1/95. Statutory Authority: Chapter 90.48 RCW. 90-14-078 (Order 90-11), § 173-221A-030, filed 7/3/90, effective 8/3/90.]

WAC 173-221A-100 Upland finfish facilities. (1) **Which types of upland finfish facilities need a wastewater discharge permit?**

(a) A permit is required for:

(i) All facilities which produce more than 20,000 net pounds of finfish a year; or

(ii) Feeds more than 5,000 pounds of fish food during any calendar month; or

(iii) Is designated as a significant contributor of pollution by the department in accordance with 40 CFR 122.24.

(b) Facilities which do not require a permit under (a) of this subsection are conditionally exempt from the requirement to obtain a wastewater discharge permit provided they comply with subsections (2) through (6) of this section.

(2) **Time of compliance.** Each upland finfish rearing facility which requires a wastewater discharge permit in accordance with subsection (1) of this section shall submit a completed application form to the department at least one hundred eighty days in advance of the date when permit coverage is deemed necessary.

(3) **Prevention, control, and treatment.** Each upland finfish facility shall provide treatment prior to discharging to waters of the state regardless of receiving water quality. The minimum acceptable technology-based treatment requirements for upland finfish facilities required to obtain permits including general wastewater discharge permits are:

(a) For facilities that use a vacuum cleaning system, standpipe bottom-drain system or other method to remove solids from the water, raceways or ponds, with treatment in a separate settling basin or treatment system:

(i) All facilities utilizing off-line settling shall incorporate into the pond or raceway design methods to collect settleable solids. Methods such as screened settling zones in the

downstream end at raceways shall be used to collect settleable solids prior to periodic removal to off-line settling basins.

(ii) The settling basin shall be designed to minimize short-circuiting and to provide a minimum total suspended solids average monthly percent removal of 85% and an average monthly settleable solids percent removal of 90%.

(iii) Turbulent flow shall be minimized within the cleaning system to avoid homogenization or solids.

(iv) Rearing of fish within the settling basin is not permitted.

(b) For facilities that provide in-line settling for the entire effluent;

(i) The settling basin shall be designed to minimize hydraulic short-circuiting.

(ii) The settling basin shall be designed to provide at least a twenty year sludge decomposition and storage capacity unless provisions are made for periodic sludge removal without interruption in treatment.

(iii) Rearing of fish within the settling basin is prohibited.

(c) For facilities with rearing ponds only, no other form of effluent treatment shall be required, provided the rearing pond has a minimum hydraulic retention time of two hours or more. Rearing vessels with less than two hours hydraulic retention time may be approved by the department in writing without additional treatment provided the applicant can demonstrate to the department, in advance, the ability to continuously comply with effluent limits established in subsection (4)(a) of this section.

(d) Each upland finfish facility that begins construction after September 1, 1990, or expands production by fifty percent over the production on the effective date of this rule shall either:

(i) Line all settling basins or otherwise ensure that the static (i.e., without inflow) seepage rate through the settling basin bottom and sides shall not be greater than a water surface drop of 0.10 inch per day; or

(ii) Demonstrate to the department through hydrogeologic investigation and/or ground water monitoring that the operation of the facility will not have an adverse impact upon ground water quality.

(e) Notwithstanding the treatment requirements of this subsection, more stringent or additional conditions may be required by the department as necessary on a case-by-case basis to mitigate adverse water quality impacts or meet water quality standards, ground water standards, sediment standards or other applicable requirements of federal or state law.

(4) **Effluent standards.** Wastewater from all upland finfish facilities regardless of size shall meet the following effluent discharge standards.

(a) Facility discharges.

(i) The instantaneous maximum total suspended solids concentration in the effluent at the point of discharge to the receiving environment shall not exceed 15 milligrams per liter of effluent.

(ii) The average total suspended solids concentration in the effluent at the point of discharge to the receiving environment shall not exceed 5 milligrams per liter of effluent.

(iii) The average settleable solids concentration in the effluent at the point of discharge to the receiving environment shall not exceed 0.1 milliliter per liter of effluent.

(iv) Effluent limitations shall apply as net values provided the criteria contained in 40 CFR 122.45 (net gross allowance) are met.

(b) Off-line settling basin effluent.

(i) The instantaneous maximum total suspended solids concentration shall not exceed 100 milligrams per liter of effluent.

(ii) The instantaneous maximum settleable solids concentration in off-line settling basin effluent shall not exceed 1.0 milliliter per liter of effluent.

(c) Discharges during rearing pond drawdown for fish release shall meet the following discharge standards. Pond drawdown for purposes other than fish release shall meet the discharger standards in (a) of this subsection.

(i) The instantaneous maximum total suspended solids concentration in the rearing pond effluent shall not exceed 100 milligrams per liter.

(ii) The instantaneous maximum settleable solids concentration in the rearing pond effluent shall not exceed 1.0 milliliter per liter.

(d) Test procedures. All sampling and analytical methods used to determine compliance with standards specified in this subsection shall, unless otherwise approved by the department, conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.

(e) Notwithstanding the numerical discharge standards within this subsection, each upland finfish facility shall be operated in the most efficient manner possible. Additional effluent limits and/or more stringent effluent limits may be required as necessary on a case-by-case basis to meet water quality standards, ground water quality standards, sediment quality standards, or other applicable requirements of federal or state law.

(5) **General requirements.** The following practices shall be applicable to all upland finfish facilities.

(a) Sand, silt, mud, solids, sludges, filter backwash, debris, or other pollutants deposited or removed in the course of treatment or control of water supply and wastewaters shall be disposed of in a manner so as to prevent such materials from entering waters of the state.

(b) Discharging untreated cleaning wastes (e.g., obtained from a vacuum or standpipe bottom drain system) to waters of the state is prohibited.

(c) Sweeping or intentionally discharging accumulated solids from raceways or ponds to waters of the state without prior treatment is prohibited.

(d) Practices such as removing dam boards in raceways or ponds, that allow accumulated solids to discharge to waters of the state are prohibited.

(e) The discharge of any drugs or chemicals in toxic amounts or in violation of water quality standards to waters of the state is prohibited.

(f) Disease control chemical use practices. The following requirements only apply to those drugs and chemicals included in feed or administered by a bath or dip treatment which results or may result in those materials being discharged to waters of the state. These requirements do not

apply to drugs and chemicals administered by injections or by dip treatments which results in no discharge to waters of the state.

(i) Disease control chemicals and drugs approved for hatchery use by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA) may be used.

(ii) USFDA approved Investigational New Animal Drugs (INADs) may also be used at a facility, provided the conditions detailed in a facility's INAD permit application are met.

(iii) All disease control drug and chemical use must be done in conformance with product label instructions, approved INAD protocols, or be administered by or under the supervision of a licensed veterinarian.

(iv) Disease control drugs and chemicals which are not used in accordance with product label instructions, or under USFDA approved INAD protocols must:

(A) Be administered by or under the supervision of a licensed veterinarian; and

(B) Be approved in advance by the department.

(v) The department may require disease control drug and chemical use reports from each facility.

(g) Fish mortalities, kill spawning, processing wastes, and any leachate from these materials shall be disposed of in a manner so as to prevent such materials from entering the waters of the state.

(h) Right of entry.

(i) Authorized representatives of the department, upon presentation of identification shall be allowed to:

(A) Enter in or upon the facility at all reasonable times;

(B) Have access to and copy at all reasonable times any records relative to information that must be kept or provided the department under the terms of, as applicable: The conditional exemption or wastewater discharge permit;

(C) Inspect, investigate, and photograph at all reasonable times any production, collection, treatment, pollution management, monitoring, or discharge equipment or facilities, or any conditions relating to pollution or possible pollution of any waters of the state;

(D) Sample and make tests at all reasonable times; and

(E) The term "reasonable times" shall include normal business hours, hours during which production, prevention, control, or treatment occurs or times when the department reasonably suspects a violation of this chapter is or may be occurring.

(6) **Receiving water quality studies.** Receiving water quality studies shall be required as follows for each upland finfish facility which begins construction after September 1, 1990, or expands production by fifty percent over the production on the effective date of this rule. Existing facilities may be required to do receiving water studies on a case-by-case basis. Dilution shall be evaluated by the department using total facility effluent at maximum production at the lowest seven-day average receiving stream flow with a 10-year recurrence interval (7Q10).

(a) For facilities with a discharge of one part upland finfish facility effluent to ten parts or more of receiving water, receiving water studies are not required unless significant data indicates water quality standards would be violated.

(b) For facilities with an effluent dilution of between one part upland finfish facility effluent to three parts receiving water and one part effluent to ten parts receiving water, receiving water studies may be required by the department. The department shall provide the upland finfish operator or permit applicant with written documentation on the need for receiving water studies upon request. Factors to be considered by the department in determining the need for and objectives of special receiving water studies may include, but are limited to, the following:

(i) The water quality classification of the receiving water of the state;

(ii) The potential water quality impacts of surrounding land use practices and/or existing and proposed discharges including the proposed upland finfish hatching and rearing facility;

(iii) The likelihood that the proposed discharge will have an effect on existing water quality and/or present or future beneficial uses;

(iv) The proximity of the discharge to a quiescent water body such as a lake or a reservoir;

(v) On-site inspection;

(vi) The potential of the discharge to have an adverse impact on receiving water quality such that water quality standards would be violated; and

(vii) Possible beneficial impacts of upland finfish discharges on existing water quality such as flow augmentation.

(c) For facilities with an effluent dilution of one part upland finfish facility effluent to three parts or less of receiving waters, receiving water quality studies will generally be required for new facilities and may be required on a case-by-case basis for existing facilities.

(d) Receiving water quality studies content and scope shall include, as required by the department an analysis of the proposed facilities discharge and any impacts upon the receiving water of the state, including, but not limited to, the following:

(i) Identification of existing and potential beneficial uses of the receiving water of the state and an evaluation of the impact on those beneficial uses of the proposed discharge;

(ii) Hydraulic impacts;

(iii) The impacts of both nitrogen and phosphorous compounds and the potential for eutrophication of the receiving waters;

(iv) The use of chemicals and medications within the facility, their toxicity, and the impacts on the receiving waters;

(v) The effect of the facilities on receiving water temperature and dissolved oxygen concentrations; and

(vi) The potential for impacting any specified identified water use.

(vii) Possible beneficial impact of upland finfish discharges on existing water quality such as flow augmentation.

[Statutory Authority: RCW 90.48.220. 95-22-079 (Order 93-26), § 173-221A-100, filed 10/31/95, effective 12/1/95. Statutory Authority: Chapter 90.48 RCW. 90-14-078 (Order 90-11), § 173-221A-100, filed 7/3/90, effective 8/3/90.]

WAC 173-221A-110 Marine finfish rearing facilities. (1) This rule sets waste discharge standards for finfish rearing facilities located within marine waters as required by RCW

90.48.220. Net-pens, floating raceways, closed bag, and barge systems are some examples of finfish rearing facilities covered by this section.

(2) **Which types of marine finfish rearing facilities need a wastewater discharge permit?**

(a) A permit is required for:

(i) All facilities which produce more than 20,000 net pounds of finfish a year; or

(ii) Feeds more than 5,000 pounds of fish food during any calendar month; or

(iii) Is designated as a significant contributor of pollution by the department in accordance with 40 CFR 122.24.

(b) Facilities which do not require a permit under (a) of this subsection are conditionally exempt from the requirement to obtain a state waste discharge permit under chapter 173-216 WAC provided they comply with subsections (3) through (5) of this section.

(3) **Time of compliance.**

(a) Each marine finfish rearing facility which requires a wastewater discharge permit in accordance with subsection (2) of this section shall submit a completed application form to the department at least one hundred eighty days in advance of the date when permit coverage is deemed necessary.

(b) Existing unpermitted marine finfish rearing facilities which require a waste discharge permit in accordance with subsection (2) of this section shall file a completed application form with the department by January 31, 1996.

(4) **Requirements applicable to all marine finfish rearing facilities.** All marine finfish rearing facilities regardless of size, shall be operated so as to:

(a) Comply with all applicable state water quality standards and sediment quality standards.

(b) Comply with the following general requirements meant to reduce pollutants in the effluent:

(i) Feeding practices. Fish food shall be dispersed in a manner which maximizes ingestion by the reared fish.

(ii) Disease control chemical use practices. The following requirements only apply to those drugs and chemicals included in feed or administered by a bath or dip treatment which results or may result in those materials being discharged to waters of the state. These requirements do not apply to drugs and chemicals administered by injections or by dip treatments which results in no discharge to waters of the state.

(A) Disease control chemicals and drugs approved for use by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA) may be used.

(B) USFDA approved Investigational New Animal Drugs (INADs) may also be used at a facility, provided the conditions detailed in a facility's INAD permit application are met.

(C) All disease control drug and chemical use must be done in conformance with product label instructions, approved INAD protocols, or be administered by or under the supervision of a licensed veterinarian.

(D) Disease control drug and chemicals which are not used in accordance with product label instructions, or under USFDA approved INAD protocols must:

(I) Be administered by or under the supervision of a licensed veterinarian; and

(II) Be approved in advance by the department.

(E) The department may require disease control drug and chemical use reports from each facility.

(iii) Right of entry. Authorized representatives of the department, upon presentation of identification shall be allowed to:

(A) Enter in or upon the facility at all reasonable times;

(B) Have access to and copy at all reasonable times any records relative to information that must be kept or provided the department under the terms of, as applicable: The conditional exemption or wastewater discharge permit;

(C) Inspect, investigate, and photograph at all reasonable times any production, collection, treatment, pollution management, monitoring, or discharge equipment or facilities, or any conditions relating to pollution or possible pollution of any waters of the state;

(D) Sample and make tests at all reasonable times; and

(E) The term "reasonable times" shall include normal business hours, hours during which production, prevention, control, or treatment occurs or times when the department reasonably suspects a violation of this chapter is or may be occurring.

(iv) Operational conditions.

(A) Fish mortalities, harvest blood, and any leachate from these materials shall be stored and disposed of in a manner so as to prevent such materials from entering the waters of the state.

(B) Accumulated solids and attached marine growth contained within or on the finfish rearing units shall be disposed of in a manner which prevents, to the maximum extent practicable, these materials from entering or reentering waters of the state.

(C) Discharging accumulated solids and marine growth removed from the finfish rearing units into waters of the state without prior treatment is prohibited.

(D) Storage quantities of all necessary chemicals, petroleum products, and potentially toxic substances essential to the day-to-day operation of the facility shall be minimized. These products shall be kept in leak proof storage areas which provide secondary containment.

(c) Pollution prevention plan. All marine finfish rearing facilities shall develop a pollution prevention plan within six months of permit issuance. Facilities which do not require discharge permits shall prepare and implement a pollution prevention plan within a year of the adoption date of this rule, or when fish are introduced, whichever is later.

(i) The plan shall address: Operating, spill prevention, spill response, solid waste, and storm water discharge practices which prevent or minimize the release of pollutants from the facility to the waters of the state.

(ii) Each facility shall be operated in accordance with its plan along with any subsequent plan amendments or revisions.

(iii) A copy of the most current version of the plan shall be maintained at the facility and available to the department upon request.

(5) **Environmental studies.** The purpose of these studies shall be to determine the potential of the discharge from a marine finfish rearing facility to have an adverse impact on existing water quality and sediment quality.

(a) Environmental studies shall be required as necessary to determine compliance with applicable water quality standards for each new facility which begins construction after November 1, 1995, or for each permitted facility which expands production by fifty percent over the permitted production on the effective date of this rule. Permitted production means the production level authorized for a facility in a waste discharge permit issued pursuant to chapter 90.48 RCW or shoreline permit issued pursuant to chapter 90.58 RCW. Existing facilities may be required to do environmental studies on a case-by-case basis.

(b) Environmental monitoring and reporting programs will be required to ensure the discharge from a facility complies with state water quality standards and sediment management standards. The department may require environmental monitoring programs through the issuance of wastewater discharge permits, and/or through administrative orders.

[Statutory Authority: RCW 90.48.220. 95-22-079 (Order 93-26), § 173-221A-110, filed 10/31/95, effective 12/1/95.]

WAC 173-221A-150 Enforcement. This chapter shall be enforced through all legal, equitable, and other methods available to the department, including, but not limited to those described in chapter 90.48 RCW.

[Statutory Authority: Chapter 90.48 RCW. 90-14-078 (Order 90-11), § 173-221A-150, filed 7/3/90, effective 8/3/90.]

Chapter 173-224 WAC

WASTEWATER DISCHARGE PERMIT FEES

(Formerly chapter 173-222 WAC)

WAC

173-224-015 Purpose.
173-224-020 Applicability.
173-224-030 Definitions.
173-224-040 Permit fee schedule.
173-224-050 Permit fee computation and payments.
173-224-060 Permits issued by other governmental agencies.
173-224-080 Transfer of ownership or control.
173-224-090 Small business fee reduction.
173-224-100 Administrative appeals to the department.
173-224-110 Deposits.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-224-070 Credits. [Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-070, filed 5/31/89 and 3/13/90, effective 4/13/90.] Repealed by 96-03-041 (Order 94-21), filed 1/10/96, effective 2/10/96. Statutory Authority: Chapter 90.48 RCW.

173-224-120 Past due payments. [Statutory Authority: Chapter 90.48 RCW. 92-03-131 (Order 91-45), § 173-224-120, filed 1/21/92, effective 2/21/92. Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-120, filed 5/31/89 and 3/13/90, effective 4/13/90.] Repealed by 08-16-109 (Order 08-05), filed 8/5/08, effective 9/5/08. Statutory Authority: Chapter 90.48 RCW.

WAC 173-224-015 Purpose. The purpose of this chapter is to establish a fee system for state waste discharge and NPDES permits issued by the department pursuant to RCW 90.48.160, 90.48.162, or 90.48.260. RCW 90.48.465 authorizes the department to base fees on factors related to the complexity of permit issuance and compliance and to charge fees to fully recover, but not exceed the costs of the permit program based on expenses incurred in the issuance and comprehensive administration of state waste discharge and NPDES permits. Fee amounts contained in this chapter represent the department's true estimate of fee eligible permit program costs and reflect the department's commitment to fully recover all eligible expenses. The department shall continue to examine the feasibility of adopting, when applicable, alternative permit fee systems. Any alternative fee system, such as variable permit fees, shall ensure continued full recovery of eligible program costs and may be based on pollutant loading and toxicity and may be designed to encourage recycling and reduction of the quantity of pollutants.

[Statutory Authority: Chapter 90.48 RCW. 92-03-131 (Order 91-45), § 173-224-015, filed 1/21/92, effective 2/21/92. Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-015, filed 5/31/89 and 3/13/90, effective 4/13/90.]

WAC 173-224-020 Applicability. This chapter applies to all persons holding or applying for a state waste discharge or NPDES permit issued by the department pursuant to RCW 90.48.160, 90.48.162, 90.48.200 or 90.48.260, including persons holding permits that remain in effect under WAC 173-216-040, 173-220-180(5), or 173-226-050. This chapter does not apply when a wastewater discharge permit is written for a state conducted remedial action under the Model Toxics Control Act. That is, ecology will not charge itself for wastewater discharge permits written for sites where the agency is conducting a cleanup.

[Statutory Authority: Chapter 90.48 RCW. 94-10-027 (Order 93-08), § 173-224-020, filed 4/28/94, effective 5/29/94; 92-03-131 (Order 91-45), § 173-224-020, filed 1/21/92, effective 2/21/92. Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-020, filed 5/31/89 and 3/13/90, effective 4/13/90.]

WAC 173-224-030 Definitions. "Administrative expenses" means those costs associated with issuing and administering permits under RCW 90.48.160, 90.48.162, and 90.48.260.

"Aggregate production" means the mining or quarrying of sand, gravel, or rock, or the production of concrete, or asphalt or a combination thereof.

"Aluminum and magnesium reduction mills" means the electrolytic reduction of alumina or magnesium salts to produce aluminum or magnesium metal.

"Animal unit" means the following:

Animal Type		Number of Animals per Animal Unit
Dairy Cows		
	Jersey Breed	
	Milking Cow	0.900
	Dry Cow	0.900
	Heifer	0.220
	Calf	0.220
	Other Breeds	
	Milking Cow	1.400
	Dry Cow	1.000
	Heifer	0.800
	Calf	0.500
Feedlot Beef		0.877
Horses		0.500

Animal Type	Number of Animals per Animal Unit
Sheep	0.100
Swine for breeding	0.375
Swine for slaughter	0.110
Laying hens & pullets > 3 months	0.004
Broilers & pullets < 3 months	0.002

For those concentrated animal feeding operations not listed on the above table, the department will use 1,000 pounds of live animal weight and the weight of the type of animal in determining the number of animal units.

"Annual permit fee" means the fee charged by the department for annual expenses associated with activities specified in RCW 90.48.465. This annual fee is based on the state's fiscal year (July 1 - June 30).

"bbls/d" means barrels per day of feedstock for petroleum refineries.

"bins/yr" means total standard bins used during the last complete calendar year by a facility in the crop preparing industry. The bins measure approximately 47.5 inches x 47.4 inches x 29.5 inches and hold approximately 870 pounds of fruit.

"Chemical pulp mill w/chlorine bleaching" means any pulp mill that uses chlorine or chlorine compounds in their bleaching process.

"Combined food processing waste treatment facility" means a facility that treats wastewater from more than one separately permitted food processor and receives no domestic wastewater or waste from industrial sources other than food processing.

"Combined industrial waste treatment" means a facility which treats wastewater from more than one industry in any of the following categories: Inorganic chemicals, metal finishing, ore concentration, organic chemicals, or photofinishers.

"Combined sewer overflow (CSO)" means the event during which excess combined sewage flow caused by inflow is discharged from a combined sewer, rather than conveyed to the sewage treatment plant because either the capacity of the treatment plant or the combined sewer is exceeded.

"Concentrated animal feeding operation" means an "animal feeding operation" that meets the criteria in Appendix B of 40 CFR 122 as presently enacted and any subsequent modifications thereto.

"Contaminants of concern" means a chemical for which an effluent limit is established (this does not include pH, flow, temperature, or other "nonchemical parameters"). Petroleum constituents will be considered as one contaminant of concern even if more than one effluent limit is established (e.g., Total Petroleum Hydrocarbons and BTEX).

"Crane" means a machine used for the hoisting and lifting of ship hulls.

"Crop preparing" means the preparation of fruit for wholesale or retail sale by washing and/or other processes in which the skin of the fruit is not broken and in which the interior part of the fruit does not come in direct contact with the wastewater.

"cu. yds/yr" means the total production from an aggregate production facility in cubic yards during the most recent completed calendar year.

"Department" means the department of ecology.

"Director" means the director of the department of ecology.

"Disturbed acres" means the total area which will be disturbed during all phases of the construction project or common plan of development or sale. This includes all clearing, grading, and excavating, and any other activity which disturbs the surface of the land.

"Domestic wastewater" means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments or other places, together with any ground water infiltration or surface waters that may be present.

"Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim or dispose of domestic wastewater together with such industrial waste as may be present.

"Existing operations" means those industrial operations requiring a wastewater discharge permit before July 1, 1993.

"EPA" means the United States Environmental Protection Agency.

"Fin fish rearing and hatching" means the raising of fin fish for fisheries enhancement or sale, by means of hatcheries, net pens, or other confined fish facilities.

"Flavor extraction" means the recovery of flavors or essential oils from organic products by steam distillation.

"Food processing" means the preparation of food for human or animal consumption or the preparation of animal byproducts, excluding crop preparing. This category includes, but is not limited to, fruit and vegetable processing, meat and poultry products processing, dairy products processing, beer production, rendering and animal feed production. Food processing wastewater treatment plants that treat wastes from only one separately permitted food processor must be treated as one facility for billing purposes.

"Gross revenue for business" means the gross income from Washington business activities as reported to the Washington state department of revenue.

"Hazardous waste clean up sites" means any facility where there has been confirmation of a release or threatened release of a hazardous substance that requires remedial action other than RCRA corrective action sites.

"Industrial facility" means any facility not included in the definition of municipal/domestic facility.

"Industrial gross revenue" means the annual amount of the sales of goods and services produced using the processes regulated by the wastewater discharge permit.

"Industrial storm water" means an operation required to be covered under ecology's NPDES and state waste discharge baseline general permit for storm water discharges associated with industrial activities or modifications to that permit or having an individual wastewater permit for storm water only.

"MGD" means permitted flow expressed in million gallons per day.

"Manufacturing" means the making of goods and articles by hand or especially, by machinery into a manufactured product.

"Median household income" means the most recent available census data, updated yearly based on inflation rates as measured by the Federal Bureau of Labor Statistics and published as the Consumer Price Index.

"Metal finishing" means the preparation of metal surfaces by means of electroplating, electroless plating, anodizing, coating (chromating, phosphating and coloring), chemical etching and milling, and printed circuit board manufacture.

"Municipal/domestic facility" means a publicly owned facility treating domestic wastewater together with any industrial wastes that may be present, or a privately owned facility treating solely domestic wastewater.

"Municipal gross revenue" means gross receipts from monthly, bimonthly, and/or quarterly user charges for sewer services received from all classes of customers;

Included in these user charges are user charges and fees based on wastewater constituents' strengths and characteristics including high-strength surcharges and charges based on biochemical oxygen demand, suspended solids, oil and grease, toxicants, heavy metals, and flow, etc.

Municipal gross revenue includes charges for receipt and treatment of septic tank wastes, holding tank wastes, chemical toilet wastes, etc.

Municipal gross revenue includes all amounts received from other municipalities for sewage interception, treatment, collection, or disposal.

Gross revenue excludes:

Amounts derived by municipalities directly from taxes levied for the support or maintenance of sewer services.

Late charges, penalties for nontimely payment by customers, interest on late payments, and all other penalties and fines.

Permit fees and compliance monitoring fees for wastewater discharge permits issued by municipalities with local pretreatment programs. Permit fees which are charged to cover the cost of providing sewer service are not excluded from municipal gross revenue.

Receipts by a municipality of special assessments or installments thereof and interests and penalties thereon, and charges in lieu of assessments.

Connection charges.

Revenues from sales of by-products such as sludge, processed wastewater, etc.

"Municipality" means a city, town, county, district, association, or other public body created by or in accordance with state law and that has jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under 33 U.S.C. Sec. 1288. State government agencies are not included in this definition.

"Noncontact cooling water with additives" means water used for cooling that does not come into direct contact with any raw materials, intermediate product, waste product or finished product, but which may contain chemicals or additives added by the permittee to control corrosion or fouling of the cooling system.

"Noncontact cooling water without additives" means water used for cooling that does not come into direct contact with any raw material, intermediate product, waste product or finished product, and which does not contain chemicals added by the permittee. The noncontact cooling water fee without additives category applies to those facilities which discharge only noncontact cooling water and which have no other wastewater discharges required to be permitted under RCW 90.48.160, 90.48.162, and 90.48.260.

"Nonferrous metals forming" means the manufacturing of semifinished products from pure metal or metal alloys other than iron or steel or of metals not otherwise classified in WAC 173-224-040(2).

"Nonoperating aggregate site" means a location where previous mining or processing has occurred; that has not been fully reclaimed; that has no current mining or processing, and that may include stockpiles of raw materials or finished products. The permittee may add or withdraw raw materials or finished products from the stockpiles for transportation offsite for processing, use, or sale and still be considered a nonoperating site. This definition can be found in ecology's *National Pollutant Discharge Elimination System and State Waste Discharge Permit for Process Water, Storm Water, and Mine Dewatering Water Discharges Associated with Sand and Gravel Operations, Rock Quarries and Similar Mining Facilities including Stockpiles of Mined Materials, Concrete Batch Operations and Asphalt Batch Operations.*

"NPDES permit" means a National Pollutant Discharge Elimination System permit issued by the department under Section 402 of the federal Clean Water Act and RCW 90.48.260.

"Person" means any political subdivision, government agency, municipality, industry, public or private corporation, partnership, association, firm, individual, or any other entity whatever.

"Portable facility" means a facility that is designed for mobility and is moved from site to site for short term operations. A portable facility applies only to an asphalt batch plant, portable concrete batch plant and portable rock crusher.

"RCRA" means Resource Conservation Recovery Act clean up sites required to have a wastewater discharge permit resulting from a corrective action under relevant federal authorities or under chapters 70.105 and 70.105D RCW including chapters 173-303 and 173-340 WAC, and are not subject to cost recovery.

"Residential equivalent" means a single-family residence or a unit of sewer service that yields an amount of gross revenue equal to the annual user charge for a single-family residence. In cases where the permit holder does not maintain data on gross revenue, user charges, and/or the number of single-family residences that it serves, "residential equivalent" means an influent flow of two hundred fifty gallons per day.

"Seafood processing" means:

(a) Preparing fresh, cooked, canned, smoked, preserved, or frozen seafoods, including marine and freshwater animals (fish, shellfish, crustaceans, etc.) and plants, for human or animal consumption; or

(b) Washing, shucking, and/or packaging of mollusks or crustaceans.

"Sewer service" means the activity of receiving sewage deposited into and carried off by a system of sewers, drains, and pipes to a common point, or points, for disposal or for transfer to treatment for disposal, and activities involving the

interception, transfer, storage, treatment, and/or disposal of sewage, or any of these activities.

"State waste discharge permit" means a permit required under RCW 98.48.260.

"Storm water" means an industrial operation or construction activity discharging storm water runoff as defined in 40 CFR 122.26 (b)(14) or facilities that are permitted as a significant contributor of pollutants as allowed in the federal Clean Water Act at Section 402 (p)(2)(E).

"Tons/yr." means the total production from an asphalt production facility in tons during the most recent completed calendar year.

"Vegetable/bulb washing" means the washing, packing, and shipping of fresh vegetables and bulbs when there is no cooking or cutting of the product before packing.

[Statutory Authority: Chapter 90.48 RCW. 08-16-109 (Order 08-05), § 173-224-030, filed 8/5/08, effective 9/5/08. Statutory Authority: RCW 90.48.465. 04-15-046, § 173-224-030, filed 7/13/04, effective 8/13/04. Statutory Authority: Chapter 90.48 RCW. 02-12-059, § 173-224-030, filed 5/30/02, effective 6/30/02; 00-02-031 (Order 99-03), § 173-224-030, filed 12/28/99, effective 1/28/00; 98-03-046 (Order 97-27), § 173-224-030, filed 1/15/98, effective 2/15/98; 94-10-027 (Order 93-08), § 173-224-030, filed 4/28/94, effective 5/29/94; 92-03-131 (Order 91-45), § 173-224-030, filed 1/21/92, effective 2/21/92. Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-030, filed 5/31/89 and 3/13/90, effective 4/13/90.]

WAC 173-224-040 Permit fee schedule. (1) Application fee. In addition to the annual fee, first time applicants (except those applying for coverage under a general permit) will pay a one time application fee of twenty-five percent of the annual permit fee, or $250.00, whichever is greater. An application fee will be assessed for RCRA sites regardless of whether a new permit is being issued or an existing permit for other than the discharge resulting from the RCRA corrective action, is being modified.

(2) Industrial facility categories.

INDUSTRIAL FACILITY CATEGORIES	FY 2009 ANNUAL PERMIT FEE	FY 2010 ANNUAL PERMIT FEE *
Aluminum Alloys	$16,713.00	$17,614.00
Aluminum and Magnesium Reduction Mills		
a. NPDES Permit	98,554.00	103,866.00
b. State Permit	49,279.00	51,935.00
Aluminum Forming	50,136.00	52,838.00
Aggregate Production - Individual Permit Coverage		
a. Mining Activities		
1. Mining, screening, washing and/or crushing	2,876.00	3,031.00
2. Nonoperating aggregate site (fee per site)	118.00	124.00
b. Asphalt Production		
1. 0 - < 50,000 tons/yr.	1,198.00	1,263.00
2. 50,000 - < 300,000 tons/yr.	2,877.00	3,032.00
3. 300,000 tons/yr. and greater	3,598.00	3,792.00
c. Concrete Production		
1. 0 - < 25,000 cu. yds/yr.	1,198.00	1,263.00
2. 25,000 - < 200,000 cu. yds/yr.	2,877.00	3,032.00
3. 200,000 cu. yds/yr. and greater	3,598.00	3,792.00
The fee for a facility in the aggregate production category is the sum of the applicable fees in the mining activities and concrete and asphalt production categories.		
d. Portable Operations		
1. Rock Crushing	2,876.00	3,031.00
2. Asphalt	2,876.00	3,031.00
3. Concrete	2,876.00	3,031.00
Aggregate Production - General Permit Coverage		
a. Mining Activities		
1. Mining, screening, washing and/or crushing	2,012.00	2,120.00
2. Nonoperating aggregate site (fee per site)	83.00	87.00
b. Asphalt Production		
1. 0 - < 50,000 tons/yr.	840.00	885.00
2. 50,000 - < 300,000 tons/yr.	2,013.00	2,122.00
3. 300,000 tons/yr. and greater	2,517.00	2,653.00
c. Concrete Production		
1. 0 - < 25,000 cu. yds/yr.	840.00	885.00
2. 25,000 - < 200,000 cu. yds/yr.	2,013.00	2,122.00
3. 200,000 cu. yds/yr. and greater	2,517.00	2,653.00
The fee for a facility in the aggregate production category is the sum of the applicable fees in the mining activities and concrete and asphalt production categories.		
d. Portable Operations		
1. Rock Crushing	2,013.00	2,122.00

INDUSTRIAL FACILITY CATEGORIES	FY 2009 ANNUAL PERMIT FEE	FY 2010 ANNUAL PERMIT FEE *
2. Asphalt	2,013.00	2,122.00
3. Concrete	2,013.00	2,122.00
Aquaculture		
a. Finfish hatching and rearing - Individual Permit	5,012.00	5,282.00
b. Finfish hatching and rearing - General Permit Coverage	3,511.00	3,700.00
c. Shellfish hatching	173.00	182.00
Aquatic Pest Control		
a. Irrigation Districts	377.00	397.00
b. Mosquito Control Districts	377.00	397.00
c. Invasive Moth Control	377.00	397.00
d. Aquatic Species Control & Eradication	377.00	397.00
e. Oyster Growers	377.00	397.00
f. Rotenone Control	377.00	397.00
Boat Yards - Individual Permit Coverage		
a. With storm water only discharge	428.00	451.00
b. All others	856.00	902.00
Boat Yards - General Permit Coverage		
a. With storm water only discharge	298.00	314.00
b. All others	602.00	634.00
Coal Mining and Preparation		
a. < 200,000 tons per year	6,680.00	7,040.00
b. 200,000 - < 500,000 tons per year	15,042.00	15,853.00
c. 500,000 - < 1,000,000 tons per year	26,739.00	28,180.00
d. 1,000,000 tons per year and greater	50,136.00	52,838.00
Combined Industrial Waste Treatment		
a. < 10,000 gpd	3,342.00	3,522.00
b. 10,000 - < 50,000 gpd	8,354.00	8,804.00
c. 50,000 - < 100,000 gpd	16,713.00	17,614.00
d. 100,000 - < 500,000 gpd	33,422.00	35,223.00
e. 500,000 gpd and greater	50,136.00	52,838.00
Combined Food Processing Waste Treatment Facilities	16,000.00	16,862.00
Combined Sewer Overflow System		
a. < 50 acres	3,342.00	3,522.00
b. 50 - < 100 acres	8,354.00	8,804.00
c. 100 - < 500 acres	10,030.00	10,571.00
d. 500 acres and greater	13,368.00	14,089.00
Commercial Laundry	428.00	451.00
Concentrated Animal Feeding Operation		
a. < 200 Animal Units	171.00	180.00
b. 200 - < 400 Animal Units	428.00	451.00
c. 400 - < 600 Animal Units	856.00	902.00
d. 600 - < 800 Animal Units	1,284.00	1,353.00
e. 800 Animal Units and greater	1,714.00	1,806.00
Crop Preparing - Individual Permit Coverage		
a. 0 - < 1,000 bins/yr.	333.00	351.00
b. 1,000 - < 5,000 bins/yr.	669.00	705.00
c. 5,000 - < 10,000 bins/yr.	1,337.00	1,409.00
d. 10,000 - < 15,000 bins/yr.	2,676.00	2,820.00
e. 15,000 - < 20,000 bins/yr.	4,425.00	4,664.00
f. 20,000 - < 25,000 bins/yr.	6,183.00	6,516.00
g. 25,000 - < 50,000 bins/yr.	8,271.00	8,717.00
h. 50,000 - < 75,000 bins/yr.	9,192.00	9,687.00
i. 75,000 - < 100,000 bins/yr.	10,694.00	11,270.00
j. 100,000 - < 125,000 bins/yr.	13,368.00	14,089.00
k. 125,000 - < 150,000 bins/yr.	16,712.00	17,613.00
l. 150,000 bins/yr. and greater	20,055.00	21,136.00
Crop Preparing - General Permit Coverage		
a. 0 - < 1,000 bins/yr.	232.00	245.00

INDUSTRIAL FACILITY CATEGORIES	FY 2009 ANNUAL PERMIT FEE	FY 2010 ANNUAL PERMIT FEE *
b. 1,000 - < 5,000 bins/yr.	468.00	493.00
c. 5,000 - < 10,000 bins/yr.	937.00	988.00
d. 10,000 - < 15,000 bins/yr.	1,873.00	1,974.00
e. 15,000 - < 20,000 bins/yr.	3,100.00	3,267.00
f. 20,000 - < 25,000 bins/yr.	4,328.00	4,561.00
g. 25,000 - < 50,000 bins/yr.	5,788.00	6,100.00
h. 50,000 - < 75,000 bins/yr.	6,433.00	6,780.00
i. 75,000 - < 100,000 bins/yr.	7,481.00	7,884.00
j. 100,000 - < 125,000 bins/yr.	9,360.00	9,865.00
k. 125,000 - < 150,000 bins/yr.	11,698.00	12,329.00
l. 150,000 bins/yr. and greater	14,037.00	14,794.00
Dairies $.50 per Animal Unit not to exceed 1,199.00 for FY 2009 and $1,264.00 for FY 2010		
Facilities Not Otherwise Classified - Individual Permit Coverage		
a. < 1,000 gpd	1,671.00	1,761.00
b. 1,000 - < 10,000 gpd	3,342.00	3,522.00
c. 10,000 - < 50,000 gpd	8,355.00	8,805.00
d. 50,000 - < 100,000 gpd	13,368.00	14,089.00
e. 100,000 - < 500,000 gpd	26,606.00	28,040.00
f. 500,000 - < 1,000,000 gpd	33,422.00	35,223.00
g. 1,000,000 gpd and greater	50,135.00	52,837.00
Facilities Not Otherwise Classified - General Permit Coverage		
a. < 1,000 gpd	1,172.00	1,235.00
b. 1,000 - < 10,000 gpd	2,425.00	2,556.00
c. 10,000 - < 50,000 gpd	5,851.00	6,166.00
d. 50,000 - < 100,000 gpd	9,360.00	9,865.00
e. 100,000 - < 500,000 gpd	18,715.00	19,724.00
f. 500,000 - < 1,000,000 gpd	23,394.00	24,655.00
g. 1,000,000 gpd and greater	35,095.00	36,987.00
Flavor Extraction		
a. Steam Distillation	171.00	180.00
Food Processing		
a. < 1,000 gpd	1,670.00	1,760.00
b. 1,000 - < 10,000 gpd	4,259.00	4,489.00
c. 10,000 - < 50,000 gpd	7,604.00	8,014.00
d. 50,000 - < 100,000 gpd	11,948.00	12,592.00
e. 100,000 - < 250,000 gpd	16,712.00	17,613.00
f. 250,000 - < 500,000 gpd	21,977.00	23,162.00
g. 500,000 - < 750,000 gpd	27,572.00	29,058.00
h. 750,000 - < 1,000,000 gpd	33,422.00	35,223.00
i. 1,000,000 - < 2,500,000 gpd	41,175.00	43,394.00
j. 2,500,000 - < 5,000,000 gpd	45,957.00	48.434.00
k. 5,000,000 gpd and greater	50,136.00	52,838.00
Fuel and Chemical Storage		
a. < 50,000 bbls	1,671.00	1,761.00
b. 50,000 - < 100,000 bbls	3,342.00	3,522.00
c. 100,000 - < 500,000 bbls	8,354.00	8,804.00
d. 500,000 bbls and greater	16,713.00	17,614.00
Hazardous Waste Clean Up Sites		
a. Leaking Underground Storage Tanks (LUST)		
1. State Permit	4,383.00	4,619.00
2. NPDES Permit Issued pre 7/1/94	4,383.00	4,619.00
3. NPDES Permit Issued post 7/1/94	8,765.00	9,237.00
b. Non-LUST Sites		
1. 1 or 2 Contaminants of concern	8,570.00	9,032.00
2. > 2 Contaminants of concern	17,140.00	18,064.00
Ink Formulation and Printing		
a. Commercial Print Shops	2,571.00	2,710.00

INDUSTRIAL FACILITY CATEGORIES	FY 2009 ANNUAL PERMIT FEE	FY 2010 ANNUAL PERMIT FEE *
b. Newspapers	4,286.00	4,517.00
c. Box Plants	6,856.00	7,226.00
d. Ink Formulation	8,571.00	9,033.00
Inorganic Chemicals Manufacturing		
a. Lime Products	8,354.00	8,804.00
b. Fertilizer	10,058.00	10,600.00
c. Peroxide	13,368.00	14,089.00
d. Alkaline Earth Salts	16,713.00	17,614.00
e. Metal Salts	23,393.00	24,654.00
f. Acid Manufacturing	33,416.00	35,217.00
g. Chlor-alkali	66,846.00	70,449.00
Iron and Steel		
a. Foundries	16,713.00	17,614.00
b. Mills	33,453.00	35,256.00
Metal Finishing		
a. < 1,000 gpd	2,004.00	2,112.00
b. 1,000 - < 10,000 gpd	3,341.00	3,521.00
c. 10,000 - < 50,000 gpd	8,353.00	8,803.00
d. 50,000 - < 100,000 gpd	16,712.00	17,613.00
e. 100,000 - < 500,000 gpd	33,420.00	35,221.00
f. 500,000 gpd and greater	50,133.00	52,835.00
Noncontact Cooling Water With Additives - Individual Permit Coverage		
a. < 1,000 gpd	1,046.00	1,102.00
b. 1,000 - < 10,000 gpd	1,459.00	1,538.00
c. 10,000 - < 50,000 gpd	3,136.00	3,305.00
d. 50,000 - < 100,000 gpd	7,314.00	7,708.00
e. 100,000 - < 500,000 gpd	12,531.00	13,206.00
f. 500,000 - < 1,000,000 gpd	17,758.00	18,715.00
g. 1,000,000 - < 2,500,000 gpd	22,982.00	24,221.00
h. 2,500,000 - < 5,000,000 gpd	28,082.00	29,596.00
i. 5,000,000 gpd and greater	33,422.00	35,223.00
Noncontact Cooling Water With Additives - General Permit Coverage		
a. < 1,000 gpd	733.00	773.00
b. 1,000 - < 10,000 gpd	1,461.00	1,540.00
c. 10,000 - < 50,000 gpd	2,195.00	2,313.00
d. 50,000 - < 100,000 gpd	5,120.00	5,396.00
e. 100,000 - < 500,000 gpd	8,773.00	9,246.00
f. 500,000 - < 1,000,000 gpd	12,432.00	13,102.00
g. 1,000,000 - < 2,500,000 gpd	16,086.00	16,953.00
h. 2,500,000 - < 5,000,000 gpd	19,739.00	20,803.00
i. 5,000,000 gpd and greater	23,394.00	24,655.00
Noncontact Cooling Water Without Additives - Individual Permit Coverage		
a. < 1,000 gpd	838.00	883.00
b. 1,000 - < 10,000 gpd	1,671.00	1,761.00
c. 10,000 - < 50,000 gpd	2,509.00	2,644.00
d. 50,000 - < 100,000 gpd	5,851.00	6,166.00
e. 100,000 - < 500,000 gpd	10,030.00	10,571.00
f. 500,000 - < 1,000,000 gpd	14,203.00	14,969.00
g. 1,000,000 - < 2,500,000 gpd	18,310.00	19,297.00
h. 2,500,000 - < 5,000,000 gpd	22,559.00	23,775.00
i. 5,000,000 gpd and greater	26,739.00	28,180.00
Noncontact Cooling Water Without Additives - General Permit Coverage		
a. < 1,000 gpd	586.00	618.00
b. 1,000 - < 10,000 gpd	1,172.00	1,235.00
c. 10,000 - < 50,000 gpd	1,757.00	1,852.00
d. 50,000 - < 100,000 gpd	4,095.00	4,316.00
e. 100,000 - < 500,000 gpd	7,019.00	7,397.00
f. 500,000 - < 1,000,000 gpd	9,944.00	10,480.00

INDUSTRIAL FACILITY CATEGORIES	FY 2009 ANNUAL PERMIT FEE	FY 2010 ANNUAL PERMIT FEE *
g. 1,000,000 - < 2,500,000 gpd	12,868.00	13,562.00
h. 2,500,000 - < 5,000,000 gpd	15,793.00	16,644.00
i. 5,000,000 gpd and greater	18,715.00	19,724.00
Nonferrous Metals Forming	16,713.00	17,614.00
Ore Mining		
a. Ore Mining	3,342.00	3,522.00
b. Ore mining with physical concentration processes	6,682.00	7,042.00
c. Ore mining with physical and chemical concentration processes	26,739.00	28,180.00
Organic Chemicals Manufacturing		
a. Fertilizer	16,713.00	17,614.00
b. Aliphatic	33,422.00	35,223.00
c. Aromatic	50,136.00	52,838.00
Petroleum Refining		
a. < 10,000 bbls/d	33,422.00	35,223.00
b. 10,000 - < 50,000 bbls/d	66,266.00	69,838.00
c. 50,000 bbls/d and greater	133,699.00	140,905.00
Photofinishers		
a. < 1,000 gpd	1,337.00	1,409.00
b. 1,000 gpd and greater	3,342.00	3,522.00
Power and/or Steam Plants		
a. Steam Generation - Nonelectric	6,680.00	7,040.00
b. Hydroelectric	6,680.00	7,040.00
c. Nonfossil Fuel	10,028.00	10,569.00
d. Fossil Fuel	26,739.00	28,180.00
Pulp, Paper and Paper Board		
a. Fiber Recyclers	16,711.00	17,612.00
b. Paper Mills	33,422.00	35,223.00
c. Groundwood Pulp Mills		
1. < 300 tons per day	50,136.00	52,838.00
2. > 300 tons per day	100,270.00	105,675.00
d. Chemical Pulp Mills w/o Chlorine Bleaching	133,692.00	140,898.00
e. Chemical Pulp Mills w/Chlorine Bleaching	150,400.00	158,507.00
Radioactive Effluents and Discharges (RED)		
a. < 3 waste streams	32,332.00	34,075.00
b. 3 - < 8 waste streams	56,147.00	59,173.00
c. 8 waste streams and greater	92,478.00	97,463.00
RCRA Corrective Action Sites	23,490.00	24,756.00
Seafood Processing		
a. < 1,000 gpd	1,671.00	1,761.00
b. 1,000 - < 10,000 gpd	4,259.00	4,489.00
c. 10,000 - < 50,000 gpd	7,604.00	8,014.00
d. 50,000 - < 100,000 gpd	11,948.00	12,592.00
e. 100,000 gpd and greater	16,713.00	17,614.00
Shipyards		
a. Per crane, travel lift, small boat lift	3,342.00	3,552.00
b. Per drydock under 250 ft in length	3,342.00	3,552.00
c. Per graving dock	3,342.00	3,552.00
d. Per marine way	5,012.00	5,282.00
e. Per sycrolift	5,012.00	5,282.00
f. Per drydock over 250 ft in length	6,682.00	7,042.00
g. In-water vessel maintenance	6,682.00	7,042.00
The fee for a facility in the shipyard category is the sum of the fees for the applicable units in the facility.		
Solid Waste Sites (nonstorm water)		
a. Nonputrescible	6,682.00	7,042.00
b. < 50 acres	13,367.00	14,087.00

INDUSTRIAL FACILITY CATEGORIES	FY 2009 ANNUAL PERMIT FEE	FY 2010 ANNUAL PERMIT FEE *
c. 50 - < 100 acres	26,739.00	28,180.00
d. 100 - < 250 acres	33,422.00	35,223.00
e. 250 acres and greater	50,136.00	52,838.00
Textile Mills	66,846.00	70,449.00
Timber Products		
a. Log Storage	3,342.00	3,522.00
b. Veneer	6,682.00	7,042.00
c. Sawmills	13,368.00	14,089.00
d. Hardwood, Plywood	23,393.00	24,654.00
e. Wood Preserving	32,094.00	33,824.00
Vegetable/Bulb Washing Facilities		
a. < 1,000 gpd	110.00	116.00
b. 1,000 - < 5,000 gpd	224.00	236.00
c. 5,000 - < 10,000 gpd	440.00	464.00
d. 10,000 - < 20,000 gpd	887.00	935.00
e. 20,000 and greater	1,464.00	1,543.00
Vehicle Maintenance and Freight Transfer		
a. < 0.5 acre	3,342.00	3,522.00
b. 0.5 - < 1.0 acre	6,682.00	7,042.00
c. 1.0 acre and greater	10,028.00	10,569.00
Water Plants - Individual Permit Coverage	4,180.00	4,405.00
Water Plants - General Permit Coverage	2,925.00	3,083.00
Wineries		
a. < 500 gpd	341.00	359.00
b. 500 - < 750 gpd	684.00	721.00
c. 750 - < 1,000 gpd	1,367.00	1,441.00
d. 1,000 - < 2,500 gpd	2,734.00	2,881.00
e. 2,500 - < 5,000 gpd	4,362.00	4,597.00
f. 5,000 gpd and greater	5,987.00	6,310.00

* FY 2010 fee amounts are applicable if, and only if, the 2009 state legislature approves ecology's request to increase fees in FY 2010 by the fiscal growth factor. If the fee increase is not approved, the FY 2009 fees will remain in effect.

(a) Facilities other than those in the aggregate production, shipyard, or RCRA categories that operate within several fee categories or subcategories, shall be charged from that category or subcategory with the highest fee.

(b) The total annual permit fee for a water treatment plant that primarily serves residential customers may not exceed three dollars per residential equivalent. The number of residential equivalents is determined by dividing the facility's annual gross revenue in the previous calendar year by the annual user charge for a single family residence that uses nine hundred cubic feet of water per month.

(c) Crop preparation and aggregate production permit holders are required to submit information to the department certifying annual production (calendar year) or unit processes. When required, the department will send the information form to the permit holder. The permit holder shall complete and return the information form to the department by the required due date. Failure to provide this information will result in a fee determination based on the highest subcategory the facility has received permit coverage in.

(i) Information submitted shall bear a certification of correctness and be signed:

(A) In the case of a corporation, by an authorized corporate officer;

(B) In the case of a limited partnership, by an authorized general partner;

(C) In the case of a general partnership, by an authorized partner; or

(D) In the case of a sole proprietorship, by the proprietor.

(ii) The department may verify information submitted and, if it determines that false or inaccurate statements have been made, it may, in addition to taking other actions provided by law, revise both current and previously granted fee determinations.

(d) Fees for crop preparers discharging only noncontact cooling water without additives shall pay the lesser of the applicable fee in the crop preparing or noncontact cooling water without additives categories.

(e) Where no clear industrial facility category exists for placement of a permit holder, the department may elect to place the permit holder in a category with dischargers or permit holders that contain or use similar properties or processes and/or a category which contains similar permitting complexities to the department.

(f) Hazardous waste clean up sites and EPA authorized RCRA corrective action sites with whom the department has begun cost recovery through chapter 70.105D RCW shall not pay a permit fee under chapter 173-224 WAC until such time as the cost recovery under chapter 70.105D RCW ceases.

(g) Any permit holder, with the exception of nonoperating aggregate operations or a permitted portable facility, who has not been in continuous operation within a consecutive

eighteen-month period or who commits to not being in operation for a consecutive eighteen-month period or longer can have their permit fee reduced to twenty-five percent of the fee that they would be otherwise assessed. This nonoperating mode must be verified by the appropriate ecology staff. Once operations resume, the permit fee will be returned to the full amount.

Facilities who commit to the minimum eighteen-month nonoperating mode but go back into operation during the same eighteen-month period will be assessed permit fees as if they were active during the entire period.

(h) Facilities with subcategories based on gallons per day (gpd) shall have their annual permit fee determined by using the maximum daily flow or maximum monthly average permitted flow in gallons per day as specified in the waste discharge permit, whichever is greater.

(i) RCRA corrective action sites requiring a waste discharge permit will be assessed a separate permit fee regardless of whether the discharge is authorized by a separate permit or by a modification to an existing permit for a discharge other than that resulting from the corrective action.

(3) MUNICIPAL/DOMESTIC FACILITIES

(a) The annual permit fee for a permit held by a municipality for a domestic wastewater facility issued under RCW 90.48.162 or 90.48.260 is determined as follows:

Residential Equivalents (RE)	FY 2009 Annual Permit Fee	FY 2010 Annual Permit Fee*
< 250,000	$1.80	$1.80
> 250,000	1.25	1.32

* FY 2010 fee amounts are applicable if, and only if, the 2009 state legislature approves ecology's request to increase fees in FY 2010 by the state fiscal growth factor. If the fee increase is not approved, the FY 2009 fees will remain in effect.

(b) The annual permit fee under RCW 90.48.162 or 90.48.260 that is held by a municipality which:

(i) Holds more than one permit for domestic wastewater facilities; and

(ii) Treats each domestic wastewater facility as a separate accounting entity, is determined as in (a) of this subsection.

A separate accounting entity is one that maintains separate funds or accounts for each domestic wastewater facility. Revenues are received from the users to pay for the costs of operating that facility.

(c) The sum of the annual permit fees for permits held by a municipality that:

(i) Holds more than one permit for domestic wastewater facilities issued under RCW 90.48.162 or 90.48.260; and

(ii) Does not treat each domestic wastewater facility as a separate accounting entity, as described in (b) of this subsection, is determined as in (a) of this subsection.

(d) The permit fee for a privately owned domestic wastewater facility that primarily serves residential customers is determined as in (a) of this subsection. Residential customers are those whose lot, parcel or real estate, or building is primarily used for domestic dwelling purposes.

(e) The annual permit fee for privately owned domestic wastewater facilities must be determined by using the maximum daily flow or maximum monthly average permitted flow in million gallons per day, whichever is greater, as specified in the waste discharge permit. Permit fees for privately owned domestic wastewater facilities that do not serve primarily residential customers and for state-owned domestic wastewater facilities are the following:

Permitted Flows	FY 2009 Annual Permit Fee	FY 2010 Annual Permit Fee*
.1 MGD and Greater	$8,354.00	$8,804.00
.05 MGD to < .1 MGD	3,342.00	3,522.00
.0008 MGD to < .05 MGD	1,671.00	1,761.00
< .0008 MGD	504.00	531.00

* FY 2010 fee amounts are applicable if, and only if, the 2009 state legislature approves ecology's request to increase fees in FY 2010 by the fiscal growth factor. If the fee increase is not approved, the FY 2009 fees will remain in effect.

(f) The number of residential equivalents is calculated in the following manner:

(i) If the facility serves only single-family residences, the number of residential equivalents is the number of single-family residences that it served on January 1 of the previous calendar year.

(ii) If the facility serves both single-family residences and other classes of customers, the number of residential equivalents is calculated in the following manner:

(A) Calculation of the number of residential equivalents that the facility serves in its own service area. Subtract from the previous calendar year's gross revenue:

(I) Any amounts received from other municipalities for sewage interception, treatment, collection, or disposal; and

(II) Any user charges received from customers for whom the permit holder pays amounts to other municipalities for sewage treatment or disposal services. Divide the resulting figure by the annual user charge for a single-family residence.

(B) Calculation of the number of residential equivalents that the facility serves in other municipalities which pay amounts to the facility for sewage interception, treatment, collection, or disposal:

(I) Divide any amounts received from other municipalities during the previous calendar year by the annual user charge for a single-family residence. In this case "annual user charge for a single-family residence" means the annual user charge that the facility charges other municipalities for sewage interception, treatment, collection, or disposal services for a single-family residence. If the facility charges different municipalities different single-family residential user fees, then the charge used in these calculations must be that which applies to the largest number of single-family residential customers. Alternatively, if the facility charges different municipalities different single-family residential user fees, the permit holder may divide the amount received from each municipality by the annual user charge that it charges that municipality for a single-family residence and sum the resulting figures.

(II) If the facility does not charge the other municipality on the basis of a fee per single-family residence, the number of residential equivalents in the other municipality is calculated by dividing its previous calendar year's gross revenue by its annual user fee for a single-family residence. If the other municipality does not maintain data on its gross revenue, user fees, and/or the number of single-family residences

that it serves, the number of residential equivalents is calculated as in (f)(iv) of this subsection.

(III) If the other municipality serves only single-family residences, the number of residential equivalents may be calculated as in (f)(i) of this subsection.

The sum of the resulting figures is the number of residential equivalents that the facility serves in other municipalities.

(C) The number of residential equivalents is the sum of the number of residential equivalents calculated in (f)(ii)(A) and (B) of this subsection.

(iii) The annual user fee for a single-family residence is calculated by either of the following methods, at the choice of the permit holder:

(A) The annual user fee for a single-family residence using nine hundred cubic feet of water per month. If users are billed monthly, this is calculated by multiplying by twelve the monthly user fee for a single-family residence using nine hundred cubic feet of water per month. If users are billed bimonthly, the annual user fee is calculated by multiplying by six the bimonthly user fee for a single-family residence using one thousand eight hundred cubic feet of water per two-month period. If the user fee for a single-family residence varies, depending on age, income, location, etc., then the fee used in these calculations must be that which applies to the largest number of single-family residential customers.

(B) The average annual user fee for a single-family residence. This average is calculated by dividing the previous calendar year's gross revenue from provision of sewer services to single-family residences by the number of single-family residences served on January 1 of the previous calendar year. If the user fee for a single-family residence varies, depending on age, income, location, etc., then the gross revenue and number of single-family residences used in making this calculation must be those for all the single-family residential customers.

In either case, (f)(iii)(A) or (B) of this subsection, the permit holder must provide the department with a copy of its complete sewer rate schedule for all classes of customers.

(iv) If a permit holder does not maintain data on its gross revenue, user fees, and/or the number of single-family residences that it serves, and therefore cannot use the methods described in (f)(i) or (ii) of this subsection to calculate the number of residential equivalents that it serves, then the number of residential equivalents that it serves is calculated by dividing the average daily influent flow to its facility for the previous calendar year by two hundred fifty gallons. This average is calculated by summing all the daily flow measurements taken during the previous calendar year and then dividing the resulting sum by the number of days on which flow was measured. Data for this calculation must be taken from the permit holder's discharge monitoring reports. Permit holders using this means of calculating the number of their residential equivalents must submit with their application a complete set of copies of their discharge monitoring reports for the previous calendar year.

(g) Fee calculation procedures for holders of permits for domestic wastewater facilities.

(i) Municipalities holding permits for domestic wastewater facilities issued under RCW 90.48.162 and 90.48.260, and holders of permits for privately owned domestic wastewater facilities that primarily serve residential customers must complete a form certifying the number of residential equivalents served by their domestic wastewater system. The form must be completed and returned to the department within thirty days after it is mailed to the permit holder by the department. Failure to return the form could result in permit termination.

(ii) The form shall bear a certification of correctness and be signed:

(A) In the case of a corporation, by an authorized corporate officer;

(B) In the case of a limited partnership, by an authorized partner;

(C) In the case of a general partnership, by an authorized partner;

(D) In the case of a sole proprietorship, by the proprietor; or

(E) In the case of a municipal or other public facility, by either a ranking elected official or a principal executive officer.

(iii) The department may verify the information contained in the form and, if it determines that the permit holder has made false statements, may, in addition to taking other actions provided by law, revise both current and previously granted fee determinations.

(4) STORM WATER PERMIT COVERAGES (UNLESS SPECIFICALLY CATEGORIZED ELSEWHERE IN WAC 173-224-040(2))

		FY 2009 Annual Permit Fee	FY 2010 Annual Permit Fee *
a.	Individual Construction or Industrial Storm Water Permits		
	1. < 50 acres	$3,342.00	$3,522.00
	2. 50 -< 100 acres	$6,680.00	$7,040.00
	3. 100 -< 500 acres	$10,028.00	$10,569.00
	4. 500 acres and greater	$13,368.00	$14,089.00
b.	Facilities Covered Under the Industrial Storm Water General Permit		
	1. Municipalities and state agencies	$1,094.00	$1,153.00
	2. New permit holders without historical gross revenue information	$575.00	$606.00
	3. The permit fee for all other permit holders shall be based on the gross revenue of the business for the previous calendar year		
	Gross Revenue		
	Less than $100,000	$106.00	$112.00
	$100,000 -< $1,000,000	$461.00	$486.00

$1,000,000 -< $2,500,000	$552.00	$582.00
$2,500,000 -< $5,000,000	$921.00	$971.00
$5,000,000 -< $10,000,000	$1,382.00	$1,456.00
$10,000,000 and greater	$1,669.00	$1,759.00

To be eligible for less than the maximum permit fee, the permit holder must provide documentation to substantiate the gross revenue claims. Documentation shall be provided annually in a manner prescribed by the department. The documentation shall bear a certification of correctness and be signed:

(a) In the case of a corporation, by an authorized corporate officer;

(b) In the case of a limited partnership, by an authorized general partner;

(c) In the case of a general partnership, by an authorized partner; or

(d) In the case of a sole proprietorship, by the proprietor.

The department may verify the information contained in the submitted documentation and, if it determines that the permit holder has made false statements, may deny the adjustment, revoke previously granted fee adjustments, and/or take such other actions deemed appropriate or required under state or federal law.

c.	Construction Activities Covered Under the Construction Storm Water General Permit(s)		
1.	Less than 5 acres disturbed area	$432.00	$455.00
2.	5 -< 7 acres of disturbed area	$703.00	$741.00
3.	7 -< 10 acres of disturbed area	$950.00	$1,001.00
4.	10 -< 20 acres of disturbed area	$1,295.00	$1,365.00
5.	20 acres and greater of disturbed area	$1,611.00	$1,698.00

* FY 2010 fee amounts are applicable if, and only if, the 2009 state legislature approves ecology's request to increase fees in FY 2010 by the fiscal growth factor. If the fee increase is not approved, the FY 2009 fees will remain in effect.

(5) MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMITS

(a) Except as provided for in (d) of this subsection, the municipal storm water permit annual fee for the entities listed below will be:

Name of Entity	FY 2009 Annual Permit Fee	FY 2010 Annual Permit Fee*
King County	$38,067.00	$40,119.00
Snohomish County	38,067.00	40,119.00
Pierce County	38,067.00	40,119.00
Tacoma, City of	38,067.00	40,119.00
Seattle, City of	38,067.00	40,119.00
Washington Department of Transportation	38,067.00	40,119.00
Clark County	38,067.00	40,119.00

* FY 2010 fee amounts are applicable if, and only if, the 2009 state legislature approves ecology's request to increase fees in FY 2010 by the fiscal growth factor. If the fee increase is not approved, the FY 2009 fees will remain in effect.

(b) Municipal storm water general permit fees for cities and counties, except as otherwise provided for in (a), (c), and (d) of this subsection, will be determined in the following manner: For fiscal year 2009, ecology will charge $1.11 per housing unit inside the geographic area covered by the permit for those cities and counties whose median household income exceeds the state average. Cities and counties whose median household income is less than the state average will have their fee per housing unit reduced to $.53 per housing unit inside the geographic area covered by the permit. If, and only if, the 2009 state legislature approves ecology's request to increase fees in FY 2010 by the fiscal growth factor, ecology will charge $1.17 per housing unit inside the geographic area covered by the permit for those cities and counties whose median household income exceeds the state average. Cities and counties whose median household income is less than the state average will have their fee per housing unit reduced to $.56 per housing unit inside the geographic area covered by the permit. Fees will not exceed $38,067.00 for fiscal year 2009 and $40,119.00 for fiscal year 2010. If ecology's request for the FY 2010 fee increase is not approved, the FY 2009 fee amount will remain in effect until this section is next amended. The minimum annual fee will not be lower than $1,584.00 unless the permitted city or county has a median household income less than the state average. In this case, the city or county will pay a fee totaling $.53 per housing unit for fiscal year 2009. The fee amount for FY 2010 will be $.56 per housing unit if, and only if, the state legislature approves ecology's request to increase fees by the fiscal growth factor. If ecology's request for a FY 2010 fee increase is not approved, the FY 2009 fee amount will remain in effect until this section is next amended.

(c) Other entities required to have permit coverage under a municipal storm water general permit will pay an annual fee based on the entities' previous year's annual operating budget as follows:

Annual Operating Budget	FY 2009 Annual Permit Fee	FY 2010 Annual Permit Fee *
Less than $100,000	$111.00	$117.00
$100,000 -< $1,000,000	$446.00	$470.00
$1,000,000 -< $5,000,000	$1,114.00	$1,174.00
$5,000,000 -< $10,000,000	$1,670.00	$1,760.00
$10,000,000 and greater	$2,784.00	$2,934.00

* FY 2010 fee amounts are applicable if, and only if, the 2009 state legislature approves ecology's request to increase fees in FY 2010 by the fiscal growth factor. If the fee increase is not approved, the FY 2009 fees will remain in effect.

For the purposes of determining the annual permit fee category, the annual operating budget shall be the entities' annual operating budget for the entities' previous fiscal year and shall be determined as follows:

(i) For diking, drainage, irrigation, and flood control districts, the district's annual operating budget.

(ii) For ports, the annual operating budget for the port district.

(iii) For colleges, schools, and universities, the portion of the operating budget related to plant or facilities operation and maintenance for the site or sites subject to the permit.

(iv) For state agencies, the annual operating budget for the site or sites subject to the permit.

(v) For other entities not listed, ecology will consider annual revenue, and the noncapital operating budget for the site subject to the permit.

(d) Municipal storm water permits written specifically for a single entity, such as a single city, county, or agency, issued after the effective date of this rule will have its annual fee determined in the following manner:

(i) For cities and counties listed in (a) of this subsection, the fee shall be five times the amount identified.

(ii) For cities and counties whose median household income exceeds the state average, the fee shall be the higher of either five times the otherwise applicable general permit fee or $30,000. For municipalities whose median household income is less than the state average, the fee shall be the higher of 2.5 times the otherwise applicable general permit fee or $15,000.

(iii) For entities that would otherwise be covered under a municipal storm water general permit as determined in (c) of this subsection, the fiscal year 2009 annual fee for a permit written for a specific entity shall be $7,918.00. If, and only if, the state legislature approves ecology's request to increase fees in FY 2010, the annual fee will be $8,345.00. However, if a fee increase is not approved, the FY 2009 fee amount will remain in effect until this section is next amended.

(e) Ecology will assess a single permit fee for entities which apply only as co-permittees or co-applicants. The permit fee shall be equal to the highest single permit fee which would have been assessed if the co-permittees had applied separately.

[Statutory Authority: Chapter 90.48 RCW. 08-16-109 (Order 08-05), § 173-224-040, filed 8/5/08, effective 9/5/08. Statutory Authority: RCW 90.48.-465. 06-12-028 (Order 05-17), § 173-224-040, filed 5/30/06, effective 6/30/06; 04-15-046, § 173-224-040, filed 7/13/04, effective 8/13/04. Statutory Authority: Chapter 90.48 RCW. 02-12-059, § 173-224-040, filed 5/30/02, effective 6/30/02; 00-13-010 (Order 00-06), § 173-224-040, filed 6/9/00, effective 7/10/00; 00-02-031 (Order 99-03), § 173-224-040, filed 12/28/99, effective 1/28/00; 98-03-046 (Order 97-27), § 173-224-040, filed 1/15/98, effective 2/15/98; 96-03-041 (Order 94-21), § 173-224-040, filed 1/10/96, effective 2/10/96; 94-10-027 (Order 93-08), § 173-224-040, filed 4/28/94, effective 5/29/94; 92-03-131 (Order 91-45), § 173-224-040, filed 1/21/92, effective 2/21/92. Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-040, filed 5/31/89 and 3/13/90, effective 4/13/90.]

WAC 173-224-050 Permit fee computation and payments. (1) The department shall charge permit fees based on the permit fee schedule contained in WAC 173-224-040. The department may charge fees at the beginning of the year to which they apply. The department shall notify permit holders of fee charges by mailing billing statements. Permit fees must be received by the department within forty-five days after the department mails a billing statement. The department may elect to bill permit holders a prorated portion of the annual fee on a monthly, quarterly, or other periodic basis.

(2) Permit fee computation for individual permits. Computation of permit fees shall begin on the first day of each fiscal year. In the case of facilities or activities not previously covered by permits, fee computation begins on the issuance date of the permit. In the case of applicants for state waste discharge permits who are deemed to have a temporary permit under RCW 90.48.200, computation shall begin on the sixty-first day after the department accepts a completed application. In the case of NPDES permit holders who submit a new, updated permit application containing information that could change their assigned permit fee, computation and permit fee category reassignment begins upon acceptance of the application by the department. Any facility that obtains permit coverage but fails to operate will still be obligated to pay the annual permit fee assessment until the permit has been terminated by the department. Permits terminated during the fiscal year will have their fees prorated as follows unless it results in an annual fee assessment of less than one hundred dollars. Ecology will not process refunds of one hundred dollars or less:

(a) Permit coverage for up to three months will pay twenty-five percent of the annual permit fee;

(b) Permit coverage for three to six months will pay fifty percent of the annual permit fee;

(c) Permit coverage for six to nine months will pay seventy-five percent of the annual permit fee; and

(d) Permit coverage for nine months or greater will pay one hundred percent of the annual permit fee.

(3) Permit fee computation for general permits. Computation of fees for permittees covered under a general permit begins on the permit coverage date. Any facility that obtains permit coverage is obligated to pay the annual permit fee regardless of whether or not the facility has ever operated until the permit has been terminated by the department. Permits terminated during the fiscal year excluding permits issued for aquatic pest control will have their fees prorated as described in subsection (2)(a), (b), (c), (d) of this section unless it results in an annual fee assessment of less than one hundred dollars. Ecology will not process refunds of one hundred dollars or less.

(4) Permit fees for sand and gravel (aggregate) general permit holders will be assessed as in subsection (3) of this section and:

(a) Nonoperating aggregate sites. A facility conducting mining, screening, washing and/or crushing activities excluding portable rock crushing operations is considered nonoperating for fee purposes if they are conducting these activities for less than ninety cumulative days during a calendar year. A facility producing no asphalt and/or concrete during the calendar year is also considered nonoperating for fee purposes.

(b) Nonoperating sites that become active for only concrete and/or asphalt production will be assessed a prorated fee for the actual time inactive. For the actual time a concrete and/or asphalt facility is active excluding asphalt portable batch plants and concrete portable batch plants, fees will be based on total production of concrete and/or asphalt.

(c) Fees for continuously active sites that produce concrete and/or asphalt excluding asphalt portable batch plants and concrete portable batch plants, will be based on the average of the three previous calendar years production totals. Existing facilities must provide the department with the production totals for concrete and/or asphalt produced during the previous three calendar years or for the number of full calendar years of operation if less than three. New facilities with no historical asphalt and/or concrete production data will

have their first year fee based on the production levels reported on the application for coverage under the National Pollutant Discharge Elimination System and State Waste Discharge Permit for Process Water, Storm Water, and Mine Dewatering Water Discharges Associated with Sand and Gravel Operations, Rock Quarries and Similar Mining Facilities including Stockpiles of Mined Materials, Concrete Batch Operations and Asphalt Batch Operations general permit. The second year fee will be determined based on the actual production during the first year and estimated production for the second year. The third year fee will be determined based on the average of actual production for the first two years and estimated for the third year. Fee calculation for subsequent years will be based on the average production values of previous years.

(d) Asphalt portable batch plants, concrete portable batch plants and portable rock crushing operations will be assessed fees as in subsection (3) of this section. Each permitted operation must commit to being shut down for a minimum of twelve calendar months before the status can be changed to nonoperating.

(5) Fees for crop preparation general permit holders will be assessed as in subsection (3) of this section and will be computed on the three previous calendar years production totals. Existing facilities must provide the department with the production totals in the manner described in WAC 173-224-040 (2)(d). New facilities with no historical production data will have their first year fee based on the estimated production level for that year. The second year fee will be determined based on the actual production during the first year and estimated production for the second year. The third year fee will be determined based on the average of actual production for the first two years and estimated for the third year. Fee calculation for subsequent years will be based on the average production values of previous years.

(6) Facilities with construction and industrial storm water general permit coverage will have their annual permit fees begin on the permit issuance date. Permit fee accrual will continue until the permit has been terminated by the department regardless if the activity covered under the permit has already ceased.

(7) Facilities with an existing NPDES and/or state wastewater discharge permit who also have obtained industrial and/or construction storm water general permit coverage shall only pay an annual fee based on the permit with the highest permit fee category assessment.

(8) Computation of fees shall end on the last day of the state's fiscal year, or in the case of a terminated permit, during the quarter the termination took place.

(9) The applicable permit fee shall be paid by check or money order payable to the "Department of Ecology" and mailed to the Wastewater Discharge Permit Fee Program, P.O. Box 47611, Olympia, Washington 98504-7611.

(10) In the event a check is returned due to insufficient funds, the department shall consider the permit fee to be unpaid.

(11) Delinquent accounts. Permit holders are considered delinquent in the payment of fees if the fees are not received by the first invoice billing due date. Delinquent accounts will be processed in the following manner:

(a) Municipal and government entities shall be notified by regular mail that they have forty-five days to bring the delinquent account up-to-date. Accounts that remain delinquent after forty-five days may receive a permit revocation letter for nonpayment of fees.

(b) Nonmunicipal or nongovernment permit holders shall be notified by the department by regular mail that they have forty-five days to bring the delinquent account up-to-date. Accounts that remain delinquent after forty-five days will be turned over for collection. In addition, a surcharge totaling twenty percent of the delinquent amount owed will also be added. The surcharge is to recover the costs for collection. If the collection agency fails to recover the delinquent fees after twelve months, the permit holder may receive a permit revocation letter for nonpayment of fees.

[Statutory Authority: Chapter 90.48 RCW. 08-16-109 (Order 08-05), § 173-224-050, filed 8/5/08, effective 9/5/08. Statutory Authority: RCW 90.48.465. 04-15-046, § 173-224-050, filed 7/13/04, effective 8/13/04. Statutory Authority: Chapter 90.48 RCW. 02-12-059, § 173-224-050, filed 5/30/02, effective 6/30/02; 00-02-031 (Order 99-03), § 173-224-050, filed 12/28/99, effective 1/28/00; 98-03-046 (Order 97-27), § 173-224-050, filed 1/15/98, effective 2/15/98; 96-03-041 (Order 94-21), § 173-224-050, filed 1/10/96, effective 2/10/96; 94-10-027 (Order 93-08), § 173-224-050, filed 4/28/94, effective 5/29/94; 92-03-131 (Order 91-45), § 173-224-050, filed 1/21/92, effective 2/21/92. Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-050, filed 5/31/89 and 3/13/90, effective 4/13/90.]

WAC 173-224-060 Permits issued by other governmental agencies. The department shall not charge permit fees for:

(1) Permits issued by a city, town, or municipal corporation under RCW 90.48.165;

(2) Permits issued by the energy facilities site evaluation council under RCW 80.50.071;

(3) Permits administered by the EPA under 33 U.S.C. 1251 et seq.

Nothing herein shall restrict the department from charging fees to recover administrative expenses of permits it issues under RCW 90.48.160 for discharges into municipal sewer systems, nor for charging fees to recover administrative expenses related to monitoring compliance with delegated pretreatment programs.

[Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-060, filed 5/31/89 and 3/13/90, effective 4/13/90.]

WAC 173-224-080 Transfer of ownership or control. The department shall charge permit fees from the permit holder on record with the department. In the event that ownership or control of a permitted facility or activity is transferred, it shall not be the responsibility of the department to transfer funds between a new and previous permit holder, and the department shall not refund fee charges prospectively in the event of a transfer. Fees paid by a previous permit holder shall be deemed to satisfy the corresponding fee payment requirements of a new permit holder. Agreements between a new and previous permit holder are not binding on the department.

[Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-080, filed 5/31/89 and 3/13/90, effective 4/13/90.]

WAC 173-224-090 Small business fee reduction. Except as noted in subsection (6) of this section, a small business required to pay a permit fee under an industrial facility category may receive a reduction of its permit fee.

(1) To qualify for the fee reduction, a business must:

(a) Be a corporation, partnership, sole proprietorship, or other legal entity formed for the purpose of making a profit;

(b) Be independently owned and operated from all other businesses (i.e., not a subsidiary of a parent company);

(c) Have annual sales of one million dollars or less of the goods or services produced using the processes regulated by the waste discharge permit; and

(d) Pay an annual wastewater discharge permit fee greater than five hundred dollars.

(2) To receive a fee reduction, the permit holder must submit an application in a manner prescribed by the department demonstrating that the conditions of subsection (1) of this section have been met. The application shall bear a certification of correctness and be signed:

(a) In the case of a corporation, by an authorized corporate officer;

(b) In the case of a limited partnership, by an authorized general partner;

(c) In the case of a general partnership, by an authorized partner; or

(d) In the case of a sole proprietorship, by the proprietor.

(3) The department may verify the information contained in the application and, if it determines that the permit holder has made false statements, may deny the fee reduction request and revoke previously granted fee reductions.

(4) The permit fee for small businesses determined to be eligible under subsection (1) of this section shall be reduced to fifty percent of the assessed annual permit fee.

(5) If the annual gross revenue of the goods and services produced using the processes regulated by the waste discharge permit is one hundred thousand dollars or less, and the annual permit fee assessed imposes an extreme hardship to the business, the small business may request an extreme hardship fee reduction. The small business must provide sufficient evidence to support its claim of an extreme hardship. In no case will a permit fee be reduced below $106.00 for fiscal year 2009 and $112.00 for fiscal year 2010.

(6) Facilities covered under the industrial storm water general permit are not eligible for a small business fee reduction under this section.

[Statutory Authority: Chapter 90.48 RCW. 08-16-109 (Order 08-05), § 173-224-090, filed 8/5/08, effective 9/5/08. Statutory Authority: RCW 90.48.465. 04-15-046, § 173-224-090, filed 7/13/04, effective 8/13/04. Statutory Authority: Chapter 90.48 RCW. 96-03-041 (Order 94-21), § 173-224-090, filed 1/10/96, effective 2/10/96; 94-10-027 (Order 93-08), § 173-224-090, filed 4/28/94, effective 5/29/94; 92-03-131 (Order 91-45), § 173-224-090, filed 1/21/92, effective 2/21/92. Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-090, filed 5/31/89 and 3/13/90, effective 4/13/90.]

WAC 173-224-100 Administrative appeals to the department. Any person aggrieved by a determination made under this chapter by the department may file a written appeal to the department no later than each fiscal year's first billing due date for payment of fees. Such appeal shall state the reasons that the aggrieved person believes that the department's determination is contrary to the requirements of RCW 90.48.465, and specific actions that he/she is requesting that are consistent with those requirements. The department shall either issue a revised determination or a statement upholding the original determination. A revised determination shall be consistent with the requirements of RCW 90.48.465. Any person feeling aggrieved by the administrative appeals decision made by the department regarding their permit fee may obtain review thereof by filing an appeal with the Pollution Control Hearings Board, P.O. Box 40903, Olympia, Washington 98504-0903, within thirty days of receipt of the department's decision. In addition, a copy of the appeal must be served on the Department of Ecology, Attention: Water Quality Program Permit Fee Unit, P.O. Box 47600, Olympia, Washington 98504-7696, within thirty days of receipt. These procedures are consistent with the provisions of chapter 43.21B RCW and the rules and regulations adopted thereunder.

[Statutory Authority: Chapter 90.48 RCW. 08-16-109 (Order 08-05), § 173-224-100, filed 8/5/08, effective 9/5/08. Statutory Authority: Chapter 90.48 RCW. 94-10-027 (Order 93-08), § 173-224-100, filed 4/28/94, effective 5/29/94; 92-03-131 (Order 91-45), § 173-224-100, filed 1/21/92, effective 2/21/92. Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-100, filed 5/31/89 and 3/13/90, effective 4/13/90.]

WAC 173-224-110 Deposits. The department shall deposit permit fee payments in the water quality permit account in the state treasury. Funds collected shall not be available for use by the department until appropriated by the legislature.

[Statutory Authority: Chapter 43.21A RCW. 89-12-027 and 90-07-015 (Order 89-8 and 89-8A), § 173-224-110, filed 5/31/89 and 3/13/90, effective 4/13/90.]

Chapter 173-225 WAC

FEDERAL WATER POLLUTION CONTROL ACT—ESTABLISHMENT OF IMPLEMENTATION PROCEDURES OF APPLICATION FOR CERTIFICATION

WAC

173-225-010	Introduction.
173-225-020	Purpose.
173-225-030	Public notice and public hearings.

WAC 173-225-010 Introduction. Section 401 of the Federal Water Pollution Control Act (FWPCA) provides that applicants for a license or permit from the federal government relating to any activity which may result in any discharge into the navigable waters shall obtain a certification from the state in which the discharge originates, or will originate, that any such discharge will comply with the applicable provisions of sections 301, 302, 306, and 307 of the FWPCA. The department of ecology, under chapter 90.48 RCW, has been designated as the state water pollution control agency for all purposes of the FWPCA, and is authorized to participate fully in the programs of that act as well as to take all action necessary to meet the requirements thereof.

[Order 73-29, § 173-225-010, filed 11/15/73.]

WAC 173-225-020 Purpose. The purpose of this regulation is to establish procedures for public notice and public

hearings in relation to the processing of applications for certification required by section 401 of the FWPCA.

[Order 73-29, § 173-225-020, filed 11/15/73.]

WAC 173-225-030 Public notice and public hearings. Whenever an application for certification required by section 401 of FWPCA is filed with the department of ecology, the following procedures pertaining to public notice and public hearings shall apply:

(1) Public notice of an application shall be performed in relation to all applications, as follows:

(a) By mailing notice of the application for certification to persons and organizations who have requested the same and to all others deemed appropriate; and

(b) When determined by the department as desirable in the public interest, by publication of a notice twice, once each on the same day of the week in two consecutive weeks, in a newspaper of general circulation in the county in which the activity described in the application is located, and in such other counties as are deemed appropriate by the department. The applicant for a certification shall be required to cause such notice to be published in a form approved by the department and the applicant shall bear the cost of such publication and provide an affidavit of publication to the department.

(2) Any person desiring to present views on the application in relation to water pollution control considerations shall do so by providing the same in writing to the regional office of the department of ecology identified in the notice of application within 20 days after notice of the application was last published or such longer period of time as the director may determine, or, in the case where notice is provided only by WAC 173-225-030 (1)(a), within the time period stated in said notice.

(3) If the department determines there is sufficient public interest in any application, a public hearing for the submission of oral views as well as written views shall be held. When this determination is made before notice of application is performed, such notice shall set forth the time and place of the hearing; otherwise, a separate notice of public hearing shall be made and such notice shall be distributed and published in the manner provided in WAC 173-225-030(1). Whenever a public hearing is to be held, the requirement of WAC 173-225-030(2) above in relation to the timing of submitting written views shall not apply, but the deadline for submitting written views shall be set forth in the notice announcing the hearing.

[Order DE 75-6, § 173-225-030, filed 3/7/75; Order 73-29, § 173-225-030, filed 11/15/73.]

Chapter 173-226 WAC

WASTE DISCHARGE GENERAL PERMIT PROGRAM

WAC

173-226-010 Purpose.
173-226-020 Permit required.
173-226-030 Definitions.
173-226-040 Relationship to chapters 173-216 and 173-220 WAC.
173-226-050 General permit coverage.
173-226-060 General permit preparation—Preliminary determination.
173-226-070 Permit effluent limitations.
173-226-080 Other terms and conditions.
173-226-090 Monitoring, recording, and reporting.
173-226-100 Prohibited discharges.
173-226-110 Fact sheets.
173-226-120 Economic impact analysis.
173-226-130 Public notice.
173-226-140 Notice to other government agencies.
173-226-150 Public hearings.
173-226-160 Public access to information.
173-226-170 Issuance of general permits.
173-226-180 Compliance schedules.
173-226-190 Appeals.
173-226-200 Applications for coverage under a general permit.
173-226-210 Transfer of permit coverage.
173-226-220 Duration and replacement of permits.
173-226-230 Modification and revocation of general permits.
173-226-240 Revocation of coverage under a general permit.
173-226-250 Enforcement.

WAC 173-226-010 Purpose. The purpose of this chapter is to establish a state general permit program, applicable to the discharge of pollutants, wastes, and other materials to waters of the state, including discharges to municipal sewerage systems. Permits issued under this chapter are designed to satisfy the requirements for discharge permits under sections 307 and 402(b) of the federal Water Pollution Control Act (33 U.S.C. §1251) and the state law governing water pollution control (chapter 90.48 RCW).

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-010, filed 5/5/93, effective 5/19/93.]

WAC 173-226-020 Permit required. No pollutants shall be discharged to waters of the state from any point source, except as authorized by an individual permit issued pursuant to chapters 173-216 and 173-220 WAC, or as authorized through coverage under a general permit issued pursuant to this chapter. Coverage under a valid general permit issued prior to the existence of this chapter will satisfy the permit requirements of this section.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-020, filed 5/5/93, effective 5/19/93.]

WAC 173-226-030 Definitions. For purposes of this chapter, the following definitions shall be applicable:

(1) "Administrator" means the administrator of the United States Environmental Protection Agency.

(2) "Application for coverage" means a form developed by, or approved by the department, which is used by a discharger to apply for coverage under a general permit.

(3) "Best management practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of the waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(4) "Department" means the Washington state department of ecology.

(5) "Director" means the director of the department of ecology or the director's authorized representative.

(6) "Discharge of pollutant" and "discharge of pollutants" mean the addition of any pollutant or combination of pollutants to waters of the state, respectively.

(7) "Discharger" means the owner or operator of any operation, facility, or activity subject to regulation under chapter 90.48 RCW.

(8) "Domestic wastewater" means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground water infiltration or surface waters as may be present.

(9) "Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater, together with such industrial waste as may be present.

(10) "Effluent limitation" means any restriction established by the department or the administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents discharged from point sources into waters of the state.

(11) "FWPCA" means the federal Water Pollution Control Act, as amended, 33 U.S.C. §1251 et seq.

(12) "Existing operation" means an operation that is not a new operation.

(13) "General permit" means a permit that covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

(14) "Individual permit" means a permit for a single point source or a single facility.

(15) "Municipal sewerage system" means a publicly owned domestic wastewater facility or privately owned domestic wastewater facility that is under contract to a municipality.

(16) "New operation" means an operation that begins activities that result in a discharge, or a potential discharge to waters of the state on or after the effective date of the general permit.

(17) "Notice of intent" means an application for a general permit, a request for coverage under a general permit, or a registration form for a general permit.

(18) "NPDES" means the National Pollutant Discharge Elimination System.

(19) "Permit" means an authorization, license, or equivalent control document issued by the director to implement this chapter.

(20) "Person" includes any political subdivision, local, state, or federal government agency, municipality, industry, public or private corporation, partnership, association, firm, individual, or any other entity whatsoever.

(21) "Point source" means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

(22) "Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. This term does not include sewage from vessels within the meaning of section 312 of the FWPCA nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the FWPCA.

(23) "Regional administrator" means the regional administrator of Region X of the Environmental Protection Agency (EPA) or his/her authorized representative.

(24) "Sediment standards" means the state of Washington's Sediment management standards (chapter 173-204 WAC).

(25) "Small business" has the meaning given in RCW 43.31.025(4).

(26) "Surface waters of the state" means all waters defined as "waters of the United States" in 40 CFR 122.2 that are within the boundaries of the state of Washington. This includes lakes, rivers, ponds, streams, inland waters, wetlands, ocean, bays, estuaries, sounds, and inlets.

(27) "Waters of the state" means all waters defined as "surface waters of the state" and all waters defined as "waters of the state" in RCW 90.48.020.

(28) "Water quality standards" means the state of Washington's water quality standards for ground waters of the state (chapter 173-200 WAC) and the state of Washington's water quality standards for surface waters of the state (chapter 173-201A WAC).

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-030, filed 5/5/93, effective 5/19/93.]

WAC 173-226-040 Relationship to chapters 173-216 and 173-220 WAC. This chapter defines a waste discharge general permit program within Washington state. Chapters 173-216 and 173-220 WAC define and establish permit programs for the development and issuance of individual permits.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-040, filed 5/5/93, effective 5/19/93.]

WAC 173-226-050 General permit coverage. (1) The director may issue general permits to satisfy any or all of the waste water discharge permit requirements of chapter 90.48 RCW and the FWPCA.

(2) The director may issue general permits to cover categories of dischargers for geographic areas as described under subsection (3) of this section. The area shall correspond to existing geographic or political boundaries, such as:

(a) Designated planning areas under section 208 or 303 of the FWPCA;

(b) Sewer districts or other special purpose districts;

(c) City, county, or state political boundaries;

(d) State or county highway systems;

(e) Standard metropolitan statistical areas as defined by the federal Office of Management and Budget;

(f) Urbanized areas as designated by the Bureau of the Census; or

(g) Any other appropriate division or combination of boundaries.

(3) General permits may be written to cover the following within a described area:

(a) Storm water sources; or

(b) Categories of dischargers that meet all of the following requirements:

(i) Involve the same or substantially similar types of operations;

(ii) Discharge the same or substantially similar types of wastes;

(iii) Require the same or substantially similar effluent limitations or operating conditions, and require similar monitoring; and

(iv) In the opinion of the director are more appropriately controlled under a general permit than under individual permits.

(4) The following discharges are not subject to permits under this chapter:

(a) Discharges to municipal sewerage systems of domestic wastewater from residential, commercial, or industrial structures.

(b) Any industrial or commercial discharge to a municipal sewerage system for which authority to issue permits has been granted to the municipality under RCW 90.48.165.

(c) Any industrial or commercial discharge to a municipal sewerage system operating under, and in compliance with, the applicable requirements of a local pretreatment program approved under section 307 of FWPCA and WAC 173-216-150. In the event of noncompliance, this exemption no longer applies and the discharger is immediately subject to enforcement action under chapter 90.48 RCW for discharging without a waste discharge permit.

(d) Discharges to municipal sewerage systems of wastes from industrial or commercial sources whose wastewater is similar in character and strength to normal domestic wastewater: Provided, That such discharges do not have the potential to adversely affect performance of the system. Examples of this type of discharge sources may include hotels, restaurants, laundries, and food preparation establishments.

(e) Discharges of domestic wastewater from a septic tank with subsurface sewage treatment and disposal and an ultimate design capacity less than or equal to fourteen thousand five hundred gallons per day. These systems are governed by on-site sewage disposal systems, chapter 246-272 WAC which is administered by the Washington state department of health.

(f) Discharges of domestic wastewater from a mechanical treatment system or lagoon followed by subsurface disposal with an ultimate design capacity less than or equal to three thousand five hundred gallons per day. These systems are governed by on-site sewage disposal systems, chapter 246-272 WAC which is administered by the Washington state department of health.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-050, filed 5/5/93, effective 5/19/93.]

WAC 173-226-060 General permit preparation—Preliminary determination. (1) For all general permits, the department shall make a preliminary determination to develop a general permit. Interested persons may petition the director requesting that a category of dischargers be considered for the development of a general permit. The department shall respond to such a petition within ninety days of receipt.

(2) The department shall provide public notice of all preliminary determinations to develop a general permit pursuant to WAC 173-226-130(1).

(3) In the event that the department determines not to develop a general permit after publishing a preliminary determination pursuant to WAC 173-226-130(2), the department shall provide public notice to that effect in the same manner as the preliminary determination public notice was provided.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-060, filed 5/5/93, effective 5/19/93.]

WAC 173-226-070 Permit effluent limitations. Any general permit issued by the department shall apply and insure compliance with all of the following, whenever applicable:

(1) Technology-based treatment requirements and standards reflecting all known, available, and reasonable methods of prevention, treatment, and control required under RCW 90.48.010, 90.48.520, 90.52.040, and 90.54.020 may be imposed through any or all of the following methods:

(a) Effluent limitations and standards promulgated pursuant to sections 301, 302, 306, and 307 of the FWPCA;

(b) Discharge standards contained in chapters 173-221 and 173-221A WAC;

(c) On a case-by-case basis under section 402 of the FWPCA; and/or

(d) Through the use of best management practices.

(2) Water quality-based effluent limitations.

(a) Water quality-based effluent limitations shall be incorporated into a general permit if such limitations are necessary to comply with chapter 173-200 and/or 173-201A WAC for the majority of the dischargers intended to be covered under the general permit and:

(i) The department determines that the use of a general permit rather than individual permits is appropriate; and

(ii) The conditions of coverage contained in WAC 173-226-050 are met.

(b) Water quality-based effluent limitations must control all pollutants or pollutant parameters which the department determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion of state ground or surface water quality standards.

(3) Any more stringent limitations or requirements, including those necessary to:

(a) Meet water quality standards, sediment quality standards, treatment standards, or schedules of compliance established pursuant to any state law or regulation under authority preserved to the state by section 510 of the FWPCA;

(b) Meet any federal law or regulation other than the FWPCA or regulations thereunder;

(c) Implement any legally applicable requirements necessary to implement total maximum daily loads established pursuant to section 303(d) and incorporated in the continuing planning process approved under section 303(e) of the FWPCA and any regulations and guidelines issued pursuant thereto;

(d) Prevent or control pollutant discharges from plant site runoff, spillage or leaks, sludge or waste disposal, or materials handling or storage;

(e) Meet the permit by rule provisions of the state dangerous waste regulation, WAC 173-303-802 (4) or (5);

(f) Comply with a plan approved pursuant to section 208(b) of the FWPCA; and/or

(g) Meet such conditions as the department determines are necessary to carry out the provisions of the FWPCA, prior to promulgation by the administrator of applicable effluent standards and limitations pursuant to sections 301, 302, 306, and 307 of the FWPCA.

(4) In addition to the other applicable requirement of this chapter, general permits authorizing the discharge into a municipal sewerage system shall satisfy the applicable pretreatment requirements of the FWPCA.

(5) Requirements pursuant to other laws, including the state's Hazardous Waste Management Act (chapter 70.105 RCW), the Solid Waste Management—Reduction and Recycling Act (chapter 70.95 RCW), the Resource Conservation and Recovery Act of 1976 (Public Law 95.190), or any other applicable local ordinances, state or federal statute, to the extent that they pertain to the prevention or control of waste discharges into the waters of the state;

(6) In the application of effluent standards and limitations, water and sediment quality standards and other legally applicable requirements pursuant to subsections (1) through (4) of this section, each general permit shall specify:

(a) For industrial wastewater facilities, average monthly and maximum daily quantitative mass and/or concentration limitations, or other such appropriate limitations for the level of pollutants and the authorized discharge;

(b) For domestic wastewater facilities, average weekly and monthly quantitative concentration and mass limitations, or other such appropriate limitations for the level of pollutants and the authorized discharge;

(c) If a dilution zone is authorized, pursuant to chapter 173-201A WAC, within which water quality standards are modified, the dimensions of such dilution zone; and

(d) If a sediment impact zone is authorized within which sediment quality standards are modified pursuant to chapter 173-204 WAC, the dimensions of such sediment impact zone.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-070, filed 5/5/93, effective 5/19/93.]

WAC 173-226-080 Other terms and conditions. (1) In addition to the requirements of WAC 173-226-070, 173-226-090, and 173-226-180, each general permit shall require:

(a) All discharges authorized by the general permit shall be consistent with the terms and conditions of the permit.

(b) Any facility expansions, production increases, or process modifications that would result in new or increased discharges of pollutants causing effluent limitations in the general permit to be exceeded or beyond which was reported in the application for coverage, must be reported to the department by submission of a new application or supplement thereto.

(c) Unless notified to the contrary by the department all notices submitted pursuant to (b) of this subsection shall comply with the application requirements of WAC 173-226-200(3).

(d) Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the general permit shall constitute a violation of the terms and conditions of the general permit.

(e) The director may terminate coverage under a general permit for cause. Cases where coverage under a general permit may be terminated include, but are not limited to, those contained in WAC 173-226-240(1).

(f) The director may require any discharger to apply for and obtain an individual permit, or to apply for and obtain coverage under another more specific general permit.

(g) General permits may be issued, modified, revoked and reissued, or terminated in accordance with the other provisions of this chapter. Grounds for modification or revocation and reissuance include but are not limited to those contained in WAC 173-226-230.

(h) The permittee shall allow the department or its authorized representative, upon the presentation of credentials and such other documents as may be required by law, at reasonable times:

(i) To enter upon permittee's premises in which an effluent source is located or in which any records are required to be kept under terms and conditions of the permit;

(ii) To have access to, and to copy at reasonable cost, any records required to be kept under terms and conditions of the permit;

(iii) To inspect any monitoring equipment or method required in the permit; and/or

(iv) To sample any discharge of pollutants.

(i) The permittee shall at all times properly operate and maintain any facilities or systems of control to achieve compliance with the terms and conditions of the general permit. Where design criteria have been established, the permittee shall not allow flows or waste loadings to exceed approved design criteria, or approved revisions thereto.

(j) The discharge of pollutants resulting from activities not covered under the general permit for which the discharger has requested coverage, shall be a violation of the terms and conditions of the general permit.

(2) General permits shall specify the contents of the application for coverage, the deadlines for submitting applications for coverage, the date(s) and/or the process by which coverage is granted, and the criteria for coverage.

(3) Any discharger authorized by a general permit may request to be excluded from coverage under the general permit by applying for and being issued an individual permit. The discharger shall submit to the director an application as described in WAC 173-220-040, with reasons supporting the request. The director shall either issue an individual permit or deny the request with a statement explaining the reason for denial.

(4) When an individual permit is issued to a discharger otherwise subject to a general permit, the applicability of the general permit to that permittee is automatically terminated on the effective date of the individual permit.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-080, filed 5/5/93, effective 5/19/93.]

WAC 173-226-090 Monitoring, recording, and reporting. (1) Monitoring.

(a) Any discharge authorized by a general permit may be subject to such monitoring requirements as may be reasonably required by the department, including the installation, use, and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). These monitoring requirements would normally include but are not limited to:

(i) Flow (in gallons per day or other appropriate units);

(ii) All pollutants on which limitations have been placed pursuant to WAC 173-226-070;

(iii) Pollutants (either directly or indirectly through the use of accepted correlation coefficients or equivalent mea-

surements) that are subject to reduction or elimination under the terms and conditions of the permit;

(iv) Pollutants that the department finds could have a significant impact on the quality of waters and sediments of the state; and

(v) Pollutants specified by the administrator, in regulations issued pursuant to the FWPCA, as subject to monitoring.

(b) Each effluent flow or pollutant required to be monitored pursuant to (a) of this subsection shall be monitored at intervals sufficiently frequent to yield data that reasonably characterizes the nature of the discharge of the monitored effluent flow or pollutant.

(c) Monitoring for compliance with limitations imposed pursuant to WAC 173-226-070 shall be no less than once per year.

(d) Variable effluent flows and pollutant levels may be monitored at more frequent intervals than relatively constant effluent flows and pollutant levels, which may be monitored at less frequent intervals.

(e) Monitoring of intake water, influent to treatment facilities, internal waste streams, and/or receiving waters may be required by the department, to verify compliance with net discharge limitations or removal requirements, to verify that proper waste treatment or control practices are being maintained, or to determine the effects of the discharge on the waters and sediments of the state.

(2) Recording of monitoring activities and results. Any general permit which requires monitoring of an authorized discharge shall require that:

(a) The permittee maintain records of all information resulting from any monitoring activities required as a condition of the application for, or as a condition of coverage under a general permit;

(b) Any records of monitoring activities and results shall include for all samples:

(i) The date, exact place, and time of sampling;

(ii) The dates analyses were performed;

(iii) Who performed the analyses;

(iv) The analytical techniques/methods used; and

(v) The results of such analyses; and

(c) The permittee retain for a minimum of five years any records of monitoring activities and all results of those activities including all original strip chart recording for continuous monitoring instrumentation and calibration and maintenance records. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee, or when requested by the department or regional administrator.

(3) Reporting of monitoring results.

(a) The department may require the permittee to periodically report on the proper reporting form, the monitoring results obtained pursuant to monitoring requirements in a general permit. In addition to the required reporting form, the department may require submission of such other reports as it determines to be necessary.

(b) Monitoring reports shall be signed by:

(i) In the case of corporations, a responsible corporate officer or duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates.

(ii) In the case of a partnership, a general partner.

(iii) In the case of a sole proprietorship, the proprietor.

(iv) In the case of a municipal, state, or other public facility, either a principal executive officer, ranking elected official, or other duly authorized employee.

(4) Except as provided in subsection (5) of this section, all monitoring data required as a condition of a general permit, or required as part of an application for coverage under a general permit shall be prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC within one year of first being covered under a general permit or by July 1, 1995, whichever is later.

(5) The following parameters need not be accredited or registered:

(a) Flow;

(b) Temperature;

(c) Settleable solids;

(d) Conductivity, except that conductivity shall be accredited if the laboratory must otherwise be registered or accredited;

(e) pH, except that pH shall be accredited if the laboratory must otherwise be registered or accredited;

(f) Turbidity, except that turbidity shall be accredited if the laboratory must otherwise be registered or accredited; and

(g) Parameters which are used solely for internal process control.

[Statutory Authority: RCW 90.48.035. 02-05-055 (Order 01-08), § 173-226-090, filed 2/15/02, effective 3/18/02. Statutory Authority: RCW 43.21A.230. 93-20-011 (Order 92-53), § 173-226-090, filed 9/22/93, effective 10/23/93. Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-090, filed 5/5/93, effective 5/19/93.]

WAC 173-226-100 Prohibited discharges. (1) No general permit issued by the department shall authorize any person to:

(a) Discharge any radiological, chemical, or biological warfare agent or high-level radioactive waste into waters of the state;

(b) Discharge any pollutants that the Secretary of the Army acting through the Chief, Corps of Engineers, finds would substantially impair anchorage and navigation;

(c) Discharge any pollutant which the regional administrator, not having waived his/her right to object pursuant to section 402(e) of the FWPCA, has objected in writing pursuant to section 402(d) of the FWPCA;

(d) Discharge any pollutant in conflict with plans or amendment thereto approved pursuant to section 208(b) of the FWPCA;

(e) Discharge any pollutant subject to a toxic pollutant discharge prohibition under section 307 of the FWPCA; or

(f) Discharge any dangerous waste as defined in the Dangerous waste regulations, chapter 173-303 WAC, into a subsurface disposal system such as a well or drainfield.

(2) The following discharges to municipal sewerage systems are also prohibited:

(a) Waste materials that pass through the treatment works untreated or interfere with its operation or performance;

(b) Liquids, solids, or gases that, by reason of their nature or quantity, are or may be sufficient either alone or by interaction to:

(i) Cause fire or explosion;

(ii) Create a public nuisance or hazard to life;

(iii) Prevent entry into the sewers for their maintenance and repair; or

(iv) Be injurious in any other way to the operation of the system or the operating personnel;

(c) Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the system;

(d) Any wastewater having a pH less than 5.0 or greater than 11.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel of the system, unless the system is specifically designed to accommodate such discharge and the discharge is authorized by a permit under this chapter;

(e) Wastewater that would cause the influent temperature to exceed 40°C (104°F), unless the system is specifically designed to accommodate such discharge and the discharge is authorized by a permit under this chapter. In any case, any wastewater having a temperature which will interfere with the biological activity in the system is prohibited;

(f) Waste materials, including, but not limited to, oxygen demanding waste materials (BOD, etc.) released in either a slug load or continuous discharge of such volume or strength as to cause interference to the system;

(g) Any other discharge prohibited by federal or state law or regulation; and

(h) Any of the following discharges, unless approved by the department under extraordinary circumstances (such as lack of direct discharge alternatives due to combined sewer service or need to augment sewage flows due to septic conditions):

(i) Noncontact cooling water in significant volumes;

(ii) Storm water and other direct inflow sources;

(iii) Waste waters significantly affecting system hydraulic loading that do not require treatment or would not be afforded a significant degree of treatment by the system.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-100, filed 5/5/93, effective 5/19/93.]

WAC 173-226-110 Fact sheets. (1) The department shall prepare a fact sheet for every draft general permit determination. Such fact sheets shall summarize the following:

(a) The type of facility or activity which is the subject of the general permit;

(b) The geographical area for which the general permit is valid;

(c) The criteria for which coverage under a general permit will be approved;

(d) A listing or some other means of identifying the facilities proposed to be covered under the general permit;

(e) The information required by WAC 173-226-200(3), to be submitted as part of the application for coverage under the general permit;

(f) The effluent characteristics for the category of dischargers being authorized under the general permit, including the following:

(i) The average rate or frequency of the proposed discharge;

(ii) For thermal discharges, the average summer and winter temperatures; and

(iii) The average and estimated range in pounds per day, or other appropriate units, of any pollutants which are present in significant quantities or which are subject to limitations or prohibition under RCW 90.48.010, 90.52.040, 90.54.020, and sections 301, 302, 306, or 307 of the FWPCA and regulations published thereunder;

(g) The effluent standards and limitations applied;

(h) The applicable water quality standards, including identification of the uses for which receiving waters have been classified;

(i) The conditions in the proposed general permit;

(j) The legal and technical grounds for the conditions contained in the general permit, including;

(i) An explanation of how conditions meet both the technology-based and water quality-based requirements of the FWPCA and chapters 90.48, 90.52, and 90.54 RCW;

(ii) An explanation of how the conditions meet the water quality standards of chapters 173-200 and 173-201A WAC; and

(iii) An explanation of how the conditions meet the sediment standards contained in chapter 173-204 WAC;

(k) If a dilution zone is authorized, pursuant to chapter 173-201A WAC, within which water quality standards are modified:

(i) A description of the allowed dilution zone;

(ii) The legal basis for providing a dilution zone; and

(iii) The technical basis for allowing a dilution zone and the basis for determining the size of the dilution zone;

(l) Any compliance schedules proposed as part of the general permit or as a part of the application process pursuant to WAC 173-226-180 and 173-226-200;

(m) How the draft permit addresses use or disposal of residual solids generated by wastewater treatment;

(n) The procedures for the formulation of final determinations (in more detailed form than that given in the public notice) including:

(i) The thirty-day comment period required by WAC 173-226-130(3), including the date and time after which public comments will not be considered by the department in formulating the final determination on the draft general permit;

(ii) The time and place of the public hearing(s); and

(iii) Any other procedures by which the public may participate in the formulation of the final determination; and

(o) A summary of the economic impact analysis required by WAC 173-226-120, including any mitigation proposed pursuant to WAC 173-226-120(2) for small business.

(2) The department shall provide copies of general permit fact sheets to any interested person upon request.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-110, filed 5/5/93, effective 5/19/93.]

WAC 173-226-120 Economic impact analysis. (1) The department shall prepare an economic impact analysis on all draft general permits which are intended to directly cover small business. The economic impact analysis shall be prepared on the draft general permit for which public notice is being provided pursuant to WAC 173-226-130(3).

(2) The purpose of the economic impact analysis is to reduce the economic impact of the general permit on small

business by doing one or more of the following when it is legal and feasible in meeting the stated objectives of the FWPCA and chapter 90.48 RCW:

(a) Establishing differing compliance or reporting requirements or timetables for small businesses;

(b) Clarifying, consolidating, or simplifying the compliance and reporting requirements under the general permit for small businesses;

(c) Establishing performance rather than design standards;

(d) Exempting small businesses from parts of the general permit.

(3) The contents of an economic impact analysis of a proposed general permit shall include, at a minimum, the following:

(a) A brief description of the compliance requirements of the general permit, including:

(i) The minimum technology based treatment requirements identified as necessary under WAC 173-226-070;

(ii) The monitoring requirements contained in the general permit;

(iii) The reporting and recordkeeping requirements; and

(iv) Any plan submittal requirements;

(b) The estimated costs of compliance, based upon existing data for facilities intended to be covered under the general permit. Costs shall include, consistent with subsection (2) of this section the following:

(i) The costs associated with (a) of this subsection; and

(ii) The costs of equipment, supplies, labor, and any increased administrative costs;

(c) A comparison, to the greatest extent possible, of the cost of compliance for small businesses with the cost of compliance for the largest ten percent of the facilities intended to be covered under the general permit. The economic impact analysis shall use one or more of the following as a basis for comparing costs:

(i) Cost per employee;

(ii) Cost per hour of labor;

(iii) Cost per one hundred dollars of sales.

(4) The following compliance costs associated with a general permit shall not be included in the economic impact analysis:

(a) The costs necessary to comply with chapters 173-200, 173-201, 173-204, and 173-224 WAC; and

(b) The costs associated with requirements of the general permit which result from conformity or compliance, or both, with federal law or regulations.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-120, filed 5/5/93, effective 5/19/93.]

WAC 173-226-130 Public notice. The department shall provide public notice of all preliminary determinations to develop a general permit, all determinations not to develop a general permit after publishing such a preliminary determination, all draft general permit determinations, and the issuance of a final general permit. All public notices shall be circulated in a manner designed to inform interested and potentially affected persons of the proposed general permit.

(1) The department shall provide public notice of all preliminary determinations to develop a general permit as follows:

(a) The public notice shall be circulated within the geographical area of the proposed general permit. Such notice may include any or all of the following:

(i) Publishing, as a paid advertisement or legal notice, the department's preliminary determination in one or more major local newspapers throughout the area of proposed coverage;

(ii) Issuance of news releases, focus sheets, or newsletters;

(iii) Publication in the *State Register*;

(b) The department shall request comments on whether a general permit is appropriate for the proposed category of dischargers or whether individual permits are necessary;

(c) The public notice shall provide an opportunity for any interested or potentially affected party to submit information on dischargers proposed to be covered under a general permit including:

(i) Any documented information on the characteristics of the discharge including effluent quantity, quality, and any receiving water impacts. Information may be from an individual facility or be representative of the category as a whole; and

(ii) Any other relevant information;

(d) The department shall add the name of any person upon request to a general permit specific mailing list to receive information and notices related to the development of the general permit.

(2) In the event that the department determines not to develop a general permit after publishing a preliminary determination pursuant to subsection (1) of this section, the department shall provide public notice to that effect.

(3) The department shall provide public notice of every draft general permit as follows:

(a) The notice shall be circulated throughout the geographical area covered by the general permit. Such circulation may include any or all of the following:

(i) Posting for a period of thirty days in post offices, public libraries, and public places within the geographical area covered by the general permit;

(ii) Publishing the notice as a paid advertisement, display advertisement, or legal notice, in one or more major local newspapers of general circulation serving the area covered by the general permit;

(iii) Issuance of news releases, focus sheets, or newsletters.

(b) Notice shall be mailed to any person upon request, including all persons on the general permit specific mailing list established pursuant to subsection (1)(d) of this section and all persons on the mailing lists established pursuant to WAC 173-220-050 (1)(d).

(c) At least thirty days before the public hearing on the general permit the department shall have the following published in the *State Register*:

(i) The public notice contents contained in (f) of this subsection;

(ii) A reference to the relevant sections of chapter 90.48 RCW as the statutory authority for issuing the general permit;

(iii) The date on which the agency intends to issue the general permit;

(iv) A short explanation of the permit, its purpose, and anticipated effects; and

(v) A summary of the economic impact analysis required in WAC 173-226-120.

(d) The department shall provide a period of not less than thirty days following the last publication of the public notice, during which time interested persons may submit their written views on a draft general permit determination. All written comments submitted during the comment period shall be retained by the department and considered in the formulation of its final determination with respect to the draft general permit. The period for comment may be extended at the discretion of the department.

(e) The department shall make available during the public comment period:

(i) The draft general permit;

(ii) The fact sheet on the draft general permit required pursuant to WAC 173-226-110;

(iii) The economic impact analysis required pursuant to WAC 173-226-120;

(iv) A copy of the proposed application for coverage; and

(v) The notice required pursuant to WAC 173-226-130 (3)(c).

(f) The contents of the draft general permit public notice shall, at a minimum, summarize the following:

(i) The name, address, and phone number of the agency issuing the public notice;

(ii) The type of facilities and activities which are the subject of the general permit;

(iii) The geographical area for which the general permit is valid;

(iv) The criteria for which coverage under a general permit will be approved;

(v) A listing or some other means of generally identifying the facilities proposed to be covered under the general permit;

(vi) The tentative determination to issue a general permit;

(vii) The procedures for the formulation of final determinations, including the thirty-day comment period required by (d) of this subsection and any other means by which interested persons may comment upon those determinations;

(viii) The date, time, and place when public hearings will be held on the draft general permit;

(ix) The address and phone number of state premises at which interested persons may obtain further information; and

(x) The date and time after which comments will not be considered by the department in formulating the final determination on the draft general permit.

(4) The department shall provide public notice of the issuance of a final general permit as follows:

(a) The notice of general permit issuance shall be circulated in a manner similar to that used to circulate the notice on the draft general permit in subsection (3)(a) of this section and shall be published in the *State Register*; and

(b) The notice of general permit issuance shall be provided to all persons on the general permit specific mailing list established pursuant to subsection (1)(d) of this section and all persons on the mailing lists established pursuant to WAC 173-220-050 (1)(d).

(c) The public notice of the issuance of a general permit shall contain:

(i) The name, address, and phone number of the agency issuing the public notice;

(ii) The type of facilities and activities which are the subject of the general permit;

(iii) The geographical area for which the general permit is valid;

(iv) The criteria for which coverage under a general permit will be approved;

(v) A listing or some other means of generally identifying the facilities proposed to be covered under the general permit;

(vi) A summary of the application process by which eligible dischargers may obtain coverage under the general permit;

(vii) An explanation of any changes to the final general permit, other than editing changes, and the principal reasons for adopting the changes;

(viii) A notice that the terms and conditions of the general permit may be appealed only by filing an appeal with the pollution control hearings board and by serving it upon the department within thirty days, and the process for doing so as contained in RCW 43.21B.310; and

(ix) The date after which the general permit shall be effective. The effective date of a general permit shall be no sooner than thirty days after the publication in the *State Register* of the public notice required pursuant to (a) of this subsection.

(5) For new operations, or for operations previously under permit for which an increase in volume or change in the character of the effluent is requested over that which was previously authorized, only:

(a) The applicant for coverage under a general permit shall cause notice to be circulated within the geographical area of the proposed discharge. Such circulation shall include:

(i) Publishing twice a notice in a newspaper of general circulation within the county in which the discharge is proposed to be made; and

(ii) Any other method the department may direct.

(b) The notice published pursuant to (a) of this subsection shall contain:

(i) The name, address, and location of the facility requesting coverage under the general permit;

(ii) The applicant's activities or operations that result in a discharge (e.g., storm water, fish farming, gravel washing);

(iii) The name of the general permit under which coverage is being requested; and

(iv) The statement: "Any person desiring to present their views to the department of ecology regarding this application may do so in writing within thirty days of the last date of publication of this notice. Comments shall submitted to the department of ecology. Any person interested in the department's action on this application may notify the department of their interest within thirty days of the last date of publication of this notice."

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-130, filed 5/5/93, effective 5/19/93.]

WAC 173-226-140 Notice to other government agencies. The department shall notify other appropriate government agencies of each draft general permit determination and

shall provide such agencies an opportunity to submit their written views and recommendations. Such notification for NPDES and combined NPDES/state waste discharge general permits only, shall include the following:

(1) Transmission of the fact sheet, application form, and draft general permit to the regional administrator for comment or objection. The regional administrator shall be provided ninety days to comment on the draft permit prior to issuance by the department unless an alternative time period is mutually agreed on by the director and the regional administrator.

(2) Immediately following issuance, the department shall transmit a copy of every fact sheet, application form, and general permit along with any and all terms, conditions, requirements, or documents which are a part of the general permit or which affect the authorization by the general permit, of the discharge of pollutants, to the regional administrator.

(3) At the time of issuance of the public notices pursuant to WAC 173-226-130 (1)(a), (3)(a), and (4)(a) the department shall transmit the public notices to any other states whose waters may be affected by the issuance of the general permit. Each affected state shall be afforded an opportunity to submit written comments pursuant to WAC 173-226-130 (1)(b) and (3)(d), to the department and to the regional administrator, which the department may incorporate into the permit if issued. Should the department fail to incorporate any written recommendations thus received, it shall provide to the affected state or states (and to the regional administrator) a written explanation of its reasons for failing to accept any of the written recommendations or comments.

(4) Unless waived by the respective agency, the public notices issued pursuant to WAC 173-226-130 (1)(a), (2), (3)(a), and (4)(a) shall be sent to the appropriate district engineer of the Army Corps of Engineers, the United States Fish and Wildlife Service, the National Marine Fisheries Service, the state departments of fisheries, health, natural resources, wildlife, and social and health services, the office of archaeology and historic preservation, the agency responsible for the preparation of an approved plan pursuant to section 208(b) of the FWPCA, applicable Indian tribes, and any other applicable government agencies.

(5) A copy of any written agreement between the department and an agency identified in subsection (4) of this section which waives the receipt of public notices shall be forwarded to the regional administrator and shall be made available upon request to the public for inspection and copying.

(6) Copies of public notices issued pursuant to WAC 173-226-130 (1)(a), (2), (3)(a), and (4)(a) shall be mailed to any other federal, state, or local agency, Indian tribe, or any affected country, upon request. Such agencies shall have an opportunity to respond or comment on the draft general permit pursuant to WAC 173-226-130 (1)(b) and (3)(d).

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-140, filed 5/5/93, effective 5/19/93.]

WAC 173-226-150 Public hearings. (1) The department shall hold one or more public hearing(s) on all draft general permits. The public hearing shall be held during the public comment period provided pursuant to WAC 173-226-130 (3)(d).

(2) The date, time, and place will be at the discretion of the department provided:

(a) At least thirty days is provided between the time the public notice is published pursuant to WAC 173-226-130 (3)(a) and (c), and the time the hearing is held; and

(b) The hearing location is within the geographical area covered by the general permit.

(3) For new operations or for operations previously under permit for which an increase in volume or change in the character of the effluent has occurred only, any interested person may request a public hearing within thirty days of the last date of publication of the public notice required pursuant to WAC 173-226-130(5).

(a) All requests for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

(b) The department shall only consider issues regarding the general permits applicability or nonapplicability to the discharger when considering the need to hold a public hearing.

(4) The department shall cause a record to be made of all hearings required pursuant to this section. The record may be stenographic, mechanical, or electronic.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-150, filed 5/5/93, effective 5/19/93.]

WAC 173-226-160 Public access to information. (1) In accordance with chapter 42.17 RCW and its published policy describing disclosure of public records, the department shall make identifiable public records relating to all general permits available to the public for inspection and copying.

(2) The department shall designate a general permit coordinator for each general permit. The coordinator shall:

(a) Have knowledge of the general permit being prepared;

(b) Maintain the records associated with the development of the general permit including the general permit file required pursuant to subsection (3) of this section;

(c) Be identified as the department contact in public notices regarding the general permit.

(3) The department shall prepare a general permit development file for each issued general permit. The general permit development file shall be available for public inspection subject to the provisions of this section. The general permit development file shall contain:

(a) Copies of all public notices required pursuant to WAC 173-226-130;

(b) A copy of the fact sheet required pursuant to WAC 173-226-110 and any other documents not readily available to the public which were used in developing the terms and conditions of the general permit;

(c) Copies of the draft and final general permits, the economic impact analysis, and the application for coverage;

(d) All written comments received during the public comment period required pursuant to WAC 173-226-130(3), on the draft general permit, fact sheet, economic impact analysis, and application for coverage;

(e) The record of public hearings produced pursuant to WAC 173-226-150(4); and

(f) The response to comments prepared pursuant to WAC 173-226-170(1).

(4) Pursuant to chapter 42.17 RCW, the department shall provide, upon request, any information submitted as part of an application for coverage under a general permit.

(5) The department shall add the name of any person, upon request, to a mailing list to receive notices of department actions associated with a general permit.

(6) The department shall provide facilities for the inspection of information relating to general permits and shall insure that employees honor requests for such inspection promptly without undue requirements or restrictions. The department shall either:

(a) Insure that a machine or device for the copying of papers and documents is available for a reasonable fee; or

(b) Otherwise provide for, or coordinate with copying facilities or services such that requests for copies of nonconfidential, identifiable public records be honored promptly.

(7) Pursuant to chapters 42.17, 43.21A, 70.105, and 90.52 RCW, the department shall protect any information (other than information on the effluent) contained in applications as confidential upon a showing by any person that such information, if made public, would divulge methods or processes entitled to protection as trade secrets of such person.

(8) Any information accorded confidential status, whether or not contained in an application form, shall be disclosed, upon request, to the regional administrator.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-160, filed 5/5/93, effective 5/19/93.]

WAC 173-226-170 Issuance of general permits. (1) At the close of the public comment period required pursuant to WAC 173-226-130 (3)(d) the department shall prepare a response to all relevant comments received (both written and oral) and shall briefly describe any changes, other than editing changes, and the principal reasons for making the changes to the draft general permit.

(2) General permits shall be deemed issued upon signing by the director or by a person delegated the authority to issue general permits pursuant to chapter 173-06 WAC.

(3) The department shall provide public notice of the issuance of all final general permits pursuant to WAC 173-226-130 (4)(a).

(4) General permits become effective thirty days after the date of publication in the *State Register* of the public notice required pursuant to WAC 173-226-130 (4)(a) unless a later date is specified by the department.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-170, filed 5/5/93, effective 5/19/93.]

WAC 173-226-180 Compliance schedules. (1) The department may establish schedules and permit conditions as necessary to achieve compliance with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements contained in a general permit in any or all of the following ways:

(a) As a condition or schedule in a general permit;

(b) In an administrative order issued pursuant to chapter 90.48 RCW; and

(c) By any other method deemed appropriate by the department.

(2) Schedules of compliance shall reflect the shortest reasonable period of time necessary to achieve compliance consistent with the guidelines and requirements of the FWPCA.

(3) In any case where the period of time for compliance specified in subsection (1)(a) of this section exceeds one year, a schedule of compliance shall be specified that will set forth interim requirements and the dates for their achievement; however, in no event shall more than one year elapse between interim dates. If the time necessary for completion of the interim requirement (such as construction of a treatment facility) is more than one year and is not readily divided into stages of completion, interim dates shall be specified for the submission of reports of progress toward completion of the interim requirement.

(4) Either before or up to fourteen days following each interim date and the final date of compliance, the permittee shall provide the department with written notice of the permittee's compliance or noncompliance with each interim or final requirement.

(5) If a permittee fails or refuses to comply with an interim or final requirement contained in a general permit, or as submitted as part of an application for coverage under a general permit, such noncompliance shall constitute a violation of the general permit for which the department may revoke coverage under the general permit or take direct enforcement action pursuant to chapter 90.48 RCW.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-180, filed 5/5/93, effective 5/19/93.]

WAC 173-226-190 Appeals. (1) The terms and conditions of a general permit as they apply to the appropriate class of dischargers are subject to appeal within thirty days of issuance of a general permit in accordance with chapter 43.21B RCW.

(2) The terms and conditions of a general permit, as they apply to an individual discharger, are appealable, within thirty days of the effective date of coverage of that discharger, in accordance with chapter 43.21B RCW. This appeal is limited to the general permit's applicability or nonapplicability to that individual discharger.

(3) The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under the general permit. If the terms and conditions of a general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to the department for consideration of issuance of an individual permit or permits.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-190, filed 5/5/93, effective 5/19/93.]

WAC 173-226-200 Applications for coverage under a general permit. (1) Following the public notice by the department of the issuance of a general permit, or at an alternate date as designated by the department, all dischargers who desire to be covered under the general permit shall notify the department of that fact on a form prescribed by the department no later than the following, unless a shorter application period is allowed in the general permit under which coverage is requested:

(a) For existing operations, applications for coverage shall be submitted no later than ninety days after the issuance date of the general permit under which coverage is requested;

(b) For new operations, applications for coverage shall be submitted no later than one hundred eighty days prior to the commencement of the activity that may result in the discharge to waters of the state.

(2) Unless specified otherwise in the general permit under which coverage is requested or the department responds in writing, coverage of a discharger under a general permit will automatically commence on the later of the following:

(a) The effective date of the general permit;

(b) The thirty-first day following the end of the thirty-day comment period required by WAC 173-226-130(4);

(c) The thirty-first day following receipt by the department of a completed application for coverage under a general permit; or

(d) A date specified by the department in the general permit.

(3) All applications for coverage under a general permit shall:

(a) Contain information necessary for adequate program implementation;

(b) Contain the legal name and address of the owner or operator, the facility name and address, type of facility or discharges, and the receiving streams;

(c) Bear a certification of correctness;

(d) Be signed:

(i) In the case of corporations, by a responsible corporate officer.

(ii) In the case of a partnership, by a general partner.

(iii) In the case of sole proprietorship, by the proprietor.

(iv) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official; and

(e) Include any other information deemed relevant by the department.

(f) For new operations, or for operations for which an increase in volume of wastes or change in character of effluent is requested over that previously authorized, applications for coverage shall also contain:

(i) A certification by the applicant that the public notice requirements of WAC 173-226-130(5) have been met; and

(ii) A certification by the applicant that the applicable SEPA requirements under chapter 197-11 WAC have been met.

(4) The department shall develop an application form for each general permit and shall make the application form available during the draft general permit public notice period. The department shall provide the application form to the regional administrator along with the draft and final general permit as required in WAC 173-226-140.

(5) Any previously issued individual permit shall remain in effect until terminated in writing by the department, except that continuation of an expired individual permit, pursuant to WAC 173-220-180(5), shall terminate upon coverage by the general permit.

(6) Where the department has determined that a discharger should not be covered under a general permit, it shall respond in writing within sixty days of receipt of an application for coverage stating the reason(s) why coverage cannot become effective and any actions needed to be taken by the discharger in order for coverage under the general permit to become effective.

(7) When an individual permit is issued to a discharger otherwise subject to a general permit, the applicability of the general permit to that permittee is automatically terminated on the effective date of the individual permit.

(8) Coverage under a general permit for domestic wastewater facilities shall be issued only to a public entity, except in the following circumstances:

(a) Facilities existing or approved for construction with private operation on or before the effective date of this chapter, until such time as the facility is expanded; or

(b) Facilities that serve a single nonresidential, industrial, or commercial establishment. Commercial/industrial complexes serving multiple owners or tenants and multiple residential dwelling facilities, such as mobile home parks, apartments, and condominiums, are not considered single commercial establishments for the purpose of this subsection.

(9) Coverage under a general permit for domestic wastewater facilities that are owned by nonpublic entities and under contract to a public entity, shall be issued to the public entity.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-200, filed 5/5/93, effective 5/19/93.]

WAC 173-226-210 Transfer of permit coverage. Coverage under a general permit is automatically transferred to a new discharger if:

(1) A written, signed agreement between the old and new discharger containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to the director; and

(2) The director does not notify the old and new discharger of the director's intent to revoke coverage under the general permit. If this notice is not given, the transfer is effective on the date specified in the agreement mentioned in subsection (1) of this section.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-210, filed 5/5/93, effective 5/19/93.]

WAC 173-226-220 Duration and replacement of permits. (1) General permits shall be issued for fixed terms not exceeding five years from the effective date.

(2) All permittees covered under a general permit shall submit a new application for coverage under a general permit or an application for an individual permit at least one hundred eighty days prior to the expiration date of the general permit under which the permittee is covered.

(3) When a permittee has made timely and sufficient application for the renewal of coverage under a general permit, an expiring general permit remains in effect and enforceable until:

(a) The application has been denied;

(b) A replacement permit has been issued by the department; or

(c) The expired general permit has been canceled by the department.

(4) Coverage under an expired general permit for permittees who fail to submit a timely and sufficient application shall expire on the expiration date of the general permit.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-220, filed 5/5/93, effective 5/19/93.]

WAC 173-226-230 Modification and revocation of general permits. (1) A general permit may be modified, revoked and reissued, or terminated, during its term for cause including, but not limited to, the following:

(a) A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under the general permit;

(b) Effluent limitation guidelines or standards are promulgated pursuant to the FWPCA or chapter 90.48 RCW, for the category of dischargers covered under the general permit;

(c) A water quality management plan containing requirements applicable to the category of dischargers covered under the general permit is approved;

(d) Information is obtained which indicates that cumulative effects on the environment from dischargers covered under the general permit are unacceptable; or

(e) A toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the FWPCA for a toxic pollutant which is more stringent than any limitation upon such pollutant in the permit.

(2) In the event that the director has determined to modify or revoke, in whole or in part, a general permit pursuant to subsection (1) of this section the director shall notify, in writing, all dischargers covered under the general permit. The notification shall include:

(a) The reason(s) why the general permit is being revoked or modified;

(b) The process for appealing the determination pursuant to RCW 43.21B.310;

(c) An application form and a time limit for submitting the application; and

(d) Any other information determined to be relevant by the department.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-230, filed 5/5/93, effective 5/19/93.]

WAC 173-226-240 Revocation of coverage under a general permit. (1) The director may terminate coverage under a general permit for cause. Cases where coverage under a general permit may be terminated include, but are not limited to, the following:

(a) Violation of any term or condition of the general permit;

(b) Obtaining coverage under a general permit by misrepresentation or failure to disclose fully all relevant facts;

(c) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

(d) A determination that the permitted activity endangers human health, safety, or the environment, or contributes to water or sediment quality standards violations;

(e) Incorporation of an approved local pretreatment program into a municipality's permit;

(f) Failure of the permittee to satisfy the public notice requirements of WAC 173-226-130(5);

(g) Failure or refusal of the permittee to allow entry as required in RCW 90.48.090; or

(h) Nonpayment of permit fees assessed pursuant to RCW 90.48.465.

(2) The director may require any discharger to apply for and obtain an individual permit, or to apply for and obtain coverage under another more specific general permit. In cases where the director requires any discharger to apply for an individual permit, or for another general permit, the discharger must be notified in writing that another permit is required. This notice shall include a statement of why another permit is being required, an application form, and a time limit for submitting the application.

(3) Any interested person may petition the director to require a discharger authorized by a general permit to apply for and obtain an individual permit.

(4) Any discharger authorized by a general permit may request to be excluded from coverage under a general permit by applying for an individual permit. The discharger shall submit to the director an application as described in WAC 173-220-040 with reasons supporting the request. The director shall either issue an individual permit or deny the request with a statement explaining the reason for denial.

(5) Where the department has determined that a discharger should no longer be covered under a general permit it shall notify the discharger in writing stating the reason(s) why coverage is no longer appropriate, and any actions required of the discharger in order for coverage under the general permit to remain effective.

(6) The discharger shall have thirty days to respond to any notification provided pursuant to subsection (5) of this section before coverage under a general permit shall be automatically revoked.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-240, filed 5/5/93, effective 5/19/93.]

WAC 173-226-250 Enforcement. (1) The department, with the assistance of the attorney general, may sue in courts of competent jurisdiction to enjoin any threatened or continuing violations of any general permits or conditions thereof without the necessity of a prior revocation of coverage under the general permit.

(2) The department may enter any premises in which an effluent source is located or in which records are required to be kept under terms or conditions of a general permit, and otherwise be able to investigate, inspect, or monitor any suspected violations of water quality standards, or effluent standards and limitations, or of general permit terms or conditions thereof.

(3) The department may assess or, with the assistance of the attorney general, sue to recover in court, such civil fines, penalties, and other civil relief as may be appropriate for the violation by any person of:

(a) Any effluent standards and limitations or water quality standards;

(b) Any general permit or term or condition thereof;

(c) Any filing requirements;

(d) Any duty to permit or carry out inspection, entry, or monitoring activities; or

(e) Any rules, regulations, or orders issued by the department.

(4) The department may request the prosecuting attorney to seek criminal sanctions for the violation by such persons of:

(a) Any effluent standards and limitations or water quality standards;

(b) Any permit or term or condition thereof; or

(c) Any filing requirements.

(5) The department, with the assistance of the prosecuting attorney, may seek criminal sanctions against any person who knowingly makes any false statement, representation, or certification in any form or any notice or report required by the terms and conditions of any issued permit or knowingly renders inaccurate any monitoring device or method required to be maintained by the department.

[Statutory Authority: Chapter 90.48 RCW. 93-10-099 (Order 92-55), § 173-226-250, filed 5/5/93, effective 5/19/93.]

Chapter 173-230 WAC

CERTIFICATION OF OPERATORS OF WASTEWATER TREATMENT PLANTS

WAC

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173-230-140	Classification of wastewater treatment plants.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-230-030	Duties of the board. [Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-030, filed 10/23/87; 78-11-016 (Order DE 78-16), § 173-230-030, filed 10/11/78; Order 73-30, § 173-230-030, filed 11/9/73.] Repealed by 99-24-117 (Order 98-18), filed 12/1/99, effective 1/1/00. Statutory Authority: Chapter 70.95B RCW.
173-230-050	Certification prerequisites. [Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-050, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-050, filed 4/16/82. Statutory Authority: RCW 70.95B.040. 78-11-016 (Order DE 78-16), § 173-230-050, filed 10/11/78; Order 73-30, § 173-230-050, filed 11/9/73.] Repealed by 99-24-117 (Order 98-18), filed 12/1/99, effective 1/1/00. Statutory Authority: Chapter 70.95B RCW.
173-230-060	Applications. [Order 73-30, § 173-230-060, filed 11/9/73.] Repealed by 82-09-056 (Order DE 82-07), filed 4/16/82. Statutory Authority: Chapter 70.95B RCW.

WAC 173-230-010 What is the purpose of this regulation? When wastewater treatment plants are properly operated, public health and the state's waters are protected. Operators must meet minimum standards to assure they are competent to operate and maintain wastewater treatment plants. This rule establishes the requirements for obtaining a wastewater certificate and for the level of certificate required for an operator in responsible charge of a treatment plant. An operator in responsible charge of a wastewater treatment plant must be certified at a level that is equal to or greater than the classification of the wastewater treatment plant.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-010, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-010, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-010, filed 4/16/82. Statutory Authority: RCW 70.95B.040. 78-11-016 (Order DE 78-16), § 173-230-010, filed 10/11/78; Order 73-30, § 173-230-010, filed 11/9/73.]

WAC 173-230-020 Definitions. (1) "Activated sludge process" means a biological wastewater treatment process in which a mixture of wastewater and activated sludge is agitated and aerated. The activated sludge is subsequently separated from the treated wastewater by sedimentation and wasted or returned to the process as needed.

(2) "Biofiltration" means the process of passing a liquid through a biological filter that contains fixed media on surfaces which develop zoogleal films that absorb and adsorb fine suspended, colloidal, and dissolved solids and release end products of biochemical action.

(3) "Certificate" means the certificate of competency issued by the director stating that an individual has met the requirements for a specific classification in the wastewater treatment plant operator's certification program.

(4) "Certificate holder" means the individual to whom a certificate is issued.

(5) "CEU" means continuing education unit that is a nationally recognized unit of measurement similar to college credit. One CEU is awarded for every ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

(6) "College credits" means credits earned toward a college degree or in course work that is relevant to the operation of a wastewater treatment plant. College credit also means CEUs. Forty-five CEUs equals forty-five quarter credits equals thirty semester credits.

(7) "Department" means the Washington state department of ecology.

(8) "Director" means the director of the department of ecology or the director's designee.

(9) "Extended aeration" means a modification of the activated sludge process that uses long aeration periods and long mean cell residence times for aerobic digestion of the biological mass by endogenous respiration and promotes the growth of nitrifying organisms.

(10) "GED" means a General Education Development certificate issued by a recognized education institution. A GED is equivalent to a high school diploma.

(11) "Group" and "class" for the purpose of operator certification and wastewater treatment plant classification are the same.

(12) "Lagoon" means any large holding or detention pond, usually with earthen dikes that is used to contain wastewater while sedimentation and biological stabilization occurs.

(13) "OIT" means operator-in-training. This is the entry level certification classification offered by the department.

(14) "Operating experience" means the routine performance of duties, on-site in a wastewater treatment plant, that affect plant performance or effluent quality.

(15) "Operator" means an individual who performs routine duties, on-site at a wastewater treatment plant, that affect plant performance or effluent quality.

(16) "Operator in charge of each shift" means the individual on-site at a wastewater treatment plant whose primary responsibility is to operate the wastewater treatment plant on a regularly run shift. The operator in charge of each shift is subordinate to the operator in responsible charge.

(17) "Operator in responsible charge" means the individual who is routinely on-site and in direct charge of the overall operation of a wastewater treatment plant.

(18) "Owner" means in the case of:

• A town or city, the city or town acting through its chief executive officer or the lessee if operated under a lease or contract;

• A county, the chairman of the county legislative authority or the chairman's designee;

• A sewer district, board of public utilities, association, municipality or other public body, the president or chairman of the body or the president's or chairman's designee;

• A privately owned wastewater treatment plant, the legal owner.

(19) "Primary wastewater treatment" means unit processes consisting of one or more of the following: Screening, comminution and grinding, flotation, precipitation, sludge pumping, and disinfection. Treatment consists of clarification followed by removal, treatment, and disposal of sludge.

(20) "Reciprocity" means the exchange of a valid out-of-state wastewater treatment plant operator's certificate achieved by passing a written examination for an equivalent level of certification without further examination.

(21) "Tertiary" means advanced physical/chemical or biological treatment of wastewater significantly beyond the conventional secondary stage to remove additional suspended and dissolved substances. These substances may include phosphorus and nitrogen, a high percentage of suspended solids, dissolved inorganic solids, toxic compounds, microorganisms, and complex organic compounds.

(22) "Wastewater certification program coordinator" means an employee of the department who is appointed by the director and who administers the wastewater treatment plant operator certification program.

(23) "Wastewater collection system" means any system of lines, pipes, manholes, pumps, liftstations, or other facilities used to collect and transport wastewater.

(24) "Wastewater treatment plant" means a facility used to treat any liquid or waterborne waste of domestic origin or a combination of domestic, commercial or industrial origin, and that, by its design, requires the presence of an operator for its operation. It does not include any facility used exclusively by a single family residence, septic tanks with subsoil absorption, industrial wastewater treatment plants, or wastewater collection systems.

(25) "Wetlands treatment" means those wetlands intentionally constructed and managed for the primary purpose of wastewater treatment.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-020, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-020, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-020, filed 4/16/82. Statutory Authority: RCW 70.95B.040. 78-11-016 (Order DE 78-16), § 173-230-020, filed 10/11/78; Order 73-30, § 173-230-020, filed 11/9/73.]

WAC 173-230-040 To whom does this rule apply? This rule applies to anyone who owns or operates a wastewater treatment plant.

The operator in charge of the wastewater treatment plant must be certified at least at a level equal to or higher than the classification of the plant. When the plant is operated on more than one daily shift, the operator in charge of each shift must be certified at a level not lower than one level below the classification of the plant.

All individuals operating wastewater treatment plants who are not required to be certified are encouraged to seek certification.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-040, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-040, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-040, filed 4/16/82. Statutory Authority: RCW 70.95B.040. 78-11-016 (Order DE 78-16), § 173-230-040, filed 10/11/78; Order 73-30, § 173-230-040, filed 11/9/73.]

WAC 173-230-061 Levels of certificates and qualifications. (1) There are five levels of certification offered by the department to individuals who meet minimum qualifications. Those minimum qualifications include required levels of education and experience.

(2)

Qualification Requirements for Operator Certification				
Certification level	**Education required**	**Experience required**	**Substitutions allowed for education**	**Substitutions allowed for experience**
Operator-in-Training	High school diploma or GED	3 months	One year of excess operating experience may be used for one year of high school or two years of grade school.	May use 3 college credits or CEUs in course work related to wastewater treatment plant operation for experience.
Group I	High school diploma or GED	1 year	One year of excess operating experience may be used for one year of high school or two years of grade school.	None.

Qualification Requirements for Operator Certification				
Certification level	**Education required**	**Experience required**	**Substitutions allowed for education**	**Substitutions allowed for experience**
Group II	High school diploma or GED	3 years	One year of excess operating experience may be used for one year of high school or two years of grade school.	May use relevant work experience or credits or CEUs for one year and six months of the operating experience.
Group III	High school diploma or GED and 2 years of college (90 credits or CEUs)	4 years with at least 2 years operating experience at a Class II plant	May use excess operating experience for college at a rate of one year of excess operating experience for half of the college (one year). Three years of excess operating experience may be used for the second year of college.	May use relevant work experience and/or excess credits for 2 years of the operating experience.
Group IV	High school diploma or GED and 4 years of college (180 credits or CEUs)	4 years with at least 2 years at a Class III plant	May use excess operating experience for college at a rate of one year of excess operating experience for one year of college for up to half of the college (two years). Three years of excess operating experience may be substituted for one year of college. This rate may be used for the remaining two years of college.	May use excess operating experience for credits. May use related work experience and/or excess credits for 2 years of the operating experience.

(3) Relevant work experience may be substituted for up to one-half of the operating experience required to qualify for the Group II, III and IV levels. This includes:

(a) Environmental or operations consultant;

(b) Environmental or an engineering branch of federal, state, county, or local government;

(c) Wastewater collection system operator;

(d) Water distribution system operator and/or manager;

(e) Wastewater pump station operator; or

(f) Water treatment plant operator.

Other related work experience may include building and equipment maintenance, boiler operation, machinist, laboratory technician, engineering, welding, or other related fields on a case-by-case basis with a written description of the duties performed on the job by the applicant.

(4) College credits substituted for an operating experience requirement cannot also be applied to the education requirement.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-061, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-061, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-061, filed 4/16/82.]

WAC 173-230-065 How do I apply? Any person seeking certification must submit a completed application and fees to the department. Application forms are available from the wastewater certification program coordinator.

Applicants must meet minimum education and experience requirements to be eligible for examination or reciprocity. Applicants accepted for examination will be scheduled and notified of the date, place, time, and cost of the examination.

If the application is denied, the applicant will be notified of the reason for the denial.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-065, filed 12/1/99, effective 1/1/00.]

WAC 173-230-070 Examination. (1) The department will use written examinations to determine the competency of operators. If examinations are prepared by an organization other than the department, the applicant shall pay any costs associated with the use of the exam.

(2) Examinations will be held at least three times annually at places and times set by the department.

(3) The wastewater certification program coordinator or designee will score all exams. The applicant will be notified of the score. Examinations will not be returned to the applicant.

(4) Certificates will be issued to applicants who pass a written examination.

(5) An applicant who fails to pass the examination must reapply for further examination. No individual will be allowed to retake the same examination more than twice consecutively.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-070, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-070, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-070, filed 4/16/82; Order 73-30, § 173-230-070, filed 11/9/73.]

WAC 173-230-080 Certificate term and renewal conditions. An owner may request a temporary certificate for an individual when the designated certified operator unexpectedly vacates the position. This request must be made in writing to the wastewater certification coordinator and must include an application and fee. The department may issue a temporary certificate at its discretion. A temporary certificate may not exceed a one-year period, is nonrenewable, and cannot be transferred to another individual.

(1) Except for a temporary certificate, a certificate is valid from January 1 until December 31 of the same year or the year designated by the department.

(2) Except for a temporary certificate, a certificate is renewable only when the certificate holder demonstrates and provides documentation to the department of continued professional growth in the field. The department will mail renewal notices to all certificate holders eligible to renew before the certificate expires.

(3) Each certificate holder must accomplish one of the following activities during a three-year period ending December 31, 1979, and each three-year period after that date.

(a) Accumulate a minimum of three CEUs or college credits in coursework relevant to the field;

(b) Advance by exam to a higher level of certification in Washington's wastewater treatment plant operator's certification program. Advancement from OIT to Group I certification will not fulfill this requirement;

(c) Achieve certification by examination in the waterworks certification program administered by the Washington department of health in the water treatment plant operator, water distribution manager, or the cross connection control specialist classifications;

(d) Achieve certification by examination or advance by examination to a higher level in Washington's voluntary wastewater collection system operator's certification program administered by the Washington Wastewater Collection System Personnel Association.

(4) It is the responsibility of each certificate holder to meet the professional growth requirement and document that growth to the department before December 31 of the last year of the three-year period described in subsection (3) of this section. The department will mail a written notice to each certificate holder who has not fulfilled the continued professional growth requirement. If this requirement is not satisfied, the certificate is not renewable. Failure to renew a certificate for any reason will be handled as described in WAC 173-230-100.

(5) The department may collect renewal fees for a period not to exceed three calendar years. The department will notify certificate holders who are eligible for renewal as described in subsection (2) of this section the amount of fees owed and the date the fees must be paid.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-080, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-080, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-080, filed 4/16/82; Order 73-30, § 173-230-080, filed 11/9/73.]

WAC 173-230-090 Fees. (1) Applications for certification by examination or reciprocity or a temporary certificate will be accepted for processing only when accompanied by a fee of fifty dollars.

(2) Applications for reexamination will be accepted for processing only when accompanied by an application fee. The department may waive a portion of the application fee for reexamination.

(3) Application fees are nonrefundable.

(4) Applications for certificate renewals will be accepted for processing only when accompanied by a renewal fee of thirty dollars for each year of renewal.

(5) All receipts will be paid into the state general fund.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-090, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.090 (1) and (2) and chapter 70.95B RCW. 91-13-058 (Order 90-61), § 173-230-090, filed 6/17/91, effective 7/18/91. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-090, filed 10/23/87; 78-11-016 (Order DE 78-16), § 173-230-090, filed 10/11/78; Order 73-30, § 173-230-090, filed 11/9/73.]

WAC 173-230-100 Suspension and revocation of a certificate. (1) When a certificate is not renewed, the director will notify the certificate holder that the certificate is suspended for sixty days. If the certificate is not renewed during the suspension period, the director will mail a written notice of revocation to the owner of the wastewater treatment plant employing the individual as last known by the department and to the certificate holder at the address last known by the department. The notice of revocation mailed to the certificate holder will be sent by certified mail. If, during the revocation notice period, the certificate is not renewed, the certificate will be revoked ten days after the notice is mailed.

(2) Certificates may also be revoked when the director finds:

(a) Fraud or deceit in obtaining the certificate.

(b) Gross negligence in the operation of a wastewater treatment plant.

(c) Violation of the requirements of this chapter or the statute it implements or of any lawful rule, regulation or order of the department.

(3) No revocation will be made under subsection (2) of this section unless the operator has been notified that revocation is proposed, been advised of the reason and been given an opportunity to appear before the director and be heard on the matter.

(4) A certificate will be suspended immediately when the director is notified by the department of social and health services that a person is not in compliance with a support order or a residential or visitation order. If the person has continued to meet all other requirements for reinstatement during the suspension, the certificate will be reissued when the director is notified by the department of social and health services that the person is in compliance with the order.

If a certificate is revoked, the individual must meet all conditions of certification including application, fees, and passing a written examination to become certified.

(5) If revocation was made due to subsection (2) of this section, the operator will not be eligible to reapply for a certificate for one year from the date the revocation became final.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-100, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-100, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-100, filed 4/16/82. Statutory Authority: RCW 70.95B.040. 78-11-016 (Order DE 78-16), § 173-230-100, filed 10/11/78; Order 73-30, § 173-230-100, filed 11/9/73.]

WAC 173-230-110 Reciprocity. The director may waive examinations for applicants holding valid wastewater treatment plant operators certificates or licenses issued by

other states that have equivalent standards as determined by the department or its designee.

(1) Applications for reciprocity will be considered for approval only when the department receives confirmation from the certifying authority of the state or province in which the applicant is certified that the certificate is currently valid and was earned by passing a written examination. A copy of the exam passed by the applicant must also be released for review by the department or its designee.

(2) Certificates will be issued to each reciprocity applicant who meets the minimum education and experience requirements for the certification level requested and who passes a written examination comparable to Washington's exam as determined and approved by the director.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-110, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-110, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-110, filed 4/16/82; Order 73-30, § 173-230-110, filed 11/9/73.]

WAC 173-230-120 Appeals. Decisions of the director under this chapter may be appealed within thirty days from the date of notice to the pollution control hearings board as required by chapter 43.21B RCW and chapter 371-08 WAC.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-120, filed 12/1/99, effective 1/1/00; Order 73-30, § 173-230-120, filed 11/9/73.]

WAC 173-230-130 Violations. Violation of this chapter is a misdemeanor. Each day of operation in violation constitutes a separate offense. Upon conviction, violators are subject to fines not exceeding one hundred dollars for each offense. Injunctions may be obtained for continuing violations.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-130, filed 12/1/99, effective 1/1/00; Order 73-30, § 173-230-130, filed 11/9/73.]

WAC 173-230-140 Classification of wastewater treatment plants. The director shall classify all wastewater treatment plants according to the following criteria.

Treatment Plant Classification Criteria		
Treatment type	**Design flow MGD**	**Classification**
Primary	≤ 1	I
	> 1 ≤ 10	II
	> 10 ≤ 20	III
	> 20	IV
Lagoon (Nonaerated)	All	I
Lagoon (Aerated)	≤ 1	I
	> 1	II
Biofiltration	≤ 1	II
	> 1 ≤ 10	III
	> 10	IV
Extended aeration	≤ 5	II
	> 5	III
Activated sludge	≤ 1	II
	> 1 ≤ 10	III
	> 10	IV
Wetlands	≤ 1	I
	> 1 ≤ 5	II
	> 5	III
Tertiary	≤ 5	III
	> 5	IV

Plants may be classified in a group different than indicated in this section if:

(1) They have characteristics that make operation less complex or more difficult than other similar plants of the same flow range; or

(2) The conditions of flow or the use of the receiving waters require an unusually high degree of plant operational control; or

(3) They use an approved method of wastewater treatment that is not included in this section.

Beginning January 2000, the department may issue a one-time provisional certificate to the certified operator in responsible charge of a plant or the certified operator in charge of a shift at the plant only if the plant's rating level increased solely due to the adoption of the treatment type and design flow rating system. The provisional certificate will not apply if the rating of a plant increases due to an upgrade, to a change to treatment processes, or to flow. The provisional certificate will be issued only for the operation of a specific plant and may not be transferred if that certified operator leaves employment with that plant.

The holder of a provisional certificate must continue to meet all certificate renewal requirements.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-140, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-140, filed 10/23/87; 78-11-016 (Order DE 78-16), § 173-230-140, filed 10/11/78; Order 73-30, § 173-230-140, filed 11/9/73.]

Chapter 173-240 WAC

SUBMISSION OF PLANS AND REPORTS FOR CONSTRUCTION OF WASTEWATER FACILITIES

WAC

173-240-010 Purpose and scope.
173-240-020 Definitions.

DOMESTIC WASTEWATER FACILITIES

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INDUSTRIAL WASTEWATER FACILITIES

173-240-110	Submission of plans and reports.
173-240-120	Review standards.
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DOMESTIC AND INDUSTRIAL WASTEWATER FACILITIES

173-240-160	Requirement for professional engineer.
173-240-170	Right of inspection.
173-240-180	Approval of construction changes.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-240-105 Form—Certificate of construction of water pollution control facilities. [Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-105, filed 1/23/79. Formerly chapter 372-20 WAC.] Repealed by 83-23-063 (Order DE 83-30), filed 11/16/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.

WAC 173-240-010 Purpose and scope. The purpose of this chapter is to implement RCW 90.48.110. The department interprets "plans and specifications" as mentioned in RCW 90.48.110 as including "engineering reports," "plans and specifications," and "general sewer plans," all as defined in WAC 173-240-020. This chapter also includes provisions for review and approval of proposed methods of operation and maintenance.

[Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-010, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-010, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-020 Definitions. (1) "Approval" means written approval.

(2) "Construction quality assurance plan" means a plan describing the methods by which the professional engineer in responsible charge of inspection of the project will determine that the facilities were constructed without significant change from the department approved plans and specifications.

(3) "Department" means the Washington state department of ecology.

(4) "Domestic wastewater" means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments or other places, together with the ground water infiltration or surface waters that may be present.

(5) "Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim or dispose of domestic wastewater together with the industrial waste that may be present. In the case of subsurface sewage treatment and disposal, the term is restricted to mean those facilities treating and disposing of domestic wastewater only from:

(a) A septic tank system with subsurface sewage treatment and disposal and an ultimate design capacity exceeding fourteen thousand five hundred gallons per day at any common point; or

(b) A mechanical treatment system or lagoon followed by subsurface disposal with an ultimate design capacity exceeding three thousand five hundred gallons per day at any common point.

Where the proposed system using subsurface disposal has received a state construction grant or a federal construction grant under the Federal Water Pollution Control Act as amended, such a system is a "domestic wastewater facility" regardless of size.

(6) "Engineering report" means a document that thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130. In the case of a domestic wastewater facility project, the report describes the recommended financing method.

The facility plan described in federal regulation 40 CFR 35 is an "engineering report." This federal regulation describes the Environmental Protection Agency's municipal wastewater construction grants program.

(7) "General sewer plan" means the:

(a) Sewerage general plan adopted by counties under chapter 36.94 RCW; or

(b) Comprehensive plan for a system of sewers adopted by sewer districts under chapter 56.08 RCW; or

(c) Plan for a system of sewerage adopted by cities under chapter 35.67 RCW; or

(d) Comprehensive plan for a system of sewers adopted by water districts under chapter 57.08 RCW; or

(e) Plan for sewer systems adopted by public utility districts under chapter 54.16 RCW and by port districts under chapter 53.08 RCW.

(f) The "general sewer plan" is a comprehensive plan for a system of sewers adopted by a local government entity. The plan includes the items specified in each respective statute. It includes the general location and description of treatment and disposal facilities, trunk and interceptor sewers, pumping stations, monitoring and control facilities, local service areas and a general description of the collection system to serve those areas. The plan also includes preliminary engineering in adequate detail to assure technical feasibility, provides for the method of distributing the cost and expense of the sewer system, and indicates the financial feasibility of plan implementation.

(8) "Industrial wastewater" means the water or liquid that carries waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feedlots, poultry houses, or dairies. The term includes contaminated stormwater and also leachate from solid waste facilities.

(9) "Industrial wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim or dispose of industrial wastewater.

(10) "Owner" means the state, county, city, town, federal agency, corporation, firm, company, institution, person or persons, or any other entity owning a domestic or industrial wastewater facility.

(11) "Plans and specifications" means the detailed drawings and specifications used in the construction or modification of domestic or industrial wastewater facilities. Except as otherwise allowed, plans and specifications are preceded by an approved engineering report. For some industrial facilities final conceptual drawings for all or parts of the system may

be substituted for plans and specifications with the permission of the department.

(12) "Sewerage system" means a system of sewers and appurtenances for the collection, transportation, pumping, treatment and disposal of domestic wastewater together with industrial waste that may be present. By definition a sewerage system is a "domestic wastewater facility."

(13) "Sewer line extension" means any pipe added or connected to an existing sewerage system, together with any pump stations: Provided, That the term does not include gravity side sewers that connect individual building or dwelling units to the sewer system when these side sewers are less than one hundred fifty feet in length and not over six inches in diameter.

(14) "Subsurface sewage treatment and disposal" means the physical, chemical, or bacteriological treatment and disposal of domestic wastewater within the soil profile by placement beneath the soil surface in trenches, beds, seepage pits, mounds, or fills.

(15) "Waters of the state" means all lakes, rivers, ponds, streams, inland waters, ground waters, salt waters, and all other waters and watercourses within the jurisdiction of the state of Washington.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-020, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-020, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-020, filed 1/23/79. Formerly WAC 372-20-010.]

DOMESTIC WASTEWATER FACILITIES

WAC 173-240-030 Submission of plans and reports. (1) Before constructing or modifying domestic wastewater facilities, engineering reports and plans and specifications for the project must be submitted to and approved by the department, except as noted in WAC 173-240-030(5).

(2) All reports and plans and specifications must be submitted by the owner or the owner's authorized representative consistent with a compliance schedule issued by the department or at least sixty days before the time approval is desired.

(3) Construction or modification of domestic wastewater facilities shall conform to the following schedule of tasks unless otherwise modified by these rules:

(a) Submission and approval of engineering report;

(b) Submission and approval of plans and specifications;

(c) Submission and approval of construction quality assurance plan;

(d) Submission and approval of draft operation and maintenance manual;

(e) Declaration of completion of construction by the project engineer; and

(f) Submission of complete operation and maintenance manual.

(4) Where two or more years has lapsed since approval of the engineering report or plans and specifications and construction has not begun, it may be necessary to update that document to reflect changed conditions such as: Water quality, services availability, regulatory requirements, or engineering technology.

(5) If the local government entity has received department approval of a general sewer plan and standard design criteria, engineering reports and plans and specifications for sewer line extensions, including pump stations, are not required to be submitted for approval. In this case the entity need only provide a description of the project and written assurance that the extension is in conformance with the general sewer plan. However, in the following situations specific department approval is necessary for sewer line extensions before construction:

(a) The proposed sewers, or pump stations involve installation of overflows or bypasses; or

(b) The proposed sewers, pump or lift stations discharge to an overloaded treatment, collection, or disposal facility.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-030, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-030, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-030, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-035 Restrictions—Subsurface disposal systems. Domestic wastewater facilities using subsurface sewage treatment and disposal, as defined in WAC 173-240-020(5), are prohibited except under those extraordinary circumstances where no other reasonable alternatives exist and: Providing that

(1) The facility is owned, operated, and maintained by a public entity, except as noted in WAC 173-240-104; and

(2) Adequate facility construction oversight is provided by the public entity; and

(3) The proposed project is consistent with local health and land use rules; and

(4) Loading rates do not exceed 1,570 gallons per day per acre of gross land area in medium sands or finer grained soils and may not exceed 900 gallons per day per acre of gross land in coarser grained soils or other soils where conditions do not provide for adequate treatment. For the purposes of this section gross land area is defined as the contiguous land area of a proposed development that might include the centerline of adjoining road or street right-of-ways.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-035, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-035, filed 11/16/83.]

WAC 173-240-040 Review standards. (1) The department will review general sewer plans, engineering reports, plans and specifications, and operation and maintenance manuals for domestic wastewater facilities to determine whether the proposed facilities will be designed, constructed, operated, and maintained to meet effluent limitations and other requirements of an NPDES or state waste discharge permit, if applicable, and to meet the policies and requirements of chapters 90.48 and 90.54 RCW pertaining to prevention and control of pollution of waters of the state.

(2) In addition to the above, the department will review documents submitted under this chapter to determine whether they are reasonably consistent with the appropriate sections of the state of Washington, "Criteria for sewage works design." Additional references may include, but are not limited to, the following:

(a) Manuals of Practice, Water Pollution Control Federation.

(b) Manuals of Engineering Practice, American Society of Civil Engineering.

(c) Standard Specifications for Municipal Public Works Construction, American Public Works Association.

(d) Considerations for Preparation of Operation and Maintenance Manuals, United States Environmental Protection Agency.

(e) Process Design Manuals, United States Environmental Protection Agency.

(f) Design Criteria for Mechanical, Electric, and Fluid System and Component Reliability, United States Environmental Protection Agency.

(g) Design Manual: Onsite Wastewater Treatment and Disposal Systems, U.S.E.P.A. October 1980.

(h) Guidelines for Larger On-Site Sewage Disposal Systems, Washington State Department of Social and Health Services and Department of Ecology.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-040, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-040, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-040, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-050 General sewer plan. (1) All general sewer plans required of any governmental agency before providing sewer service are "plans" within the requirements of RCW 90.48.110. Three copies of the proposed general sewer plan and each amendment to it must be submitted to and approved by the department before implementing the plan.

(2) The general sewer plan must be sufficiently complete so that engineering reports can be developed from it without substantial alterations of concept and basic considerations.

(3) The general sewer plan shall include the following information together with any other relevant data as requested by the department. To satisfy the requirements of the local government jurisdiction, additional information may be necessary.

(a) The purpose and need for the proposed plan.

(b) A discussion of who will own, operate, and maintain the systems.

(c) The existing and proposed service boundaries.

(d) Layout map including the following:

(i) Boundaries. The boundary lines of the municipality or special district to be sewered, including a vicinity map;

(ii) Existing sewers. The location, size, slope, capacity, direction of flow of all existing trunk sewers, and the boundaries of the areas served by each;

(iii) Proposed sewers. The location, size, slope, capacity, direction of flow of all proposed trunk sewers, and the boundaries of the areas to be served by each;

(iv) Existing and proposed pump stations and force mains. The location of all existing and proposed pumping stations and force mains, designated to distinguish between those existing and proposed;

(v) Topography and elevations. Topography showing pertinent ground elevations and surface drainage must be included, as well as proposed and existing streets;

(vi) Streams, lakes, and other bodies of water. The location and direction of flow of major streams, the high and low elevations of water surfaces at sewer outlets, and controlled overflows, if any. All existing and potential discharge locations should be noted; and

(vii) Water systems. The location of wells or other sources of water supply, water storage reservoirs and treatment plants, and water transmission facilities.

(e) The population trend as indicated by available records, and the estimated future population for the stated design period. Briefly describe the method used to determine future population trends and the concurrence of any applicable local or regional planning agencies.

(f) Any existing domestic or industrial wastewater facilities within twenty miles of the general plan area and within the same topographical drainage basin containing the general plan area.

(g) A discussion of any infiltration and inflow problems and a discussion of actions that will alleviate these problems in the future.

(h) A statement regarding provisions for treatment and discussion of the adequacy of the treatment.

(i) List of all establishments producing industrial wastewater, the quantity of wastewater and periods of production, and the character of the industrial wastewater insofar as it may affect the sewer system or treatment plant. Consideration must be given to future industrial expansion.

(j) Discussion of the location of all existing private and public wells, or other sources of water supply, and distribution structures as they are related to both existing and proposed domestic wastewater treatment facilities.

(k) Discussion of the various alternatives evaluated, and a determination of the alternative chosen, if applicable.

(l) A discussion, including a table, that shows the cost per service in terms of both debt service and operation and maintenance costs, of all facilities (existing and proposed) during the planning period.

(m) A statement regarding compliance with any adopted water quality management plan under the Federal Water Pollution Control Act as amended.

(n) A statement regarding compliance with the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA), if applicable.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-050, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-050, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-050, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-060 Engineering report. (1) The engineering report for a domestic wastewater facility shall include each appropriate (as determined by the department) item required in WAC 173-240-050 for general sewer plans unless an up-to-date general sewer plan is on file with the department. Normally, an engineering report is not required for sewer line extensions or pump stations. See WAC 173-240-020(13) and 173-240-030(5). The facility plan described in federal rule 40 CFR 35 is an "engineering report."

(2) The engineering report must be sufficiently complete so that plans and specifications can be developed from it without substantial changes. Three copies of the report must be submitted to the department for approval, except as waived under WAC 173-240-030(5).

(3) The engineering report shall include the following information together with any other relevant data as requested by the department:

(a) The name, address, and telephone number of the owner of the proposed facilities, and the owner's authorized representative.

(b) A project description that includes a location map and a map of the present and proposed service area.

(c) A statement of the present and expected future quantity and quality of wastewater, including any industrial wastes that may be present or expected in the sewer system.

(d) The degree of treatment required based upon applicable permits and rules, the receiving body of water, the amount and strength of wastewater to be treated, and other influencing factors.

(e) A description of the receiving water, applicable water quality standards, and how water quality standards will be met outside any applicable dilution zone.

(f) The type of treatment process proposed, based upon the character of the wastewater to be handled, the method of disposal, the degree of treatment required, and a discussion of the alternatives evaluated and the reasons they are unacceptable.

(g) The basic design data and sizing calculations of each unit of the treatment works. Expected efficiencies of each unit and also of the entire plant, and character of effluent anticipated.

(h) Discussion of the various sites available and the advantages and disadvantages of the site or sites recommended. The proximity of residences or developed areas to any treatment works. The relationship of the twenty-five-year and one hundred-year flood to the treatment plant site and the various plant units.

(i) A flow diagram that shows general layout of the various units, the location of the effluent discharge, and a hydraulic profile of the system that is the subject of the engineering report and any hydraulically related portions.

(j) A discussion of infiltration and inflow problems, overflows and bypasses, and proposed corrections and controls.

(k) A discussion of any special provisions for treating industrial wastes, including any pretreatment requirements for significant industrial sources.

(l) Detailed outfall analysis or other disposal method selected.

(m) A discussion of the method of final sludge disposal and any alternatives considered.

(n) Provision for future needs.

(o) Staffing and testing requirements for the facilities.

(p) An estimate of the costs and expenses of the proposed facilities and the method of assessing costs and expenses. The total amount shall include both capital costs and also operation and maintenance costs for the life of the project, and must be presented in terms of total annual cost and present worth.

(q) A statement regarding compliance with any applicable state or local water quality management plan or any plan adopted under the Federal Water Pollution Control Act as amended.

(r) A statement regarding compliance with the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA), if applicable.

(4) The engineering report for projects that use land application, including seepage lagoons, irrigation, and subsurface disposal, shall include information on the following together with appropriate parts of subsection (3) of this section, as determined by the department:

(a) Soils and their permeability;

(b) Geohydrologic evaluation of factors such as:

(i) Depth to ground water and ground water movement during different times of the year;

(ii) Water balance analysis of the proposed discharge area;

(iii) Overall effects of the proposed facility upon the ground water in conjunction with any other land application facilities that may be present;

(c) Availability of public sewers;

(d) Reserve areas for additional subsurface disposal.

(5) The engineering report for projects funded by the Environmental Protection Agency shall, in addition to the requirements of subsection (3) or (4) of this section, follow EPA facility plan guidelines contained in the EPA publication, "Guidance for Preparing a Facility Plan" (MCD-46), and shall indicate how the special requirements contained in 40 CFR 35.719-1 will be met.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-060, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-060, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-060, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-070 Plans and specifications. (1) The plans and specifications for a domestic wastewater facility are the detailed construction documents by which the owner or his or her contractor bid and construct the facility. The content and format of the plans and specifications must be as stated in the state of Washington, "Criteria for sewage works design," and shall include a list of the facility design criteria and a plan for interim operation of facilities during construction.

(2) Plans and specifications for sewer line extensions shall include, as a separate report, an analysis of the existing collection and treatment system's ability to transport and treat additional flow and loading.

(3) Two copies of the plans and specifications must be submitted to the department for approval before starting construction, except as waived under WAC 173-240-030(5).

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-070, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-070, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-070, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-075 Construction quality assurance plan. (1) Before construction a detailed plan must be submitted to the department that shows how adequate and competent construction inspection will be provided.

(2) The construction quality assurance plan shall include a:

(a) Construction schedule with a summary of planned construction activities, their sequence, interrelationships, durations, and terminations.

(b) Description of the construction management organization, management procedures, lines of communication, and responsibility.

(c) Description of anticipated quality control testing that includes type of test, frequency, and who will perform the tests.

(d) Description of the change order process that includes who will initiate change orders, as well as who will review, negotiate, and approve change orders.

(e) Description of the technical records handling methodology that includes where plans and specifications, as-built drawings, field orders, and change orders will be kept.

(f) Description of the construction inspection program that includes inspection responsibility, anticipated inspection frequency, deficiency resolution, and inspector qualifications.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-075, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-075, filed 11/16/83.]

WAC 173-240-080 Operation and maintenance manual. (1) The proposed method of operation and maintenance of the domestic wastewater facility must be stated in the engineering report or plans and specifications and must be approved by the department. The statement must be a discussion of who will own, operate, and maintain the facility and what the staffing and testing requirements are. The owner shall follow the approved method of operation after the facility is constructed, unless changes have been approved by the department.

(2) In those cases where the facility includes mechanical components, a detailed operation and maintenance manual must be prepared before completing the construction. The purpose of the manual is to present technical guidance and regulatory requirements to the operator to enhance operation under both normal and emergency conditions. Two copies of the manual must be submitted to the department for approval before completing the construction.

(3) In order to assure proper operation during construction and timely review and approval of the final operation and maintenance manual, a draft manual must be submitted in the early stages of the construction of a facility. In addition, manufacturer's information on equipment must be available to the plant operator before unit start up.

(4) The operation and maintenance manual shall include the following list of topics. For those projects funded by the Environmental Protection Agency the manual shall also follow the requirements of the EPA publication, "Considerations for Preparation of Operation and Maintenance Manuals."

(a) The assignment of managerial and operational responsibilities, including plant classification and classification of required operators.

(b) A description of plant type, flow pattern, operation, and efficiency expected.

(c) The principal design criteria.

(d) A process description of each plant unit, including function, relationship to other plant units, and schematic diagrams.

(e) A discussion of the detailed operation of each unit and description of various controls, recommended settings, fail-safe features, etc.

(f) A discussion of how the treatment facilities are to be operated during anticipated maintenance procedures, and under less than design loading conditions, if applicable, such as initial loading on a system designed for substantial growth.

(g) A section on laboratory procedures, including sampling techniques, monitoring requirements, and sample analysis.

(h) Recordkeeping procedures and sample forms to be used.

(i) A maintenance schedule that incorporates manufacturer's recommendations, preventative maintenance and housekeeping schedules, and special tools and equipment usage.

(j) A section on safety.

(k) A section that lists the spare parts inventory, address of local suppliers, equipment warranties, and appropriate equipment catalogues.

(l) Emergency plans and procedures.

(5) In those cases where the facility does not include mechanical components, an operation and maintenance manual, which may be less detailed than that described in subsection (4) of this section, must be submitted to the department for approval before completing construction. The manual shall fully describe the treatment and disposal system and outline routine maintenance procedures needed for proper operation of the system.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-080, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-080, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-080, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-090 Declaration of construction completion. (1) Within thirty days after acceptance by the owner of the construction or modification of a domestic wastewater facility, the professional engineer in responsible charge of inspection of the project shall submit to the department:

(a) One complete set of record drawings or as-builts;

(b) A declaration stating the facilities were constructed in accordance with the provisions of the construction quality assurance plan and without significant change from the department approved plans and specifications.

(2) The declaration will be furnished by the department and will be the same form as WAC 173-240-095, declaration of construction of water pollution control facilities. The submission of the declaration is not necessary for sewer line extensions where the local government entity has received approval of a general sewer plan and standard design criteria.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-090, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-090, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-090, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-095 Form—Declaration of construction of water pollution control facilities.

DECLARATION OF CONSTRUCTION OF WATER POLLUTION CONTROL FACILITIES

Instructions:

A. Upon completion, and before using any project or portions thereof, a professional engineer shall complete and sign this form, declaring that the project was constructed in accordance with the provisions of the construction quality assurance plan and with the plans and specifications and major change orders approved by the department of ecology.

B. If a project is being completed in phased construction, a map must be attached showing that portion of the project to which the declaration applies. A declaration of construction must be submitted for each phase of a project as it is completed. Additional declaration forms are available upon request from the department of ecology offices listed below.

NAME AND BRIEF DESCRIPTION OF PROJECT: .....
.....
.....

NAME OF OWNER ..... DOE PROJECT NO. .....

ADDRESS ..... DATE PROJECT OR PHASE COMPLETED .....

CITY .....STATE ..... ZIP .....

DOE PLAN AND SPECIFICATION APPROVAL DATE .....

I hereby declare that I am the project engineer of the above identified project and that the project was reviewed and observed by me or my authorized agent in accordance with the provisions of the construction quality assurance plan. I further declare that the project was, to the best of my knowledge and information, constructed and completed in accordance with the plans and specification and major change orders approved by the department of ecology and as shown on the owner's "as-built" plans.

..... SEAL

Signature of Professional Engineer

OF

DATE .....

ENGINEER

Please return completed form to the department of ecology office checked below.

❏ SW Regional Office
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

❏ Central Regional Office
Department of Ecology
15 W. Yakima Ave.,
Suite 200
Yakima, WA 98902-3401

❏ NW Regional Office
Department of Ecology
3190 160th Ave. S.E.
Bellevue, WA 98008-5452

❏ Eastern Regional Office
Department of Ecology
N. 4601 Monroe,
Ste. 100
Spokane, WA 99205-1295

❏ Water Quality Program
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-095, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-095, filed 11/16/83.]

WAC 173-240-100 Requirement for certified operator. Each owner of a domestic wastewater treatment facility is required by chapter 70.95B RCW to have an operator, certified by the state, in responsible charge of the day to day operation of the facility. This requirement does not apply to a septic tank using subsurface disposal. The certification procedures are set forth in chapter 173-230 WAC.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-100, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-100, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-100, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-104 Ownership and operation and maintenance. (1) Except as provided in subsections (2) and (3) of this section, domestic sewage facilities will not be approved unless ownership and responsibility for operation and maintenance is by a public entity. If a waste discharge permit is required it must be issued to the public entity. Nothing in this rule precludes a public entity from contracting operation and maintenance of domestic sewage facilities.

(2) Ownership by nonpublic entities may be approved if the department determines the ownership is in the public interest: Provided, That there is an enforceable contract, approved by the department, between the nonpublic entity and a public entity with an approved sewer general plan that will assure immediate assumption of the system under the following conditions:

(a) Treatment efficiency is unsatisfactory either as a result of plant capacity or physical operation; or

(b) If such an assumption is necessary for the implementation of a general sewer plan.

(3) The following domestic wastewater facilities would not require public entity ownership, operation, and maintenance:

(a) Those facilities existing or approved for construction as of the effective date of this section, until such a time the facility is expanded to accommodate additional development.

(b) Those facilities which serve a single nonresidential, industrial, or commercial establishment. Commercial/industrial complexes serving multiple owners or tenants and multiple residential dwelling facilities such as mobile home parks, apartments, and condominiums are not considered commercial establishments for the purpose of this section.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-104, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-104, filed 11/16/83.]

INDUSTRIAL WASTEWATER FACILITIES

WAC 173-240-110 Submission of plans and reports. (1) Before constructing or modifying industrial wastewater facilities, engineering reports and plans and specifications for the project must be submitted to and approved by the department.

(2) All engineering reports and plans and specifications should be submitted by the owner consistent with a compliance schedule issued by the department or at least thirty days before the time approval is desired. The department will generally review and either approve (or conditionally approve), comment on, or disapprove those plans and reports within the thirty-day period unless circumstances prevent, in which case the owner will be notified and informed of the reason for the delay.

(3) Construction or modification of industrial wastewater facilities shall conform to the following schedule of tasks unless waived in accordance with subsection (5).

(a) Submission and approval of an engineering report;

(b) Submission and approval of plans and specifications;

(c) Submission of an operation and maintenance manual.

(4) Where two or more years has elapsed since approval of the engineering report or plans and specifications, it may be necessary to update that document to reflect changed water quality conditions, regulatory requirements, or engineering technology.

(5) Upon request by the owner, the department may waive the requirement for a three step submission of documents for industrial facilities. In such a case the department will require instead conceptual plans that also include the appropriate (as determined by the department) information from the engineering report and an operation and maintenance manual.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-110, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-110, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-110, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-120 Review standards. The department will review engineering reports, plans and specifications, and operation and maintenance manuals for industrial wastewater facilities to:

(1) Determine whether the proposed facilities will be designed, constructed, operated and maintained to meet effluent limitations and other requirements of an NPDES or state waste discharge permit, if applicable; and

(2) To meet the policies and requirements of chapters 90.48 and 90.54 RCW pertaining to prevention and control of pollution of waters of the state; and

(3) To determine whether the facility will be designed, constructed, and operated consistent with good engineering practices.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-120, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-120, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-120, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-130 Engineering report. (1) The engineering report for an industrial wastewater facility must be sufficiently complete so that plans and specifications can be developed from it without substantial changes. Two copies of the report must be submitted to the department for approval.

(2) The engineering report shall include the following information together with any other relevant data as requested by the department:

(a) Type of industry or business;

(b) The kind and quantity of finished product;

(c) The quantity and quality of water used by the industry and a description of how it is consumed or disposed of, including:

(i) The quantity and quality of all process wastewater and method of disposal;

(ii) The quantity of domestic wastewater and how it is disposed of;

(iii) The quantity and quality of noncontact cooling water (including air conditioning) and how it is disposed of; and

(iv) The quantity of water consumed or lost to evaporation.

(d) The amount and kind of chemicals used in the treatment process, if any;

(e) The basic design data and sizing calculations of the treatment units;

(f) A discussion of the suitability of the proposed site for the facility;

(g) A description of the treatment process and operation, including a flow diagram;

(h) All necessary maps and layout sketches;

(i) Provisions for bypass, if any;

(j) Physical provision for oil and hazardous material spill control or accidental discharge prevention or both;

(k) Results to be expected from the treatment process including the predicted wastewater characteristics, as shown in the waste discharge permit, where applicable;

(l) A description of the receiving water, location of the point of discharge, applicable water quality standards, and how water quality standards will be met outside of any applicable dilution zone;

(m) Detailed outfall analysis;

(n) The relationship to existing treatment facilities, if any;

(o) Where discharge is to a municipal sewerage system, a discussion of that system's ability to transport and treat the proposed industrial waste discharge without exceeding the municipality's allocated industrial capacity. Also, a discussion on the effects of the proposed industrial discharge on the use or disposal of municipal sludge;

(p) Where discharge is through land application, including seepage lagoons, irrigation, and subsurface disposal, a geohydrologic evaluation of factors such as:

(i) Depth to ground water and ground water movement during different times of the year;

(ii) Water balance analysis of the proposed discharge area;

(iii) Overall effects of the proposed facility upon the ground water in conjunction with any other land application facilities that may be present;

(q) A statement expressing sound engineering justification through the use of pilot plant data, results from other similar installations, or scientific evidence from the literature, or both, that the effluent from the proposed facility will meet applicable permit effluent limitations or pretreatment standards or both;

(r) A discussion of the method of final sludge disposal selected and any alternatives considered with reasons for rejection;

(s) A statement regarding who will own, operate, and maintain the system after construction;

(t) A statement regarding compliance with any state or local water quality management plan or any plan adopted under the Federal Water Pollution Control Act as amended;

(u) Provisions for any committed future plans;

(v) A discussion of the various alternatives evaluated, if any, and reasons they are unacceptable;

(w) A timetable for final design and construction;

(x) A statement regarding compliance with the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA), if applicable;

(y) Additional items to be included in an engineering report for a solid waste leachate treatment system are:

(i) A vicinity map and also a site map that shows topography, location of utilities, and location of the leachate collection network, treatment systems, and disposal;

(ii) Discussion of the solid waste site, working areas, soil profile, rainfall data, and ground water movement and usage;

(iii) A statement of the capital costs and the annual operation and maintenance costs;

(iv) A description of all sources of water supply within two thousand feet of the proposed disposal site. Particular attention should be given to showing impact on usable or potentially usable aquifers.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-130, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-130, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-130, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-140 Plans and specifications. (1) Upon request of the owner the department may, at its discretion, allow submission of conceptual plans for industrial facilities, as noted in WAC 173-240-110(5). Two copies of the plans and specifications must be submitted to the department for approval before the start of construction.

(2) The plans and specifications shall include the following information together with any other relevant data as requested by the department:

(a) Repeat presentation of the basic engineering design criteria from the engineering report.

(b) If there are any deviations from the concepts of the engineering report, an explanation of the changes that includes as much detail as would have been provided in an engineering report.

(c) The plan and section drawings of major components, such as the treatment units, pump stations, flow measuring devices, sludge handling equipment, and influent and effluent piping. Foundations or soil preparation or both should be shown for major structures.

(d) A general site drawing that shows the location with respect to the entire plant site and a detailed site drawing that shows the component siting.

(e) A schematic drawing that shows flows that include: In plant collection, and wastewater pumping, treatment, and discharge.

(f) A hydraulic profile that shows head under maximum flows. This requirement may be waived where the three step submission of documents has been waived under WAC 173-240-110(5).

(g) Instrumentation, controls, and sampling schematics.

(h) General operating procedures, such as startup, shutdown, spills, etc.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-140, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-140, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-140, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-150 Operation and maintenance manual. (1) A detailed operation and maintenance manual must be prepared for an industrial wastewater facility that includes mechanical components before completing the construction. The manual is to be submitted to the department for review and approval. The purpose of the manual is to present technical guidance and regulatory requirements to the operator to enhance operation under both normal and emergency conditions.

(2) The operation and maintenance manual shall include the following topics:

(a) The names and phone numbers of the responsible individuals.

(b) A description of plant type, flow pattern, operation, and efficiency expected.

(c) The principal design criteria.

(d) A process description of each plant unit, that includes function, relationship to other plant units, and schematic diagrams.

(e) An explanation of the operational objectives for the various wastewater parameters, such as sludge age, settleability, etc.

(f) A discussion of the detailed operation of each unit and a description of various controls, recommended settings, fail-safe features, etc.

(g) A discussion of how the facilities are to be operated during anticipated startups and shutdowns, maintenance procedures, and less than design loading conditions, so as to maintain efficient treatment.

(h) A section on laboratory procedures that includes sampling techniques, monitoring requirements, and sample analysis.

(i) Recordkeeping procedures and sample forms to be used.

(j) A maintenance schedule that incorporates manufacturer's recommendations, preventative maintenance and housekeeping schedules, and special tools and equipment usage.

(k) A section on safety.

(l) A section that contains the spare parts inventory, address of local suppliers, equipment warranties, and appropriate equipment catalogues.

(m) Emergency plans and procedures.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-150, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-150, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-150, filed 1/23/79. Formerly chapter 372-20 WAC.]

DOMESTIC AND INDUSTRIAL WASTEWATER FACILITIES

WAC 173-240-160 Requirement for professional engineer. (1) All required engineering reports, and plans and specifications for the construction or modification of wastewater facilities must be prepared under the supervision of a professional engineer licensed in accordance with chapter 18.43 RCW. All copies of these documents submitted to the department for review shall bear the seal of the professional engineer under whose supervision they have been prepared.

(2) Upon request of the owner, the department may waive the above requirement for construction or modification at industrial wastewater facilities.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-160, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-160, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-160, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-170 Right of inspection. Under RCW 90.48.090, the department or its authorized representative has the right to enter at all reasonable times in or upon any property, public or private, for the purposes of inspection or investigation relating to the pollution or possible pollution of the waters of the state, including the inspection of construction activities related to domestic or industrial wastewater facilities.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-170, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-170, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-170, filed 1/23/79. Formerly chapter 372-20 WAC.]

WAC 173-240-180 Approval of construction changes. All wastewater facilities subject to the provisions of this rule must be constructed in accordance with the plans and specifications approved by the department. Any contemplated changes during construction, which are significant deviations from the approved plans, must first be submitted to the department for approval.

[Statutory Authority: RCW 90.48.110. 00-15-021 (Order 00-09), § 173-240-180, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. 83-23-063 (Order DE 83-30), § 173-240-180, filed 11/16/83. Statutory Authority: RCW 90.48.110. 79-02-033 (Order DE 78-10), § 173-240-180, filed 1/23/79. Formerly chapter 372-20 WAC.]

Chapter 173-245 WAC

SUBMISSION OF PLANS AND REPORTS FOR CONSTRUCTION AND OPERATION OF COMBINED SEWER OVERFLOW REDUCTION FACILITIES

WAC

173-245-010 Purpose and scope.
173-245-015 General requirements.
173-245-020 Definitions.
173-245-030 Submission of plans.
173-245-040 CSO reduction plan.
173-245-050 Plans and specifications.
173-245-055 Construction quality assurance plan.
173-245-060 Operation and maintenance manual.
173-245-070 Declaration of construction completion.
173-245-075 Form—Declaration of construction of water pollution control facilities.
173-245-080 Requirement for certified operator.
173-245-084 Ownership and operation and maintenance.
173-245-090 Schedule updates—Monitoring—Reporting.

WAC 173-245-010 Purpose and scope. This chapter establishes a procedure and criteria for implementing RCW 90.48.480, which requires "the greatest reasonable reduction of combined sewer overflows at the earliest possible date." It applies to municipalities whose sewer system includes combined sewer overflow (CSO) sites.

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-010, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-010, filed 1/27/87.]

WAC 173-245-015 General requirements. (1) All CSO sites shall achieve and at least maintain the greatest reasonable reduction, and neither cause violations of applicable water quality standards, nor restrictions to the characteristic uses of the receiving water, nor accumulation of deposits which: (a) Exceed sediment criteria or standards; or (b) have an adverse biological effect.

(2) This chapter may not negate specific CSO reduction projects, programs, and schedules that the department and a municipality have agreed upon before this chapter's effective date. However, the provisions of this chapter shall still apply.

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-015, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-015, filed 1/27/87.]

WAC 173-245-020 Definitions. As used in this chapter:

(1) "At-site treatment" means treatment and discharge of combined sewage at the CSO site.

(2) "Baseline annual CSO volume and frequency" means the annual CSO volume and frequency that is estimated to occur based upon the existing sewer system and the historical rainfall record.

(3) "Best management practices" means use of those practices which will best reduce the amount of pollution caused by nonpoint sources so that pollutant loadings in combined and storm sewer flows during rainfall events are minimized.

(4) "Combined sewage" means the mixture of sanitary sewage, infiltration, and inflow.

(5) "Combined sewer" means a sewer that has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

(6) "Combined sewer overflow (CSO)" means (a) the event during which excess combined sewage flow caused by

inflow is discharged from a combined sewer, rather than conveyed to the sewage treatment plant because the capacity of either the treatment plant or the combined sewer is exceeded.

(7) "CSO reduction plan" means a comprehensive plan for attaining the greatest reasonable reduction of CSOs at the earliest possible date. The requirements for a CSO reduction plan are as further described in this chapter.

(8) "Department" means the department of ecology.

(9) "Disinfection" means the selective destruction of disease-causing and bacterial indicator group organisms.

(10) "Domestic wastewater facilities" means any CSO treatment or control facility included under the definition of domestic wastewater facilities as defined in chapter 173-240 WAC.

(11) "In-line storage" means storage of sewage within the sewer pipes through the use of regulators and gates.

(12) "Infiltration" means the addition of ground water into a sewer through joints, the sewer material, cracks, and other defects.

(13) "Inflow" means the addition of rainfall-caused surface water drainage from roof drains, yard drains, basement drains, street catch basins, etc., into a sewer.

(14) "NPDES" means the National Pollutant Discharge Elimination System.

(15) "Off-line storage" means storage of sewage adjacent to the sewer pipe in a tank or other storage device.

(16) "Primary treatment" means any process that removes at least fifty percent of the total suspended solids from the waste stream, and discharges less than 0.3 ml/l/hr. of settleable solids.

(17) "Sanitary sewer" means a sewer that is designed to convey sanitary sewage and infiltration.

(18) "Sanitary sewage" means the mixture of domestic, commercial, and industrial wastewaters.

(19) "Secondary treatment" means any process that achieves the requirements of 40 CFR Part 133 as supplemented by state rule and guidance.

(20) "Storm sewer" means a sewer that is designed to convey surface water drainage caused by rainfall.

(21) "Storm sewer/sanitary sewer separation" means construction of new storm sewers or new sanitary sewers so that sanitary sewage and surface drainage are conveyed in different sewers.

(22) "The greatest reasonable reduction" means control of each CSO in such a way that an average of one untreated discharge may occur per year.

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-020, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-020, filed 1/27/87.]

WAC 173-245-030 Submission of plans. Municipalities shall:

(1) Obtain the approval of the department for CSO reduction plans by January 1, 1988. This deadline may be extended by the department when that authority is granted.

(2) Submit plans to the department at least sixty days before the time approval is desired.

(3) Incorporate CSO reduction plans into their respective general sewer plans and into plans for new or upgraded sewage treatment facilities.

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-030, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-030, filed 1/27/87.]

WAC 173-245-040 CSO reduction plan. (1) The CSO reduction plan must be sufficiently complete so that plans and specifications can be developed from it for projects that may proceed into design within two years of plan submittal. Sufficient detail of any remaining projects must be provided so that detailed engineering reports can be prepared in the future.

(2) CSO reduction plans shall include the following information together with any other relevant data as requested by the department.

(a) Documentation of CSO activity. Municipalities shall complete a field assessment and mathematical modeling study to establish each CSO's location, baseline annual frequency, and baseline annual volume; to characterize each discharge; and to estimate historical impact by:

(i) Flow monitoring and sampling CSOs. Monitoring and sampling at one or more CSO sites in a group that are in close proximity to one another is sufficient if the municipality can establish a consistent hydraulic and pollutant correlation between or among the group of CSO sites. Sampling may not be required for CSO sites that serve residential basins; and

(ii) Developing a rainfall/stormwater runoff/CSO model to simulate each CSO site's activity; and

(iii) Verifying the model's accuracy with data collected under (a)(i) of this subsection; and

(iv) In circumstances where an historical impact may be discernible, observing and sampling the receiving water sediments adjacent to each CSO site or group of sites to establish the presence and extent of any bottom deposits; and

(v) If the sewer service area upstream of a CSO site includes sanitary sewer sources other than domestic sewage, samples of the sediment deposits shall receive heavy metal analysis and organic pollutant screening. Pending review of results of these analyses, the department may require additional pollutant analyses. If two or more CSO sites serve the same industrial/commercial sources, sediment sampling adjacent to one representative CSO site may suffice.

(b) To achieve the greatest reasonable reduction at each CSO site, control/treatment alternatives that shall receive consideration include, but are not limited to:

(i) Use of best management practices, sewer use ordinances, pretreatment programs, and sewer maintenance programs to reduce pollutants, reduce infiltration, and delay and reduce inflow; and

(ii) In-line and off-line storage with at least primary treatment and disinfection at the secondary sewage treatment facility that is served by the combined sewer; or

(iii) Increased sewer capacity to the secondary sewage treatment facility that shall provide at least primary treatment and disinfection; or

(iv) At-site treatment equal to at least primary treatment, and adequately offshore submerged discharge. At-site treatment may include a disinfection requirement at CSO sites that are near or impact water supply intakes, potentially harvestable shellfish areas, and primary contact recreation areas; or

(v) Storm sewer/sanitary sewer separation.

(c) Analysis of selected treatment/control projects. Municipalities shall conduct an assessment of the treatment/control project or combination of projects proposed for each CSO site. The assessment shall include:

(i) An estimation of the water quality and sediment impacts of any proposed treated discharge using existing background receiving water quality data, and estimated discharge quality and quantity. The department may require a similar analysis for proposed storm sewer outfalls for basins that drain industrial and/or commercial areas; and

(ii) An estimation of the selected projects' impacts on the quality of effluent from and operation of a municipality's secondary sewage treatment facility. During wet weather flow conditions, a municipality shall maximize the rate and volume of flows transported to its secondary sewage treatment facility for treatment. However, those flows must not cause the treatment facility to exceed the pollutant concentration limits in its NPDES permit; and

(iii) The estimated construction and operation and maintenance costs of the selected projects; and

(iv) The general locations, descriptions, basic design data, sizing calculations, and schematic drawings of the selected projects and descriptions of operation to demonstrate technical feasibility; and

(v) An evaluation of the practicality and benefits of phased implementation; and

(vi) A statement regarding compliance with the State Environmental Policy Act (SEPA).

(d) Priority ranking. Each municipality shall propose a ranking of its selected treatment/control projects. The rankings must be developed considering the following criteria:

(i) Highest priority must be given to reduction of CSOs that discharge near water supply intakes, public primary contact recreation areas, and potentially harvestable shellfish areas;

(ii) A cost-effectiveness analysis of the proposed projects. This can include a determination of the monetary cost per annual mass pollutant reduction, per annual volume reduction, and/or per annual frequency reduction achieved by each project;

(iii) Documented, probable, and potential environmental impacts of the existing CSO discharges.

(e) Municipalities shall propose a schedule for achieving "the greatest reasonable reduction of combined sewer overflows at the earliest possible date." (RCW 90.48.480.) If the agreed upon schedule exceeds five years, municipalities shall propose an initial five-year program of progress towards achieving the greatest reasonable reduction. Factors that municipalities and the department shall use to determine compliance schedules shall include but not be limited to:

(i) Total cost of compliance;

(ii) Economic capability of the municipality;

(iii) Other recent and concurrent expenditures for improving water quality; and

(iv) The severity of existing and potential environmental and beneficial use impacts.

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-040, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-040, filed 1/27/87.]

WAC 173-245-050 Plans and specifications. (1) The plans and specifications for a domestic wastewater facility are the detailed construction documents by which the owner or his or her contractor bid and construct the facility. The content and format of the plans and specifications must be as stated in the state of Washington, "Criteria for sewage works design," and shall include a list of the facility design criteria and a plan for interim operation of facilities during construction.

(2) Plans and specifications for sewer line extensions shall include, as a separate report, an analysis of the existing collection and treatment system's ability to transport and treat additional flow and loading.

(3) Two copies of the plans and specifications must be submitted to the department for approval before the start of construction, except as waived under WAC 173-240-030(5). (See also, WAC 173-240-070.)

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-050, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-050, filed 1/27/87.]

WAC 173-245-055 Construction quality assurance plan. (1) Before construction, a detailed plan must be submitted to the department showing how adequate and competent construction inspection will be provided.

(2) The construction quality assurance plan shall include:

(a) Construction schedule with a summary of planned construction activities, their sequence, interrelationships, durations, and terminations.

(b) Description of the construction management organization, management procedures, lines of communication, and responsibility.

(c) Description of anticipated quality control testing including type of test, frequency, and who will perform the tests.

(d) Description of the change order process that includes who will initiate change orders, as well as who will review, negotiate, and approve change orders.

(e) Description of the technical records handling methodology that includes where plans and specifications, as-built drawings, field orders, and change orders will be kept.

(f) Description of construction inspection program that includes inspection responsibility, anticipated inspection frequency, deficiency resolution, and inspector qualifications. (See also, WAC 173-240-075.)

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-055, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-055, filed 1/27/87.]

WAC 173-245-060 Operation and maintenance manual. (1) The proposed method of operation and maintenance of the domestic wastewater facility must be stated in the engineering report or plans and specifications and must be approved by the department. The statement must be a discussion of who will own, operate, and maintain the facility and what the staffing and testing requirements are. The owner shall follow the approved method of operation after the facility is constructed, unless changes have been approved by the department.

(2) In those cases where the facility includes mechanical components, a detailed operation and maintenance manual must be prepared before completing the construction. The purpose of the manual is to present technical guidance and regulatory requirements to the operator to enhance operation under both normal and emergency conditions. Two copies of the manual must be submitted to the department for approval before completing the construction.

(3) In order to assure proper operation during construction and timely review and approval of the final operation and maintenance manual, a draft manual must be submitted in the early stages of the construction of a facility. In addition, manufacturer's information on equipment must be available to the plant operator before unit start up.

(4) The operation and maintenance manual shall include the following list of topics. For those projects funded by the environmental protection agency the manual shall also follow the requirements of the EPA publication, *Considerations for Preparation of Operation and Maintenance Manuals.*

(a) The assignment of managerial and operational responsibilities, including plant classification and classification of required operators.

(b) A description of plant type, flow pattern, operation, and efficiency expected.

(c) The principal design criteria.

(d) A process description of each plant unit, which includes function, relationship to other plant units, and schematic diagrams.

(e) A discussion of the detailed operation of each unit and description of various controls, recommended settings, fail-safe features, etc.

(f) A discussion of how the treatment facilities are to be operated during anticipated maintenance procedures, and under less than design loading conditions, if applicable, such as initial loading on a system designed for substantial growth.

(g) A section on laboratory procedures that includes sampling techniques, monitoring requirements, and sample analysis.

(h) Recordkeeping procedures and sample forms to be used.

(i) A maintenance schedule incorporating manufacturer's recommendations, preventative maintenance and housekeeping schedules, and special tools and equipment usage.

(j) A section on safety.

(k) A section stating the spare parts inventory, address of local suppliers, equipment warranties, and appropriate equipment catalogues.

(l) Emergency plans and procedures.

(5) In those cases where the facility does not include mechanical components, an operation and maintenance manual, which may be less detailed than that described in subsection (4) of this section, must be submitted to the department for approval before completing the construction. The manual shall fully describe the treatment and disposal system and outline routine maintenance procedures needed for proper operation of the system. (See also, WAC 173-240-080.)

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-060, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-060, filed 1/27/87.]

WAC 173-245-070 Declaration of construction completion. (1) Within thirty days after the owner accepts the construction or modification of a domestic wastewater facility, the professional engineer in responsible charge of inspection of the project shall submit to the department (a) one complete set of record drawings or as-built drawings (b) a declaration stating the facilities were constructed in accordance with the provisions of the construction quality assurance plan and without significant change from the department approved plans and specifications.

(2) The declaration will be furnished by the department and will be the same form as WAC 173-245-075, declaration of construction of water pollution control facilities. The submission of the declaration is not necessary for sewer line extensions where the local government entity has received approval of a general sewer plan and standard design criteria. (See also, WAC 173-240-090.)

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-070, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-070, filed 1/27/87.]

WAC 173-245-075 Form—Declaration of construction of water pollution control facilities.

DECLARATION OF CONSTRUCTION OF WATER POLLUTION CONTROL FACILITIES

Instructions:

A. Upon completion, and before using any project or portions thereof, a professional engineer shall complete and sign this form, declaring that the project was constructed in accordance with the provisions of the construction quality assurance plan and with the plans and specifications and major change orders approved by the department of ecology.

B. If a project is being completed in phased construction, a map must be attached showing that portion of the project to which the declaration applies. A declaration of construction must be submitted for each phase of a project as it is completed. Additional declaration forms are available upon request from the department of ecology offices listed below.

NAME AND BRIEF DESCRIPTION OF PROJECT: . . . . . .
. . . . . .
. . . . . .

NAME OF OWNER . . . . . DOE PROJECT NO. . . . . .
ADDRESS . . . . . DATE PROJECT OR PHASE COMPLETED . . . . . .
CITY . . . . . STATE . . . . . ZIP . . . . . DOE PLAN AND SPECIFICATION APPROVAL DATE . . . . . .

I hereby declare that I am the project engineer of the above identified project and that this project was reviewed and observed by me or my authorized agent in accordance with the provisions of the construction quality assurance plan. I further declare that this project was, to the best of my knowledge and information, constructed and completed in accordance with the plans and specification and major change

orders approved by the department of ecology and as shown on the owner's "as-built" plans.

. . . . . SEAL
Signature of Professional Engineer

OF

DATE . . . . . .

ENGINEER

Please return completed form to the department of ecology office checked below.

❏ SW Regional Office
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

❏ Central Regional Office
Department of Ecology
15 W. Yakima Ave.
Ste. 200
Yakima, WA
98902-3401

❏ NW Regional Office
Department of Ecology
3190 160th Ave. SE
Bellevue, WA 98008-5452

❏ Eastern Regional Office
Department of Ecology
N. 4601 Monroe St.,
Ste. 100
Spokane, WA
99205-1295

❏ Water Quality Program
Department of Ecology
P.O. Box 47600
Olympia, WA
98504-7611

(See also, WAC 173-240-095.)

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-075, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-075, filed 1/27/87.]

WAC 173-245-080 Requirement for certified operator. Each owner of a domestic wastewater treatment facility is required by chapter 70.95B RCW to have an operator, certified by the state, in responsible charge of the day to day operation of the facility. This requirement does not apply to a septic tank using subsurface disposal. The certification procedures are set forth in chapter 173-230 WAC. (See also, WAC 173-240-100.)

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-080, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-080, filed 1/27/87.]

WAC 173-245-084 Ownership and operation and maintenance. (1) Except as provided in subsections (2) and (3) of this section, domestic sewage facilities will not be approved unless ownership and responsibility for operation and maintenance is by a public entity. If a waste discharge permit is required it must be issued to the public entity. Nothing herein precludes a public entity from contracting operation and maintenance of domestic sewage facilities.

(2) Ownership by nonpublic entities may be approved if the department determines the ownership is in the public interest: Provided, That there is an enforceable contract, approved by the department, between the nonpublic entity and a public entity with an approved sewer general plan that will assure immediate assumption of the system under the following conditions:

(a) Treatment efficiency is unsatisfactory either as a result of plant capacity or physical operation; or

(b) If such an assumption is necessary for the implementation of a general sewer plan.

(3) The following domestic wastewater facilities would not require public entity ownership, operation, and maintenance:

(a) Those facilities existing or approved for construction as of the effective date of this section, until such a time as the facility is expanded to accommodate additional development.

(b) Those facilities which serve a single nonresidential, industrial, or commercial establishment. Commercial/industrial complexes serving multiple owners or tenants and multiple residential dwelling facilities such as mobile home parks, apartments, and condominiums are not considered commercial establishments for the purpose of this section. (See also, WAC 173-240-104.)

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-084, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-084, filed 1/27/87.]

WAC 173-245-090 Schedule updates—Monitoring—Reporting. (1) By the anniversary date of its sewage treatment plant NPDES permit, in conjunction with its annual assessment for prevention of facilities overloading where applicable, a municipality shall submit an annual CSO report to the department for review and approval that:

(a) Details the past year's frequency and volume of combined sewage discharged from each CSO site, or group of CSO sites in close proximity. Field monitoring is necessary to estimate these parameters. The report shall indicate whether a CSO site or group of sites has increased over the baseline annual condition. If any increase has occurred, the municipality shall propose a project and schedule to reduce that CSO site or group of sites to or below its baseline condition;

(i) When a CSO site has been reduced to an average of one overflow per year through use of storage or separation, the department may consider reducing the monitoring requirement to frequency verification;

(ii) If the selected CSO control project is at-site treatment and discharge, the department may issue a modification to the applicable sewage treatment plant permit or issue a separate NPDES permit for that discharge. The permit or permit modification must include effluent limits, flow capacity limits, and reporting requirements. The total treated and untreated annual discharge from an at-site treatment plant may not increase above the baseline annual;

(b) Explains the previous year's CSO reduction accomplishments; and

(c) Lists the projects planned for the next year.

(2) In conjunction with its application for renewal of its applicable NPDES permit, the municipality shall submit an amendment to its CSO reduction plan. The amendment shall include:

(a) An assessment of the effectiveness of the CSO reduction plan to date; and

(b) A reevaluation of the CSO sites' project priority ranking; and

(c) A list of projects to be accomplished in the next five years, based upon priorities and estimated revenues. The

department of ecology may incorporate such a schedule into an administrative order or the applicable NPDES permit.

[Statutory Authority: RCW 90.48.110. 00-15-019 (Order 00-07), § 173-245-090, filed 7/11/00, effective 8/11/00. Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-090, filed 1/27/87.]

Chapter 173-255 WAC

LIMITATIONS ON USE OF REFERENDUM 26 GRANT FUNDS FOR WATER POLLUTION ABATEMENT

WAC

173-255-010 Purpose and scope.
173-255-020 Effective date.
173-255-030 Definitions.
173-255-040 Limitation of programs eligible for funding under Referendum Bill No. 26.
173-255-050 Limitation on grant awards within the municipal grants program.
173-255-060 Provision of guidelines.

WAC 173-255-010 Purpose and scope. The purpose of this chapter is to set forth the limitations on uses of moneys administered by the department of ecology pursuant to chapter 43.83A RCW (Referendum Bill No. 26). The limitations are necessary to insure that these funds will be used to their optimum extent to protect the resources and environment of the state of Washington and the health and safety of its people by providing adequate publicly owned facilities and systems for the collection, treatment and disposal of solid and liquid waste materials.

[Statutory Authority: RCW 43.21A.080. 78-09-066 (Order DE 78-12), § 173-255-010, filed 8/24/78.]

WAC 173-255-020 Effective date. All projects, or phases of projects, which have not received a federal or state grant award for design, before the effective date of this chapter will be subject to provisions contained herein.

[Statutory Authority: RCW 43.21A.080. 78-09-066 (Order DE 78-12), § 173-255-020, filed 8/24/78.]

WAC 173-255-030 Definitions. For the purpose of this chapter:

(1) "Department" means the Washington state department of ecology.

(2) "Agricultural pollution grants program" means the program of grants administered by the department for the planning, design and construction of publicly owned or operated agricultural pollution abatement facilities.

(3) "Lake restoration grants program" means the program of state grants administered by the department for the planning, design and implementation of lake restoration projects.

(4) "Marina pumpout grants program" means the program of state grants administered by the department for the design and construction of sewage pumpout facilities and dump stations at publicly owned or operated marinas.

(5) "Municipal wastewater treatment works construction grants program" (hereinafter referred to as the construction grants program) means the federal/state matching program of grants under Title II of Public Law 95-217 to municipal entities for the purpose of upgrading their treatment works to meet the effluent requirements of state and federal law.

(6) "Water supply residual waste treatment works grants program" means the program of state grants administered by the department for the design and construction of pollution abatement facilities for publicly owned or operated water supply plants in existence on February 3, 1976, that discharge residual wastes to the waters of the state.

(7) "Individual systems" means privately owned treatment works serving one or more principal residences or small commercial establishments constructed prior to and inhabited on or before December 27, 1977, to abate an existing water pollution or public health problem.

(8) "Industrial cost recovery program" means the program established under Title II section 204(b) of the Federal Water Pollution Control Act Amendments (Public Law 92-217) to recover the cost of municipal treatment systems attributed to industrial users, when a municipal treatment system has been funded with federal funds under Title II.

(9) Industrial user:

(a) Any nongovernmental user of publicly owned treatment works which discharges more than twenty-five thousand gallons per day of sanitary waste, or a volume of process waste or combined process and sanitary waste, equivalent to twenty-five thousand gallons per day of sanitary waste.

(b) Any nongovernmental user of a publicly owned treatment works which discharges wastewater to the treatment works which contains toxic pollutants or poisonous solids, liquids, or gases in sufficient quantity either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in or have an adverse effect on the waters receiving any discharge from the treatment works.

(c) All commercial users of an individual system constructed with grant assistance under section 201(h) of the Clean Water Act of 1977 (P.L. 95-217).

(10) "Innovative and alternative technology projects" means those projects employing innovative and alternative wastewater treatment processes and techniques as defined by EPA guidelines in 40 CFR 35, Appendix E, and which are eligible for federal grants under 40 CFR 35.908 promulgated on April 25, 1978, or hereafter modified.

[Statutory Authority: RCW 43.21A.080. 78-09-066 (Order DE 78-12), § 173-255-030, filed 8/24/78.]

WAC 173-255-040 Limitation of programs eligible for funding under Referendum Bill No. 26. (1) The following programs shall be eligible for state matching grants in an amount not to exceed fifty percent of the total eligible cost of a project as determined by the department: The marina pumpout grants program, the water supply plant residual waste treatment works grants program, the lake restoration grants program, the state construction grants program and the agricultural pollution grants program. The department may authorize a matching grant less than fifty percent of the total eligible cost of a project in those cases where it would be in the public interest, or where federal matching funds are available and it would be in the public interest to secure a local matching portion.

(2) The federal construction grants program may be eligible for state matching grants in an amount not to exceed fifteen percent of the total eligible cost of a project as deter-

mined by the department except as provided in WAC 173-255-050(1).

[Statutory Authority: RCW 43.21A.080. 80-08-050 (Order DE 80-24), § 173-255-040, filed 6/30/80; 78-09-066 (Order DE 78-12), § 173-255-040, filed 8/24/78.]

WAC 173-255-050 Limitation on grant awards within the municipal grants program. (1) The state matching grants for innovative and alternative technology projects shall be limited to nine percent which is the same portion of the nonfederal share as other types of projects funded under the construction grants program.

(2) Expenditure of funds under the provisions of chapter 43.83A RCW is limited to public bodies which are defined in the statute to mean any agency, political subdivision, taxing district, or municipal corporation thereof, and those Indian tribes now or hereafter recognized as such by the federal government for participation in the federal land and water conservation program and which may constitutionally receive grants or loans from the state of Washington. This provision and definition prohibits the expenditure of state funds for matching grants for, among others:

(a) Individual systems; and

(b) That portion of the construction of a municipal treatment works attributable to industrial users. Such portion is to be determined through the environmental protection agency's industrial cost recovery program.

[Statutory Authority: RCW 43.21A.080. 78-09-066 (Order DE 78-12), § 173-255-050, filed 8/24/78.]

WAC 173-255-060 Provision of guidelines. The department will publish guidelines which establish procedures, under each of the Referendum 26 grant programs, for the grant application and award process.

[Statutory Authority: RCW 43.21A.080. 78-09-066 (Order DE 78-12), § 173-255-060, filed 8/24/78.]

Chapter 173-270 WAC
PUGET SOUND HIGHWAY RUNOFF PROGRAM

WAC

173-270-010	Purpose, authority, and applicability.
173-270-020	Definitions.
173-270-030	Best management practices.
173-270-040	Vegetation management program.
173-270-050	New construction.
173-270-060	Existing facilities.
173-270-070	Monitoring.
173-270-080	Reporting.
173-270-090	Enforcement.
173-270-100	Severability.

WAC 173-270-010 Purpose, authority, and applicability. (1) Purpose. The purpose of this chapter is to:

(a) Control highway runoff into waters of the state to the maximum extent possible under state law;

(b) Establish procedures and criteria for WSDOT's highway runoff program mandated by the Puget Sound water quality management plan pursuant to chapter 90.70 RCW; and

(c) Provide for appropriate consultation and coordination with tribes, local governments, and other interested and affected parties.

(2) Authority. The authority for this chapter is provided by chapters 90.48 and 90.70 RCW.

(3) Applicability. This chapter applies to all state highway rights of way in the Puget Sound basin which WSDOT owns or controls by long-term lease or easement, or for which WSDOT has maintenance responsibility. This chapter is applicable subject to the availability of appropriated funds or other funding sources.

Note: Copies of statutes and administrative rules incorporated by reference as a part of this chapter are available at ecology offices in Lacey, Washington during regular business hours.

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-010, filed 5/21/91, effective 6/21/91.]

WAC 173-270-020 Definitions. The definitions in this section apply to this chapter unless the context requires otherwise.

(1) "Average daily traffic" or "ADT" means the total traffic volume during a given time period (in whole days) greater than one day and less than one year divided by the number of days in that time period. ADT is determined by WSDOT.

(2) "Best management practices" or "BMPs" means physical, structural, and/or managerial practices that when used singly or in combination prevent or reduce pollution of water and have been approved by ecology. BMPs are listed and described in the manual defined in subsection (9) of this section.

(3) "Broadcast application" means a uniform application of pesticides to an entire area.

(4) "Buffer zone" means the minimum distance that a pesticide is permitted to be applied from a physical feature or sensitive area.

(5) "Capital improvement program plan" means a schedule of permanent physical structural improvements budgeted to fit financial resources.

(6) "Ecology" means the Washington state department of ecology.

(7) "EPA" means the U.S. Environmental Protection Agency.

(8) "Experimental BMP" means any treatment or methodology proposed for treatment of highway runoff that is not in the highway runoff manual, defined in subsection (9) of this section, and is being studied by WSDOT and/or ecology for adoption as a BMP.

(9) "Highway runoff manual" means the manual adopted by WSDOT and approved by ecology that contains BMPs to prevent or reduce pollution, and described in WAC 173-270-030.

(10) "Integrated pest management" or "IPM" means the selection, integration, and implementation of pest control that consists of: Prevention of pest problems; monitoring and evaluation of pests, damage and results of treatment; acknowledgment of population levels of pests that can be tolerated based on legal, economic, health, or aesthetic thresholds; use of natural control agents in an ecosystem; reliance to the maximum extent possible on nonhazardous biological, mechanical, and cultural treatment of pests; application of pesticides in a manner that minimizes damage to the ecosys-

tem's natural controls and integrity; and use of pesticides only after all other methods have been evaluated.

(11) "Local government" means a county, city, town, or special purpose district that has authority to manage stormwater.

(12) "New construction" means the addition of one or more lanes, ramps, bridges, or other major structures to an existing state highway or the construction of a new state highway.

(13) "Pest" means any form of plant or animal life or virus (except virus on or in living man or other animal) which is normally considered to be a pest or which the director of the WSDA may declare by regulation to be a pest, including but not limited to, any insect, other arthropod, fungus, rodent, nematode, mollusk, or weed.

(14) "Pest treatment" means mechanical, biological, cultural, or chemical procedures or methods to manage, control, or reduce the influence of a pest.

(15) "Pesticide" means as defined by chapter 17.21 RCW, the Washington Pesticide Act, and regulated by the United States Environmental Protection Agency and WSDA.

(16) "Pollution" means such contamination or other alteration of the physical, chemical, or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial use, or to livestock, wild animals, birds, fish, or other aquatic life.

(17) "Puget Sound basin" means the waters of Puget Sound south of Admiralty Inlet including Hood Canal and Saratoga Passage; the waters north to the Canadian border, including portions of the Strait of Georgia; the Strait of Juan de Fuca south of the Canadian border; and all land draining into these waters as mapped in WAC 173-500-040 Water resource inventory areas numbers 1 through 19.

(18) "Quality assurance and control plan" means a collection of policies, objectives, principles, and procedures for attaining data of known and accepted quality and establishes standards of performance for sampling, monitoring, and measurement.

(19) "Sensitive area" means an area or that due to its ground or surface water characteristics may be adversely affected or altered directly or indirectly by pollution and requires special vegetation management, stormwater management, or other practices.

(20) "Spot treatment" means the application of pesticides to a selected individual area or species.

(21) "Stormwater management manual" means the technical manual prepared by ecology for use by local governments and WSDOT that contains BMPs to prevent or reduce pollution in stormwater.

(22) "Stormwater treatment" means chemical, biological, or mechanical procedures or structural methods to remove, reduce, or neutralize pollution.

(23) "Waters of the state" means lakes, rivers, ponds streams, inland waters, underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

(24) "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are identified and delineated by the "*Federal Manual for Identifying Jurisdictional Wetlands*" dated January 19, 1989.

(25) "WSDA" means the Washington state department of agriculture.

(26) "WSDOT" means the Washington state department of transportation.

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-020, filed 5/21/91, effective 6/21/91.]

WAC 173-270-030 Best management practices. (1) Approved manual required. Six months after the effective date of ecology's stormwater management manual or six months after the effective date of this chapter, whichever is later, WSDOT shall submit to ecology a highway runoff manual. If WSDOT proposes to adopt a manual other than ecology's stormwater management manual as its highway runoff manual, WSDOT shall formally consult with the tribes and local governments about the contents of the highway runoff manual. The highway runoff manual shall be consistent with ecology's stormwater management manual and shall be adopted by WSDOT only after obtaining ecology's approval. After obtaining ecology's approval, WSDOT shall use the highway runoff manual to direct stormwater management for its existing and new facilities and rights of way in the Puget Sound basin.

(2) Amendments to manual.

(a) Ecology initiates amendments. If ecology amends its stormwater management manual to change or add a BMP or other technical requirement that applies to highways, ecology shall notify WSDOT in writing and send WSDOT a copy of the amendment. This notification shall include ecology's determination as to whether the highway runoff manual complies with the amendment. If the highway runoff manual does not comply with the amendment, WSDOT shall submit proposed amendments within sixty days unless ecology agrees to a time extension. Such proposed amendment shall be subject to ecology's review and approval.

(b) WSDOT initiates amendments. Amendments proposed by WSDOT to the approved highway runoff manual shall be submitted to ecology for review and approval. WSDOT shall formally consult with affected tribes and local governments during the development of proposed amendments. Ecology shall review and approve, conditionally approve or deny the proposed amendments within sixty days from the submittal date.

(3) More stringent standards.

(a) WSDOT shall use the minimum standards established in the highway runoff manual but may use more stringent standards.

(b) When a state highway is located in the jurisdiction of a local government that is required by ecology to utilize more stringent standards to protect the quality of receiving waters,

WSDOT shall comply with the same standards to promote uniform stormwater treatment.

(c) WSDOT shall comply with standards identified in watershed action plans for WSDOT rights of ways as required by WAC 400-12-570.

(4) Project coordination. WSDOT shall consult with appropriate tribes and local governments and evaluate local conditions for design, construction, and maintenance of stormwater facilities as indicated in WSDOT's utilities manual. Other agencies and organizations that have an interest or expertise in stormwater may also be consulted. WSDOT, tribes, and local governments are encouraged to jointly develop and maintain stormwater facilities.

(5) Contents of manual. The highway runoff manual shall include, but not be limited to, the following:

(a) BMPs for the control of erosion and sedimentation from construction sites, including standards for operation and maintenance;

(b) Hydrologic analysis procedures, including selection of design storms and estimation of runoff;

(c) Design, operation, and maintenance standards for retention and/or detention facilities and conveyance systems that shall emphasize systems which maximize water quality benefits as well as water quantity control, such as inclusion of biofiltration techniques where practicable;

(d) BMPs for the control of pests, excluding weed control which shall be addressed in the vegetation management program described in WAC 173-270-040;

(e) BMPs for the selection and use of deicing chemicals and traction grit which, as a minimum, shall consist of the following: (i) Traction grit particles should be as large as suitable for application on highways for traction purposes because large particles are less readily transported into waters of the state; (ii) selection and use of deicing chemicals shall include consideration of potential effects on water quality and the beneficial uses of potentially affected waters; (iii) stockpiles containing deicing chemicals shall be investigated for existing and potential water quality problems; and (iv) stockpiles that have an identified problem shall be covered, curbed, diked, placed on an impervious surface, and/or located so runoff can not carry dissolved chemicals into waters of the state; and

(f) BMPs for waste disposal from highway runoff system maintenance.

(6) Experimental BMPs.

(a) WSDOT request. WSDOT may request in writing that ecology approve the use of an experimental BMP for one or several sites. The request shall include, but need not be limited to, a description of: (i) The experimental BMP; (ii) why the experimental BMP is being requested; (iii) why the BMPs in the highway runoff manual are not appropriate; (iv) applicable construction techniques; (v) the site or sites at which use of the experimental BMP is proposed; (vi) the characteristics of the site or sites; (vii) design criteria for the experimental BMP; (viii) maintenance procedures; (ix) cost estimates; (x) monitoring procedures; (xi) the time needed for monitoring; (xii) the anticipated results; (xiii) if appropriate, an approved BMP that could be used if the experimental BMP fails; and (xiv) consultation with interested and affected parties including tribes, local governments, and contiguous property owners.

(b) Ecology review and approval. After reviewing WSDOT's request, ecology may approve, conditionally approve, or deny the use of the experimental BMP for specific sites. Any approval shall be for a period of time not to exceed four years unless ecology determines, upon request and justification by WSDOT, that unusual circumstances justify a longer time period.

(c) Evaluation criteria. In evaluating an experimental BMP, ecology shall consider factors it deems appropriate, including, but not limited to: The experimental BMP's effectiveness in protecting water quality and beneficial uses; its reliability, cost, ease of construction; and maintenance requirements.

(d) BMP status. Before ecology's authorization for WSDOT's use of the experimental BMP expires, WSDOT shall consult with affected tribes, local governments, or property owners. WSDOT shall document the results of the experimental BMP and shall determine whether to request amendment of the highway runoff manual to include the experimental BMP as an approved BMP. Before ecology's authorization expires, WSDOT shall either request an amendment to the highway runoff manual under subsection (2)(b) of this section or inform ecology in writing that it is not proposing to amend the highway runoff manual to include the BMP. Based upon the predicted results in the original request, monitoring data and other information relevant to WSDOT's request, ecology shall determine whether an experimental BMP that is not proposed to be included in the highway runoff manual shall be replaced with an approved BMP.

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-030, filed 5/21/91, effective 6/21/91.]

WAC 173-270-040 Vegetation management program. (1) General. The purposes of vegetation management in highway rights of way are to establish and maintain stable plant communities that resist encroachment by undesirable plants, noxious weeds, and other pests; meet WSDOT operational, health, natural resources, and environmental standards; be cost effective; and protect the public investment with minimal negative impacts on the environment.

(2) Program required. WSDOT shall prepare and implement a vegetation management program for all state highways within the Puget Sound basin. WSDOT shall obtain ecology's preliminary approval of the program before WSDOT conducts a public hearing. WSDOT shall formally consult with the tribes and local governments during preparation of the proposed program. After the public hearing, WSDOT shall obtain ecology's approval before WSDOT adopts the program. The program shall be adopted by September 30, 1991. WSDOT and ecology shall review the program at least every two years beginning September 30, 1993. Either ecology or WSDOT may initiate amendment of the program. Amendments shall be prepared, approved, and adopted in accordance with the procedures of this subsection for the initial development of the vegetation management program.

(3) Contents of program.

(a) The vegetation management program shall include, but need not be limited to vegetation management policies; technical guidelines; procedures to implement policies and

guidelines; and roadside management plan procedures and standards.

(b) Vegetation management policies. These policies, at a minimum, shall address:

(i) Operational, aesthetic, and environmental standards;

(ii) Integrated pest management;

(iii) Coordination between WSDOT and local governments, abutting property owners, and tribes, including public notification, option to maintain by contiguous property owner and the option to maintain by a preferred management technique of the contiguous property owner;

(iv) Recordkeeping;

(v) Training and education for vegetation management employees; and

(vi) Testing for pesticides at storage, loading, and mixing areas and, if necessary, in ground water and nearby surface water that may be contaminated by or affected by pesticides.

(c) Technical guidelines. These guidelines, at a minimum, shall address:

(i) Integrated pest management which shall address monitoring, establishing injury levels, setting action levels, selecting treatment, and evaluating treatment.

(A) Monitoring. Monitoring guidelines shall provide for: Identification of the potential pest and/or problem and sensitive areas; and observation of the vegetation on the site, or the site itself for potential pest problems at regular intervals. The schedule and methods of monitoring shall be appropriate to minimize the severity of damage caused by the pest.

(B) Establishing injury levels. Guidelines for establishing injury levels shall provide for determination of when a pest is likely to cause significant damage and require action to prevent unacceptable damage or public safety problems. Accurate records shall be kept so adequate data is available to make decisions. A problem shall be noted before any action is taken.

(C) Setting action levels. Guidelines for setting action levels shall provide for prioritization of target species and determination of when to initiate action so that unacceptable injury levels are not reached.

(D) Selecting treatment. Selection of pest treatment strategies and tactics shall provide for safety of highway users; protect the environment and human health; and provide for the stewardship of the public investment. This shall include an effort to minimize the use of chemical controls.

(E) Evaluating treatment. After pest treatment, the site shall be inspected to determine whether the pest treatment had the desired results. Adequate time shall be provided for the pest treatment to function before it is evaluated. If the pest treatment did not have the desired results, the treatment may be modified. Desired results may be examined to determine if they were realistic and/or appropriate;

(ii) Measures to reduce the amount of pesticides used to the least possible including measures to reduce the use of any state restricted use pesticides on WSDA's list for the protection of ground water found in WAC 16-228-164;

(iii) Criteria for the selection of pesticides that shall include, but not be limited to, target specificity, toxicity, persistence, migration characteristics, time of application and site conditions of treatment area, including slope and permeability;

(iv) Procedures for sampling and analysis for pesticide contamination in storage, loading, and mixing areas and, if appropriate, ground water and surface water with the use of Puget Sound protocols for sediment sampling of marine sediment for EPA priority pollutants is recommended where appropriate;

(v) A spill cleanup plan;

(vi) Methods for safe transportation of pesticides;

(vii) A recordkeeping system on pesticide use, including format;

(viii) Criteria for the identification of sensitive areas;

(ix) Buffer zones to protect waters of the state, public and private supply wells and watersheds, irrigation ditches, ecology regulated areas, and sensitive areas;

(x) Pesticide storage including a requirement that pesticides shall be stored in a secure building with an impermeable floor and controlled drains;

(xi) Vegetation selection in accordance with WSDOT's design manual with emphasis given to reduced maintenance; and

(xii) Vegetation management personnel training and education.

(d) Procedures for the implementation of the policies and guidelines.

(e) Procedures and standards for the preparation and implementation of roadside management plans for specific segments of state highway to assist WSDOT field crews manage state highway rights of way according to the approved vegetation management policies and technical guidelines. WSDOT shall consult with affected tribes, local governments, and other interested parties during preparation of these procedures and standards. WSDOT shall consult with affected tribes, local governments, and other interested parties during preparation of roadside management plans. These plans, at a minimum, shall address:

(i) Goals and objectives;

(ii) Identification of sensitive areas and minimum buffer zones;

(iii) Maintenance activities;

(iv) Budget estimates; and

(v) Evaluation methods and standards.

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-040, filed 5/21/91, effective 6/21/91.]

WAC 173-270-050 New construction. WSDOT shall incorporate BMPs in all new construction projects for which design is started after the effective date of this chapter. For projects that are being designed or constructed when this chapter becomes effective, WSDOT shall implement BMPs to the maximum extent practicable to protect water quality. If the cost of constructing water quality BMPs makes a project that is being designed when this chapter becomes effective impracticable, then such BMPs shall be retrofitted at a later date. WSDOT shall submit water pollution control plans to ecology for review and approval for new construction and shall obtain other appropriate authorizations prior to construction.

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-050, filed 5/21/91, effective 6/21/91.]

WAC 173-270-060 Existing facilities. (1) Inventory required. WSDOT shall prepare and maintain an inventory of all state highways in the Puget Sound basin. The purpose of the inventory is to determine where water quality BMPs need to be installed, to assist identification of priority projects, and to provide a basis for the evaluation of the program. WSDOT shall begin its inventory on highways with an ADT of fifty thousand or greater. The inventory and rating of highways with an ADT of less than fifty thousand shall be sufficient to provide projects for the six-year capital improvement program plan.

(2) Contents of inventory. The inventory shall be developed for homogeneous highway segments and shall include, but not be limited to:

(a) Highway segment identification including name, location, type, traffic volume classification, local government(s) with jurisdiction, interested tribes, and WSDOT district;

(b) Status of stormwater management as follows: (i) BMPs are present and/or a local government is receiving and/or treating the highway runoff; (ii) BMPs are feasible or the local government will receive and/or treat highway runoff; or (iii) BMPs are not practicable; and

(c) Name of any water quality project completed since the effective date of this chapter, length of project, year of construction, and cost.

(3) Priority rating and ranking.

(a) WSDOT shall establish an annual project priority list for each WSDOT district within the Puget Sound basin. For each fiscal year WSDOT shall select needed improvements for each district inventoried as required by subsection (1) of this section. WSDOT shall divide these needed improvements into projects, considering funds available but in no case less than one project per year in each district unless all needed projects are completed.

(b) Priority rating criteria. WSDOT shall develop a priority rating and ranking system and submit it to ecology for concurrence.

(c) Priority ranking. WSDOT, using the priority ratings and rankings prepared using the system required in subsection (2)(b) of this section, shall determine which projects are to be implemented in each WSDOT district during the fiscal year. WSDOT may modify this ranking for good reason including the participation in a joint project proposed by a local government or tribe.

(4) Capital improvement program plan.

(a) The capital improvement program plan is to promote efficient use of resources, to coordinate projects, to aid compliance with the long-range program targets set forth in subsection (5) of this section and to ensure that difficult projects and those that require lengthy lead time are constructed in a reasonable time.

(b) WSDOT shall prepare a biennially updated water quality capital improvement program plan. WSDOT shall consult with ecology, tribes, and local governments throughout the planning process including the inventory. The capital improvement program plan shall be for a six-year period and include the following:

(i) An inventory of potential projects for the six-year period, including fiscal, technical, work force, legislative requirements, restrictions, and an initial evaluation of their relative priority;

(ii) A schedule for potential execution of projects in a long-range program list which considers priority relationships of projects coupled with legislative, fiscal, technical, and work force restrictions;

(iii) Selection of projects for early action from this schedule; and

(iv) Formal adoption by WSDOT after public review.

(c) Ecology shall review the proposed WSDOT capital improvement program plan and submit written comments to WSDOT before public review and again before adoption by WSDOT.

(d) After a public hearing, WSDOT shall adopt the capital improvement program plan after making appropriate revisions deemed necessary by public input.

(5) Long-range program.

(a) WSDOT shall complete all practicable BMP projects or transmit highway runoff to tribes or local governments for stormwater treatment for highways with an ADT of fifty thousand and greater by December 31, 2005, and for other highways by December 31, 2015.

(b) At least every six years WSDOT and ecology shall evaluate these target dates. Ecology or WSDOT may initiate revision of the target dates. In evaluating any proposed revision of a target date, ecology and WSDOT are to consider factors including, but not limited to, the number and projected costs of the projects yet to be completed, the degree of difficulty to construct the remaining sites, the projected level of funding, any revisions to the state water quality standards and any revisions to the manual required by WAC 173-270-030(1).

(6) Negotiations. Before transmitting to or requesting treatment of highway runoff by a tribe, local government or property owner, WSDOT shall negotiate with the tribe, local government, or property owner. WSDOT shall provide relevant information that shall include, but not be limited to, existing agreements to accept highway runoff, characteristics of the highway runoff, the reasons WSDOT is not treating the runoff on its own right of way and any proposed financial considerations for quality and/or quantity control.

(7) Disposal sites. WSDOT shall prepare an inventory, by district and maintenance area, of all sites, including all known inactive sites, where WSDOT disposes highway sweepings and sediments from stormwater facilities maintenance activities. Inventory information for WSDOT owned and leased sites and sites WSDOT for which has an easement shall include a scaled map illustrating property boundaries and the extent of the fill area, and where possible, an estimate of the volume of the fill present.

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-060, filed 5/21/91, effective 6/21/91.]

WAC 173-270-070 Monitoring. (1) BMP effectiveness monitoring.

(a) Monitoring procedures. WSDOT shall formulate and implement monitoring procedures for each type of BMP employed. The procedures shall include a quality assurance and control plan.

(b) Waivers. After application by WSDOT, ecology may grant a waiver from monitoring a BMP if ecology determines

there is adequate knowledge about the BMP's water quality performance.

(2) Pesticide monitoring. WSDOT shall formulate a pesticide monitoring policy, including but not limited to, threshold determination and frequency of monitoring. WSDOT also shall formulate procedures for monitoring pesticides, including the use of benthic organisms.

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-070, filed 5/21/91, effective 6/21/91.]

WAC 173-270-080 Reporting. (1) Biennial report required. WSDOT shall prepare and submit to ecology a report by September 30 of each odd-numbered year beginning September 30, 1991.

(2) Content of report. The biennial report shall include, but is not limited to:

(a) Monitoring report for both approved and experimental BMPs and pesticides describing monitoring procedures and interpreting results. Included may be recommendations to improve monitoring procedures, findings on which BMPs are the most effective, combinations of BMPs that optimize pollution removal, and recommendations for experimental BMPs;

(b) A pesticide usage inventory, including (i) the amount of pesticides by product by pounds of active ingredient applied for shoulder residual, landscaped areas, brush control, general weed control, noxious weed control, spot treatment and broadcast application by district, area, highway segment, and if feasible, by county and (ii) an analysis and interpretation shall be included with the data;

(c) Storage, loading, and mixing area soil and ground water contamination report for the presence of pesticides, including any cleanup efforts required, proposed, or completed since the adoption of this chapter;

(d) A deicing chemicals and traction grit usage report including:

(i) Product and quantities of deicing chemicals used in the Puget Sound basin by WSDOT district and maintenance area including chemical properties and known effects upon water quality;

(ii) Stockpile locations, with quantities of traction grit abrasive and deicing chemicals used during each season;

(iii) Cleanup practices to prevent or lessen traction grit and deicing chemical entry into waters of the state;

(iv) Locations prohibiting use of deicing chemicals or specific products due to water quality considerations;

(v) Training of personnel;

(vi) Experiments conducted on new products or procedures and experiments that WSDOT proposes;

(e) BMP maintenance report. Reports that shall submit BMP maintenance reports to ecology that shall include, but are not limited to:

(i) Dates that segments of state highway BMPs are inspected and/or maintained;

(ii) The general condition of BMPs;

(iii) Maintenance accomplished;

(iv) The need to reconstruct any BMPs;

(v) Any evaluation of a BMP type;

(vi) Estimated cost to maintain a BMP;

(vii) Suggested improvements to BMPs or their maintenance procedures; and

(viii) Training of personnel;

(f) Inventory for state highways with a fifty thousand ADT or greater required by WAC 173-270-060(1);

(g) Priority list for state highways with less than fifty thousand ADT required by WAC 173-270-060(3);

(h) Capital improvement program required by WAC 173-270-060(4);

(i) Inventory of all WSDOT highway disposal sites required by WAC 173-270-060(6);

(j) Status of roadside management plans by district and maintenance area; and

(k) A summary of the negotiations required by WAC 173-270-060(6).

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-080, filed 5/21/91, effective 6/21/91.]

WAC 173-270-090 Enforcement. Water quality requirements of this chapter shall be enforced through all methods available to ecology, including, but not limited to, those described in chapter 90.48 RCW. For all nonwater quality shortfalls WSDOT shall submit written explanation to ecology, together with proposed remedies.

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-090, filed 5/21/91, effective 6/21/91.]

WAC 173-270-100 Severability. If any provision of this chapter or its application to any person, entity, or circumstance is held invalid, the remainder of this chapter or the application of the provision to other persons, entities, or circumstances shall not be affected.

[Statutory Authority: Chapters 90.48 and 90.70 RCW. 91-11-091 (Order 91-06), § 173-270-100, filed 5/21/91, effective 6/21/91.]

Chapter 173-300 WAC

CERTIFICATION OF OPERATORS OF SOLID WASTE INCINERATOR AND LANDFILL FACILITIES

WAC

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WAC 173-300-010 Authority and purpose. One of the basic requirements of the act relating to solid waste (chapter 431, Laws of 1989) is to have the owner or operator in responsible charge of a solid waste incinerator or solid waste landfill certified in the operation and maintenance of the facility. To achieve this, the department shall, to the greatest extent possible, rely on the certification standards and proce-

dures developed by national organizations and the federal government. Certification under this act is available to all individuals who can meet the minimum qualifications for a given type of facility. Operating personnel not required to be certified by chapter 70.95D RCW are encouraged to become certified on a voluntary basis. NOTE: All codes, standards, or rules cited in this chapter are available for inspection at the Department of Ecology, 300 Desmond Drive S.E., Lacey, Washington.

[Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-010, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-010, filed 12/18/90, effective 1/1/91.]

WAC 173-300-020 Definitions. (1) "Ash" means the residue and includes any air pollution flue dusts from combustion or incineration of material including solid wastes.

Note: Please see definition for "special incinerator ash."

(2) "Biomedical waste" means solid waste of the following types:

(a) "Animal waste," which includes waste animal carcasses, body parts, and bedding of animals that were known to have been deliberately infected or inoculated with human pathogenic microorganisms during research.

(b) "Liquid human body fluids" means waste that includes waste liquid emanating or derived from humans including but not limited to human blood and blood products, serum and plasma, sputum, drainage secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid and amniotic fluid that exceeds fifty milliliters per container, storage vessel, or plastic bag and cannot be and has not been directly discarded into a sanitary sewage system.

(c) "Cultures and stocks" means waste that includes waste cultures and stocks of microbiological agents infectious to humans, human serums and discarded live and attenuated vaccines infectious to humans, human blood specimens, and laboratory wastes that are contaminated with these agents or specimens.

(d) "Biosafety level 4 disease waste," which includes wastes contaminated with blood, excretions, exudates, or secretions from humans or animals who are isolated to protect others from highly communicable infectious diseases that are identified as viruses assigned to Biosafety Level 4 by the Centers for Disease Control, National Institute of Health, Biosafety in Microbiological and Biomedical Laboratories, 2nd Edition, 1988. These viruses include, but are not limited to, Congo-Crimean hemorrhagic fever, tick-borne encephalitis virus complex (Absettarov, Hanzalova, Hypr, Kumlinge, Kyasanur Forest disease, Omsk hemorrhagic fever, and Russian spring-summer encephalitis), Marburg, Ebola, Junin, Lassa, and Machupo.

(e) "Pathological waste," which includes waste human source biopsy materials, tissues, and anatomical parts that emanate from surgery, obstetrical procedures, autopsy, and laboratory procedures. "Pathological waste" does not include teeth or formaldehyde or other preservative agents, human corpses, remains, and anatomical parts that are intended for interment or cremation.

(f) "Sharps waste," which includes waste hypodermic needles, syringes, IV tubing with needles attached, scalpel blades, and lancets that have been used in animal or human patient care or treatment in medical research.

(3) "Biomedical waste treatment" means incineration, steam sterilization, or any method, technique, or process that changes the biological character or composition of biomedical waste to render it noninfectious. Any waste, except sharps, that has been treated is not considered to be biohazardous or biomedical.

(4) "Board" means the board of advisors for solid waste incinerator and landfill certification established by RCW 70.95D.050.

(5) "Certificate" means the certificate of competency issued by the director stating that the operator has met the requirements for the operation and maintenance of a specific classification of solid waste incinerator or landfill facility.

(6) "Certificate holder" means the individual to whom a certificate is issued.

(7) "Commercial waste" means nonhazardous solid waste that is generated by the commercial business sector.

(8) "Contractor" means any other state, federal, or interstate agencies, municipalities, educational institutions, or other organizations or individuals with whom the department has an agreement, contract or cooperative agreement.

(9) "Department" means the Washington state department of ecology.

(10) "Director" means the director of the department of ecology or the director's designee.

(11) "Fee" means only those moneys to be paid for examinations, certification, or renewal.

Note: Fees do not include the costs of training or other educational opportunities.

(12) "Hog fuel" means woodwaste that is reduced in size to facilitate burning.

(13) "Incineration" means reducing the volume of solid wastes by use of an enclosed device using controlled flame combustion.

(14) "Incinerator" means an enclosed mechanical combustion device that has as its primary purpose the burning and reduction of the volume of solid waste or solid waste-derived fuel. Crematoria facilities that have combustion devices which burn human corpses, or burn animal bodies exclusively, in a manner that is not a solid waste reduction measure, or burn primarily hog fuel waste are not included in this definition. NOTE: Crematoria facilities that burn any kind of biomedical, treated or untreated medical waste, human or animal, or other solid waste, in their incinerator are subject to this rule.

(15) "Incineration facility" means any municipal or private activity that has as part of its operations a solid waste incinerator. It may also include means for storage, preparation, and conveyance of the solid waste fuel, and air pollution control equipment.

(16) "Incinerator operator in responsible charge" means an individual who is the owner or who is designated as the on-site operator in responsible charge of operation and maintenance duties at a solid waste incineration facility.

(17) "Inspector" means any person employed by any public agency that inspects the operation of solid waste incinerators, or the operation of solid waste landfills, to determine the compliance of the facility with state and local laws or rules.

(18) "Institutional waste" means nonhazardous solid waste that is generated by any commercial or noncommercial service establishment.

(19) "Landfill" means an operating disposal facility or part of a facility at which solid waste is placed in or on land and which is not a land treatment.

(20) "Landfill operator in responsible charge" means an individual who is the owner or who is designated as the on-site or on-call operator in responsible charge of operation and maintenance duties at a landfill facility.

(21) "Limited purpose landfill" means a landfill that receives solid waste of a limited type or types of known and consistent composition.

(22) "Monofill" means a disposal facility or part of a facility that is not a land treatment facility, at which only a single, specific substance is deposited in or on.

(23) "Municipal solid waste" means any combination of nonhazardous solid waste generated by residential sources, and any institutional waste, commercial waste, and industrial waste. NOTE: Household hazardous wastes are an excluded waste under WAC 173-303-071 and therefore may be disposed of in a municipal or incinerated landfill or incinerated. Small quantities of hazardous waste may also be landfilled if the waste complies with WAC 173-303-070 (8)(a) and (b).

(24) "Owner" means:

(a) In the case of a town or city, the city or town acting through its chief executive officer or the lessee if operated under a lease or contract;

(b) In the case of a county, the chief elected official of the county legislative authority or the chief elected official's designee;

(c) In the case of a board of public utilities, association, municipality, or other public body, the president or chief elected official of the body or the president's or chief elected official's designee;

(d) In the case of a privately owned landfill or incinerator, the legal owner.

(25) "Reciprocity" means the automatic recognition of comparable training from another state, the federal government, a local government, or a professional association. NOTE: Correction of deficiencies such as a lack of training in Washington state solid waste law is required for certification.

(26) "Reserved" is a note to the regulated community that means a section that has no requirements and which is set aside for future possible rule-making.

(27) "Solid waste" or "wastes" as defined in RCW 70.95.030 (1989 ed.) means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, and recyclable materials. NOTE: Treated biomedical waste or medical waste not defined as biomedical waste is considered to be solid waste. Woodwaste is also considered solid waste.

(28) "Special incinerator ash" means ash residues that results from the operation of incineration or energy recovery facilities which manage municipal solid waste from residential, commercial, and industrial establishments, if the ash residues are:

(a) Not otherwise regulated as hazardous wastes under chapter 70.105 RCW; and

(b) Are not regulated as a hazardous waste under the federal Resource Conservation and Recovery Act, 42 U.S.C. Sec. 6901 et seq.

(29) "Woodwaste" means solid waste that consists of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, and the handling and storage of raw materials, trees, and stumps. This includes but is not limited to sawdust, chips, shavings, bark, pulp, and log sort yard waste, but does not include wood pieces or particles containing chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

Note: All applicable terms not defined above have the same meaning as those defined in chapter 173-304 WAC.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-020, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-020, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-020, filed 12/18/90, effective 1/1/91.]

WAC 173-300-030 Duties of the board of advisors. (1) The state's solid waste advisory committee may establish a standing committee or act as a committee of the whole to serve as a board of advisors created under RCW 70.95D.050.

Duties of the board of advisors may include:

(a) Act as an advisory committee to the department and shall assist the department with review of the rules adopted under this chapter.

(b) Assist in the development and evaluation of the training and testing material required for certification.

(c) Hold hearings and make recommendations to the director on matters of revocation of certification.

(d) Encourage operating personnel other than those required to be certified under chapter 70.95D RCW to become certified on a voluntary basis.

(2) Members shall receive no compensation for their services but must be reimbursed for their travel expenses while engaged in business of the committee in accordance with RCW 43.03.050 and 43.03.060 as now existing or hereafter amended.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-030, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-030, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-030, filed 12/18/90, effective 1/1/91.]

WAC 173-300-040 Board of advisors—Staff services and facilities. The department shall furnish necessary staff services and facilities required by the board of advisors.

[Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-040, filed 12/18/90, effective 1/1/91.]

WAC 173-300-050 Operator certification required at incineration facilities. (1) It is unlawful to operate a solid waste incineration facility without a certified operator in responsible charge on-site during all hours of operation.

(2) All other operational employees are to be encouraged to become certified on a voluntary basis.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-050, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-050, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-050, filed 12/18/90, effective 1/1/91.]

WAC 173-300-060 Operator certification required at landfill facilities. (1) It is unlawful to operate the following types of landfills without an on-site certified landfill operator in responsible charge during all hours of operation when accepting waste, and during the closure phase of the facility. The operator's specific role in the closure phase must be specified in the closure plan. However, the certified operator may be away from the facility on official business or personal emergencies for periods of one day or less if they are on-call and available to respond in case of an emergency at the facility.

(a) All municipal waste landfills.

(b) All problem waste landfills. NOTE: Problem waste landfills are presently reserved per chapter 173-350 WAC and WAC 173-304-463.

(c) All special incinerator ash landfills or monofills. NOTE: In a case where a monofill is a separate cell at a municipal waste landfill, the responsible operator in charge of the complete facility may assume responsibility of the operation of the monofills.

(d) All inert waste and demolition waste landfills.

(e) All limited purpose solid waste landfills.

(2) These standards do not apply to:

(a) Dangerous waste landfills;

(b) Drop box facilities;

(c) Interim solid waste handling sites;

(d) Landspreading disposal facilities;

(e) Piles;

(f) Transfer stations;

(g) Waste recycling facilities; and

(h) Composting facilities.

(3) Owners of small landfills with a total capacity at closure of two hundred thousand cubic yards of solid waste or less, may apply to the department to have their facility operated and maintained by a certified operator who is in responsible charge on an on-call basis at all times the landfill is operating: Provided, That a certified operator visit the site once each working day. The department shall consider all applications on a case-by-case basis. The department shall base its decision on the following requirements:

(a) A physical inspection of the facility by the department to determine whether the facility is being operated in a manner that is protective of human health and the environment;

(b) That the facility has an up-to-date approved facility operating plan and is in compliance with all other sections of chapters 173-350 and 173-304 WAC;

(c) That the status of all facility variances, compliance schedules, and related grants are current as required; and

(d) That the facility strictly adheres to all other applicable laws and rules.

(4) All landfills that have on-call designations shall reapply for the designation every five years from the date of issuance. This designation may be revoked at any time the facility does not meet the minimum requirements.

(5) When a position required to be filled by an on-site certified landfill operator is vacated for a period of not longer than a maximum of thirty calendar days due to an emergency such as a short-term illness, the landfill owner may apply to the department for a variance that allows the facility be operated and maintained by a certified operator on an on-call basis as outlined in this section. These requirements may be waived temporarily at the director's discretion.

(6) All other operational employees are to be encouraged to become certified on a voluntary basis.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-060, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-060, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-060, filed 12/18/90, effective 1/1/91.]

WAC 173-300-070 Certification of inspectors. (1) Any person who is employed by a public agency to inspect the operation of a landfill or incinerator described under this chapter to determine the compliance of the facility with state or local laws or rules shall receive, in addition to the successful completion of the training and examination process as an operator under this chapter, training relevant to the inspection procedure.

(2) Inspectors are exempt from certification fees administered by the department.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-070, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-070, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW. 91-12-040 (Order 91-30), § 173-300-070, filed 6/4/91, effective 7/5/91. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-070, filed 12/18/90, effective 1/1/91.]

WAC 173-300-075 Contracting for certification. Notwithstanding any provision of this chapter, the department may enter into contracts with any individual, firm, association, or corporation to conduct certification, training, testing, and recertification under this chapter. Provided, that such individual, firm, association or corporation, and the certification, training, testing and recertification conducted under such contract, comply with chapter 70.95D RCW and this chapter, and any other applicable state or federal laws.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-075, filed 6/26/06, effective 7/27/06.]

WAC 173-300-080 Applications and certification requirements. (1) An application for incineration, landfill operator, or inspector certification must be filed with the department or its designee. The department or its designee shall make application forms available upon request.

(2) Upon receipt of the completed application and application fee, the department or its designee shall determine:

(a) If the applicant has successfully completed the required training and examinations;

(b) The status of a reciprocal certification; and

(c) That the facility at which the applicant is employed is in compliance with local and state laws or rules.

(3) Upon successful determination of all requirements and the payment of the certification fees provided for in WAC 173-300-110 and 173-300-120, the appropriate operator or inspector certificate will be issued.

(4) An owner may apply for a variance for a temporary certificate without an examination to fill a vacated position required by WAC 173-300-050 and 173-300-060 to have a certified operator, or 173-300-070, in the case of a certified inspector. A temporary certificate must be valid for a period of not more than twelve months from date of issue.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-080, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-080, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-080, filed 12/18/90, effective 1/1/91.]

WAC 173-300-090 Training and examinations. (1) The department or its designee shall prepare or cause to be prepared educational materials and opportunities to fulfill requirements of WAC 173-300-080(2) to help develop the skills necessary to operate a solid waste incinerator or solid waste landfill according to state and federal laws.

(2) All examinations must be graded by the department or the department's designee and the applicant must be notified by mail of the score attained. Examinations may not be returned to the applicant.

(3) An applicant who fails to pass an examination must be reexamined at the next scheduled examination. An additional application form and examination fee is required. No individual will be allowed to retake the same examination.

(4) An applicant who fails to pass a second examination is required to repeat the certification training.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-090, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-090, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-090, filed 12/18/90, effective 1/1/91.]

WAC 173-300-100 Certificate term. Except as provided for in WAC 173-300-080(4), the term for any certificate or renewal thereof is three years from the date of issuance.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-100, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-100, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-100, filed 12/18/90, effective 1/1/91.]

WAC 173-300-110 Renewal of certificate. (1) Except as provided in WAC 173-300-080(4), all certificates held by incinerator operators, landfill operators, and inspectors are renewable upon presentation of evidence that the certificate holder successfully completed renewal requirements.

(2) The department or its designee shall mail renewal notices and refresher course information to all certificate holders eligible for renewal four months before the date the certificate expires.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-110, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-110, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-110, filed 12/18/90, effective 1/1/91.]

WAC 173-300-120 Fees. (1) For examinations, certifications, or renewals administered by the department:

(a) A fee of $50.00 for each examination administered by the department shall accompany the application for examination.

(b) After an applicant successfully completes the examination and is notified by the department of the results, the applicant shall pay a certification fee of $200.00 to the department within thirty days of the date of the results notification.

(c) A $200.00 renewal fee must accompany an application for certificate renewal.

(d) A fee of $50.00 is required to apply for consideration of certification through reciprocity under WAC 173-300-140. After determining that the reciprocal criteria has been met, the department will notify the applicant:

(i) That the applicant is deficient in a required area, and the process to correct the deficiency; or

(ii) That the applicant has successfully completed all requirements for certification and that the applicant must pay a certification fee of $200.00 to the department within thirty days of the date of notification.

(2) A $200.00 renewal fee must accompany an application for certificate renewal.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-120, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-120, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-120, filed 12/18/90, effective 1/1/91.]

WAC 173-300-130 Revocation. (1) When a certificate is not renewed, the certificate, upon notice by the director or its designee, must be suspended for sixty days.

(a) If renewal of the certificate is not completed during the suspension period, the director or its designee shall mail a written notice of revocation by certified mail to the certificate holder's employer as last known by the department and to the certificate holder at the address last known by the department.

(b) If, during the revocation notice period, the certificate is not renewed, the certificate must be revoked ten days after the notice is mailed.

(2) Certificates may also be revoked when a majority of the board so recommends to the director, and the director agrees, upon finding:

(a) Fraud or deceit in obtaining the certificate;

(b) Gross negligence in the operation or inspection of an incineration or landfill facility;

(c) Violation of the requirements of chapter 70.95D RCW, this chapter or of any lawful rule or order of the department; or if

(d) The facility operated by the certified employee is operated in violation of local, state, or federal environmental laws.

(3) No revocation may be made under subsection (2) of this section unless the operator has been notified that revocation is proposed, has been advised of the grounds therefore, and has been given an opportunity to appear before the board and be heard on the matter.

(4) A person whose certificate is revoked under this section is eligible to apply for a certificate for one year from the effective date of the final order of revocation.

(5) Whenever an individual's certificate is revoked, the individual may not be certified again until:

(a) He or she has repeated all required training for certification or has completed other requirements recommended by the board and approved by the department;

(b) Has applied for certification under WAC 173-300-090;

(c) Paid the application fees; and

(d) Upon notification, paid the certification fee within thirty days of notification.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-130, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-130, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-130, filed 12/18/90, effective 1/1/91.]

WAC 173-300-140 Reciprocity. The director may, with the approval of the board of advisors, waive examinations for applicants who hold valid incinerator or landfill operators certificates, or inspector certificates issued by other states, a province, the federal government, or a professional association that has comparable standards as determined by the board.

(1) Applications for reciprocity will be considered when:

(a) The training received by the applicant is comparable to training offered by the state of Washington. A detailed syllabus outlining all relevant training must be released by the appropriate training facility for review and approval by the board. Those applicants with deficiencies shall resolve the deficiencies before certification is granted. Applicants must contact the department within one year of application;

(b) The department receives written confirmation from the certifying authority of the state, province, the federal government, or professional association in which the applicant is certified, that the certificate is currently valid and was earned by passing a written examination. A copy of the exam passed by the applicant must also be released for review by the board; and

(c) The application fee is received.

(2) The board shall review and compare out-of-state examinations with Washington's examinations to determine at which level the examination is most equivalent.

(3) Training in state of Washington solid waste law is required for certification.

(4) Incinerator operators are required to successfully complete an examination to determine the competency needed to operate and maintain the facility for which the operator is currently responsible.

(5) Certificates must be issued to each reciprocity applicant who meets the minimum training and examination requirements set forth in WAC 173-300-080. Upon notification by the department that the applicant meets all the criteria, the certification fee is due within thirty days from the date of notification.

[Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-140, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-140, filed 12/18/90, effective 1/1/91.]

WAC 173-300-150 Unlawful acts—Variance from requirements. It is unlawful for any person, firm, corporation, municipal corporation, or other governmental subdivision or agency to operate a solid waste incineration or landfill facility unless an operator in responsible charge is duly certified by the director under this chapter or any lawful rule or order of the department. The department shall allow the owner or operator of a landfill or solid waste incineration facility to request a variance from this requirement under emergency conditions. Emergency conditions may include but are not limited to unexpected health related problems that incapacitate the operator or an unexpected termination of employment of the operator. The department may impose conditions that may be necessary to protect human health and the environment during the term of the variance.

[Statutory Authority: Chapter 70.95 RCW. 06-14-024 (Order 05-13), § 173-300-150, filed 6/26/06, effective 7/27/06. Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-150, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-150, filed 12/18/90, effective 1/1/91.]

WAC 173-300-160 Penalties. Any person, including any firm, corporation, municipal corporation, or other governmental subdivision or agency, with the exception of incinerator operators, who violates any provision of this chapter, is guilty of a misdemeanor. Incinerator operators who violate any provision of this chapter are guilty of a gross misdemeanor. Each day of operation in violation of this chapter shall constitute a separate offense. The prosecuting attorney or the attorney general, as appropriate, shall secure injunctions of continuing violations of any provisions of this chapter.

[Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-160, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-160, filed 12/18/90, effective 1/1/91.]

WAC 173-300-170 Appeals. Decisions of the director under this chapter may be appealed within thirty days from the date of notice thereof to the pollution control hearings board under chapter 43.21B RCW and chapter 370-08 WAC.

[Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-170, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-170, filed 12/18/90, effective 1/1/91.]

WAC 173-300-180 Incineration of biomedical or medical waste. Incineration of biomedical, treated or untreated medical waste must be conducted under sufficient burning conditions to reduce all combustible material to a form so that no portion of the combustible material is visible in its uncombusted state.

[Statutory Authority: 1989 c 431. 00-19-017 (Order 00-16), § 173-300-180, filed 9/8/00, effective 10/9/00. Statutory Authority: Chapter 70.95D RCW and RCW 70.95.710. 91-01-093, § 173-300-180, filed 12/18/90, effective 1/1/91.]

Chapter 173-303 WAC
DANGEROUS WASTE REGULATIONS

WAC

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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-303-275 Transfer facilities (or collection facilities). [Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-275, filed 2/10/82.] Repealed by 84-14-031 (Order DE 84-22), filed 6/27/84. Statutory Authority: Chapter 70.105 RCW.

173-303-284 Notice of intent. [Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-284, filed 3/11/88.] Repealed by 88-18-083 (Order 88-29), filed 9/6/88. Statutory Authority: Chapter 70.105 RCW.

173-303-285 Location standards. [Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-285,

filed 3/11/88.] Repealed by 88-18-083 (Order 88-29), filed 9/6/88. Statutory Authority: Chapter 70.105 RCW.

173-303-286 Performance standards. [Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-286, filed 3/11/88.] Repealed by 88-18-083 (Order 88-29), filed 9/6/88. Statutory Authority: Chapter 70.105 RCW.

173-303-420 Siting standards. [Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-420, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-420, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-420, filed 6/26/87. Statutory Authority: RCW 70.105.200 through 70.105.270. 87-03-014 (Order 86-37), § 173-303-420, filed 1/13/87. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-420, filed 4/18/84.] Repealed by 90-20-016, filed 9/21/90, effective 10/22/90. Statutory Authority: RCW 43.21A.080 and 70.105.210, et seq.

173-303-901 Response to requests for public records. [Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-901, filed 3/11/88.] Repealed by 88-18-083 (Order 88-29), filed 9/6/88. Statutory Authority: Chapter 70.105 RCW.

WAC 173-303-010 Purpose. This regulation implements chapter 70.105 RCW, the Hazardous Waste Management Act of 1976 as amended, and implements, in part, chapters 70.105A, 70.105D, and 15.54 RCW, and Subtitle C of Public Law 94-580, the Resource Conservation and Recovery Act, which the legislature has empowered the department to implement. The purposes of this regulation are to:

(1) Designate those solid wastes which are dangerous or extremely hazardous to the public health and environment;

Note: The terms public health and human health are used in this chapter interchangeably.

(2) Provide for surveillance and monitoring of dangerous and extremely hazardous wastes until they are detoxified, reclaimed, neutralized, or disposed of safely;

(3) Provide the form and rules necessary to establish a system for manifesting, tracking, reporting, monitoring, recordkeeping, sampling, and labeling dangerous and extremely hazardous wastes;

(4) Establish the siting, design, operation, closure, postclosure, financial, and monitoring requirements for dangerous and extremely hazardous waste transfer, treatment, storage, and disposal facilities;

(5) Establish design, operation, and monitoring requirements for managing the state's extremely hazardous waste disposal facility;

(6) Establish and administer a program for permitting dangerous and extremely hazardous waste management facilities; and

(7) Encourage recycling, reuse, reclamation, and recovery to the maximum extent possible.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-010, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-010, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-010, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-010, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-010, filed 2/10/82. Formerly WAC 173-302-010.]

WAC 173-303-016 Identifying solid waste. (1) Purpose and applicability.

(a) The purpose of this section is to identify those materials that are and are not solid wastes.

(b)(i) The definition of solid waste contained in this section applies only to wastes that also are dangerous for purposes of the regulations implementing chapter 70.105 RCW. For example, it does not apply to materials (such as nondangerous scrap, paper, textiles, or rubber) that are not otherwise dangerous wastes and that are recycled.

(ii) This section identifies only some of the materials which are solid wastes and dangerous wastes under chapter 70.105 RCW. A material which is not defined as a solid waste in this section, or is not a dangerous waste identified or listed in this section, is still a solid waste and a dangerous waste for purposes of these sections if reason and authority exists under chapter 70.105 RCW and WAC 173-303-960. Within the constraints of chapter 70.105 RCW, this includes but is not limited to any material that: Is accumulated, used, reused, or handled in a manner that poses a threat to public health or the environment; or, due to the dangerous constituent(s) in it, when used or reused would pose a threat to public health or the environment.

(c) Certain materials are solid wastes but are excluded from the requirements of this chapter by WAC 173-303-071 and 173-303-073.

(2) The following terms are used and have the meanings as defined in WAC 173-303-040:

(a) Boiler
(b) By-product
(c) Incinerator
(d) Industrial furnace
(e) Reclaim
(f) Recover
(g) Recycle
(h) Used or reused (see reuse or use)
(i) Sludge
(j) Scrap metal
(k) Spent material
(l) Excluded scrap metal
(m) Processed scrap metal
(n) Home scrap metal
(o) Prompt scrap metal

(3) Definition of solid waste.

(a) A solid waste is any discarded material that is not excluded by WAC 173-303-017(2) or that is not excluded by variance granted under WAC 173-303-017(5).

(b) A discarded material is any material that is:

(i) Abandoned, as explained in subsection (4) of this section; or

(ii) Recycled, as explained in subsection (5) of this section; or

(iii) Considered inherently waste-like, as explained in subsection (6) of this section. Persons registering micronutrient or waste-derived fertilizers under chapter 15.54 RCW must submit information required by the department to indicate compliance with this chapter. The required minimum information is described in WAC 173-303-505; or

(iv) A military munition identified as a solid waste at WAC 173-303-578(2).

(4) Materials are solid waste if they are abandoned by being:

(a) Disposed of; or

(b) Burned or incinerated; or

(c) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

(5) Materials are solid wastes if they are recycled—or accumulated, stored, or treated before recycling—as specified in (a) through (d) of this subsection.

(a) Used in a manner constituting disposal. Materials noted with a "*" in column 1 of Table 1 are solid wastes when they are:

(i)(A) Applied to or placed on the land in a manner that constitutes disposal; or

(B) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).

(ii) However, commercial chemical products listed in WAC 173-303-9903 or which exhibit any of the criteria or characteristics listed in WAC 173-303-090 or 173-303-100 are not solid wastes if they are applied to the land and that is their ordinary manner of use.

(b) Burning for energy recovery. Materials noted with a "*" in column 2 of Table 1 are solid wastes when they are:

(i) Burned to recover energy;

(ii) Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste).

However, commercial chemical products listed in WAC 173-303-9903 or which exhibit any of the criteria or characteristics listed in WAC 173-303-090 or 173-303-100 are not solid wastes if they are themselves fuels.

(c) Reclaimed. Materials noted with a "*" in column 3 of Table 1 are solid wastes when reclaimed.

(d)(i) Accumulated speculatively. Materials noted with a "*" in column 4 of Table 1 are solid wastes when accumulated speculatively.

(ii) A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that—during the calendar year (commencing on January 1)—the amount of material that is recycled, or transferred to a different site for recycling, equals at least seventy-five percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the seventy-five percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under WAC 173-303-071 (3)(n) are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

TABLE 1

	Use constituting disposal WAC 173-303-016(5)(a)	Energy recovery/ fuel WAC 173-303-016 (5)(b)	Reclamation WAC 173-303-016 (5)(c)	Speculative accumulation WAC 173-303-016 (5)(d)
Spent materials	(*)	(*)	(*)	(*)
Commercial chemical products	(*)	(*)	——	——
By-products listed in WAC 173-303-9904	(*)	(*)	(*)	(*)
Sludges listed in WAC 173-303-9904	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic[1] or criteria[2]	(*)	(*)	——	(*)
Sludges exhibiting a characteristic[1] or criteria[2]	(*)	(*)	——	(*)
Scrap metal other than excluded scrap metal (see WAC 173-303-016 (2)(l))	(*)	(*)	(*)	(*)

Note: The terms "spent materials," "sludges," "by-products," "scrap metal" and "processed scrap metal" are defined in WAC 173-303-040.

[1] The characteristics of dangerous waste are described in WAC 173-303-090.

[2] The dangerous waste criteria are described in WAC 173-303-100.

(6) Inherently waste-like materials. The following materials are solid wastes when they are recycled in any manner:

(a) Dangerous Waste Nos. F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028.

(b) Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a dangerous waste or are listed as a dangerous waste as defined in WAC 173-303-090 or 173-303-080 through 173-303-082, except for brominated material that meets the following criteria:

(i) The material must contain a bromine concentration of at least 45%; and

(ii) The material must contain less than a total of 1% of toxic organic compounds listed in WAC 173-303-9905; and

(iii) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping).

(c) The department will use the following criteria to add wastes to (a) of this subsection:

(i)(A) The materials are ordinarily disposed of, burned, or incinerated; or

(B) The materials contain toxic constituents listed in WAC 173-303-9905 and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

(ii) The material may pose a substantial hazard to human health or the environment when recycled.

(7) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respon-

dents in actions to enforce regulations implementing chapter 70.105 RCW who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-016, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-016, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-016, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-016, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-016, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-016, filed 6/27/84.]

WAC 173-303-017 Recycling processes involving solid waste. (1) The purpose of this section is to identify those materials that are and are not solid wastes when recycled. Certain materials, as described in subsection (2) of this section, would not typically be considered to involve waste management and are exempt from the requirements of this chapter. All recycling processes not exempted by subsection (2) of this section are subject to the recycling requirements of WAC 173-303-120.

(2) General categories of materials that are not solid waste when recycled.

(a) Except as provided in subsection (3) of this section, materials are not solid wastes when they can be shown to be recycled by being:

(i) Used or reused as ingredients in an industrial process to make a product provided the materials are not being reclaimed; or

(ii) Used or reused as effective substitutes for commercial products; or

(iii) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials must be managed such that there is no placement on the land.

(b) Except as provided in subsection (3) of this section, the department has determined that the following materials when used as described are not solid wastes:

(i) Pulping liquors (e.g., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process;

(ii) Spent pickle liquor which is reused in wastewater treatment at a facility holding a national pollutant discharge elimination system (NPDES) permit, or which is being accumulated, stored, or treated before such reuse;

(iii) Spent sulfuric acid used to produce virgin sulfuric acid.

(3) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (as described in subsection (2)(a) of this section):

(a) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

(b) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

(c) Materials accumulated speculatively as defined in WAC 173-303-016 (5)(d)(ii); or

(d) Materials listed in WAC 173-303-016(6); or

(e) Any materials that the department determines are being accumulated, used, reused or handled in a manner that poses a threat to public health or the environment.

(4) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing chapter 70.105 RCW who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

(5) Variances from classification as a solid waste.

(a) In accordance with the standards and criteria in (b) of this subsection and the procedures in subsection (7) of this section, the department may determine on a case-by-case basis that the following recycled materials are not solid wastes:

(i) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in WAC 173-303-016 (5)(d)(ii));

(ii) Materials that are reclaimed and then reused within the original production process in which they were generated;

(iii) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered;

(iv) State-only dangerous materials (not regulated as hazardous wastes (defined in WAC 173-303-040) by EPA) which serve as an effective substitute for a commercial product or raw material.

(b) Standards and criteria for variances from classification as a solid waste.

(i) The department may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The department's decision will be based on the following criteria:

(A) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);

(B) The reason that the applicant has accumulated the material for one or more years without recycling seventy-five percent of the volume accumulated at the beginning of the year;

(C) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;

(D) The extent to which the material is handled to minimize loss;

(E) Other relevant factors.

(ii) The department may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

(A) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

(B) The prevalence of the practice on an industry-wide basis;

(C) The extent to which the material is handled before reclamation to minimize loss;

(D) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;

(E) The location of the reclamation operation in relation to the production process;

(F) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

(G) Whether the person who generates the material also reclaims it;

(H) Other relevant factors.

(iii) The department may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:

(A) The degree of processing the material has undergone and the degree of further processing that is required;

(B) The value of the material after it has been reclaimed;

(C) The degree to which the reclaimed material is like an analogous raw material;

(D) The extent to which an end market for the reclaimed material is guaranteed;

(E) The extent to which the reclaimed material is handled to minimize loss;

(F) Other relevant factors.

(iv) The department may grant requests for a variance from classifying as a solid waste those materials that serve as an effective substitute for a commercial product or raw material, when such material is not regulated as hazardous waste (defined in WAC 173-303-040) by EPA, if the materials are recycled in a manner such that they more closely resemble products or raw materials rather than wastes. This determination will be based on the following factors:

(A) The effectiveness of the material for the claimed use;

(B) The degree to which the material is like an analogous raw material or product;

(C) The extent to which the material is handled to minimize loss or escape to the environment;

(D) The extent to which an end market for the reclaimed material is guaranteed;

(E) The time period between generating the material and its recycling;

(F) Other factors as appropriate.

(6) Variance to be classified as a boiler.

In accordance with the standards and criteria in WAC 173-303-040 (definition of "boiler"), and the procedures in subsection (7) of this section, the department may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in WAC 173-303-040, after considering the following criteria:

(a) The extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(b) The extent to which the combustion chamber and energy recovery equipment are of integral design; and

(c) The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(d) The extent to which exported energy is utilized; and

(e) The extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids, or heated gases; and

(f) Other factors, as appropriate.

(7) Procedures for variances from classification as a solid waste or to be classified as a boiler.

The department will use the following procedures in evaluating applications for variances from classification as a solid waste or applications to classify particular enclosed controlled flame combustion devices as boilers:

(a) The applicant must apply to the department for the variance. The application must address the relevant criteria contained in subsections (5)(b) or (6) of this section.

(b) The department will evaluate the application and issue a draft public notice tentatively granting or denying the application. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the locality where the recycler is located. The department will accept comment on the tentative decision for thirty days, and may also hold a public hearing upon request or at its discretion. The department will issue a final decision after receipt of comments and after the hearing (if any).

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-017, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-017, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-017, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-017, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-017, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-017, filed 6/27/84.]

WAC 173-303-020 Applicability. Except as expressly provided elsewhere herein, this chapter 173-303 WAC applies to all persons who handle dangerous wastes and solid

wastes that may designate as dangerous wastes including, but not limited to:

(1) Generators;

(2) Transporters;

(3) Owners and operators of dangerous waste recycling, transfer, storage, treatment, and disposal facilities; and

(4) The operator of the state's extremely hazardous waste management facility.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-020, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-020, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-020, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-020, filed 2/10/82. Formerly WAC 173-302-020.]

WAC 173-303-030 Abbreviations. The following abbreviations are used in this regulation.

ASTM - American Society for Testing Materials

APHA - American Public Health Association

CDC - Center for Disease Control

CFR - Code of Federal Regulations

DOT - Department of Transportation

°C - degrees Celsius

DW - dangerous waste

DWS - drinking water standards of the Safe Drinking Water Act

EHW - extremely hazardous waste

EP - extraction procedure

EPA - Environmental Protection Agency

°F - degrees Fahrenheit

g - gram

IARC - International Agency for Research on Cancer

IFC - International Fire Code

kg - kilogram (one thousand grams)

L - liter

lb - pound

LC_{50} - median lethal concentration

LD_{50} - median lethal dose

M - molar (gram molecular weights per liter of solution)

mg - milligram (one thousandth of a gram)

NFPA - National Fire Protection Association

NIOSH - National Institute for Occupational Safety and Health

pH - negative logarithm of the hydrogen ion concentration

POTW - publicly owned treatment works

ppm - parts per million (weight/weight)

RCRA - Resource Conservation and Recovery Act

RCW - Revised Code of Washington

TSD facility - treatment, storage, or disposal facility

UBC - Uniform Building Code

UFC - Uniform Fire Code

USCG - United States Coast Guard

USGS - United States Geological Survey

WAC - Washington Administrative Code

% - percent

- number

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-030, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-030, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-030, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-030, filed 2/10/82. Formerly WAC 173-302-030.]

WAC 173-303-040 Definitions. When used in this chapter, the following terms have the meanings given below.

"Aboveground tank" means a device meeting the definition of "tank" in this section and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

"Active life" of a facility means the period from the initial receipt of dangerous waste at the facility until the department receives certification of final closure.

"Active portion" means that portion of a facility which is not a closed portion, and where dangerous waste recycling, reuse, reclamation, transfer, treatment, storage or disposal operations are being or have been conducted after:

The effective date of the waste's designation by 40 CFR Part 261; and

March 10, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261. (See also "closed portion" and "inactive portion.")

"Active range" means a military range that is currently in service and is being regularly used for range activities.

"Acute hazardous waste" means dangerous waste sources (listed in WAC 173-303-9904) F020, F021, F022, F023, F026, or F027, and discarded chemical products (listed in WAC 173-303-9903) that are identified with a dangerous waste number beginning with a "P", including those wastes mixed with source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954. The abbreviation "AHW" will be used in this chapter to refer to those dangerous and mixed wastes which are acute hazardous wastes. Note - the terms acute and acutely are used interchangeably.

"Ancillary equipment" means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of dangerous waste from its point of generation to a storage or treatment tank(s), between dangerous waste storage and treatment tanks to a point of disposal on-site, or to a point of shipment for disposal off-site.

"Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

"Batch" means any waste which is generated less frequently than once a month.

"Battery" means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

"Berm" means the shoulder of a dike.

"Boiler" means an enclosed device using controlled flame combustion and having the following characteristics:

The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

The unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: Process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

While in operation, the unit must maintain a thermal energy recovery efficiency of at least sixty percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

The unit must export and utilize at least seventy-five percent of the recovered energy, calculated on an annual basis. In this calculation, no credit will be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

The unit is one which the department has determined, on a case-by-case basis, to be a boiler, after considering the standards in WAC 173-303-017(6).

"By-product" means a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a coproduct that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

"Carbon regeneration unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.

"Carcinogenic" means a material known to contain a substance which has sufficient or limited evidence as a human or animal carcinogen as listed in both IARC and either IRIS or HEAST.

"Cathode ray tube" or "CRT" means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.

"Chemical agents and chemical munitions" are defined as in 50 U.S.C. section 1521 (j)(1).

"Cleanup-only facility" means a site, including any contiguous property owned or under the control of the owner or operator of the site, where the owner or operator is or will be treating, storing, or disposing of remediation waste, including dangerous remediation waste, and is not, has not and will not be treating, storing or disposing of dangerous waste that is not remediation waste. A cleanup-only facility is not a "facility" for purposes of corrective action under WAC 173-303-646.

"Closed portion" means that portion of a facility which an owner or operator has closed, in accordance with the approved facility closure plan and all applicable closure requirements.

"Closure" means the requirements placed upon all TSD facilities to ensure that all such facilities are closed in an acceptable manner (see also "post-closure").

"Commercial chemical product or manufacturing chemical intermediate" refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient.

"Commercial fertilizer" means any substance containing one or more recognized plant nutrients and which is used for its plant nutrient content and/or which is designated for use or claimed to have value in promoting plant growth, and includes, but is not limited to, limes, gypsum, and manipulated animal manures and vegetable compost. The commercial fertilizer must be registered with the state or local agency regulating the fertilizer in the locale in which the fertilizer is being sold or applied.

"Compliance procedure" means any proceedings instituted pursuant to the Hazardous Waste Management Act as amended in 1980 and 1983, and chapter 70.105A RCW, or regulations issued under authority of state law, which seeks to require compliance, or which is in the nature of an enforcement action or an action to cure a violation. A compliance procedure includes a notice of intention to terminate a permit pursuant to WAC 173-303-830(5), or an application in the state superior court for appropriate relief under the Hazardous Waste Management Act. A compliance procedure is considered to be pending from the time a notice of violation or of intent to terminate a permit is issued or judicial proceedings are begun, until the department notifies the owner or operator in writing that the violation has been corrected or that the procedure has been withdrawn or discontinued.

"Component" means either the tank or ancillary equipment of a tank system.

"Constituent" or "dangerous waste constituent" means a chemically distinct component of a dangerous waste stream or mixture.

"Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

"Containment building" means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of WAC 173-303-695.

"Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of dangerous waste or dangerous waste constituents which could threaten human health or environment.

"Contract" means the written agreement signed by the department and the state operator.

"Corrosion expert" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional

education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

"CRT collector" means a person who receives CRTs for recycling, repair, resale, or donation.

"CRT glass manufacturer" means an operation or part of an operation that uses a furnace to manufacture CRT glass.

"CRT processing" means conducting all of the following activities:

• Receiving broken or intact CRTs; and

• Intentionally breaking intact CRTs or further breaking or separating broken CRTs; and

• Sorting or otherwise managing glass removed from CRT monitors.

"Dangerous waste constituents" means those constituents listed in WAC 173-303-9905 and any other constituents that have caused a waste to be a dangerous waste under this chapter.

"Dangerous waste management unit" is a contiguous area of land on or in which dangerous waste is placed, or the largest area in which there is a significant likelihood of mixing dangerous waste constituents in the same area. Examples of dangerous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

"Dangerous wastes" means those solid wastes designated in WAC 173-303-070 through 173-303-100 as dangerous, or extremely hazardous or mixed waste. As used in this chapter, the words "dangerous waste" will refer to the full universe of wastes regulated by this chapter. The abbreviation "DW" will refer only to that part of the regulated universe which is not extremely hazardous waste. (See also "extremely hazardous waste," "hazardous waste," and "mixed waste" definitions.)

"Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: Any material for which a specific treatment standard is provided in 40 CFR Part 268 Subpart D (incorporated by reference in WAC 173-303-140 (2)(a)); process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least seventy-five percent of their original volume. A mixture of debris that has not been treated to the standards provided by 40 CFR 268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

"Department" means the department of ecology.

"Dermal LD_{50}" means the single dosage in milligrams per kilogram (mg/kg) body weight which, when dermally (skin) applied for 24 hours, within 14 days kills half of a group of ten rabbits each weighing between 2.0 and 3.0 kilograms.

"Designated facility" means a dangerous waste treatment, storage, or disposal facility that has received a permit (or interim status) in accordance with the requirements of this chapter, has received a permit (or interim status) from another state authorized in accordance with 40 CFR Part 271, has received a permit (or interim status) from EPA in accordance with 40 CFR Part 270, has a permit by rule under WAC 173-303-802(5), or is regulated under WAC 173-303-120 (4)(c) or 173-303-525 when the dangerous waste is to be recycled, and that has been designated on the manifest pursuant to WAC 173-303-180(1). If a waste is destined to a facility in an authorized state that has not yet obtained authorization to regulate that particular waste as dangerous, then the designated facility must be a facility allowed by the receiving state to accept such waste. The following are designated facilities only for receipt of state-only waste; they cannot receive federal hazardous waste from off-site: Facilities operating under WAC 173-303-500 (2)(c).

"Designation" is the process of determining whether a waste is regulated under the dangerous waste lists, WAC 173-303-080 through 173-303-082; or characteristics, WAC 173-303-090; or criteria, WAC 173-303-100. The procedures for designating wastes are in WAC 173-303-070. A waste that has been designated as a dangerous waste may be either DW or EHW.

"Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in WAC 173-303-573 (9)(a), (b) and (c) and 173-303-573 (20)(a), (b) and (c). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

"Dike" means an embankment or ridge of natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other substances.

"*Dioxins and furans (D/F)*" means tetra, penta, hexa, hepta, and octa-chlorinated dibenzo dioxins and furans.

"Director" means the director of the department of ecology or his designee.

"Discharge" or "dangerous waste discharge" means the accidental or intentional release of hazardous substances, dangerous waste or dangerous waste constituents such that the substance, waste or a waste constituent may enter or be emitted into the environment.

"Disposal" means the discharging, discarding, or abandoning of dangerous wastes or the treatment, decontamination, or recycling of such wastes once they have been discarded or abandoned. This includes the discharge of any dangerous wastes into or on any land, air, or water.

"Domestic sewage" means untreated sanitary wastes that pass through a sewer system to a publicly owned treatment works (POTW) for treatment.

"Draft permit" means a document prepared under WAC 173-303-840 indicating the department's tentative decision to issue or deny, modify, revoke and reissue, or terminate a permit. A notice of intent to terminate or deny a permit are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination as discussed in WAC 173-303-830 is not a draft permit.

"Drip pad" is an engineered structure consisting of a curbed, free-draining base, constructed of nonearthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

"Elementary neutralization unit" means a device which:

Is used for neutralizing wastes which are dangerous wastes only because they exhibit the corrosivity characteristics defined in WAC 173-303-090 or are listed in WAC 173-303-081, or in 173-303-082 only for this reason; and

Meets the definition of tank, tank system, container, transport vehicle, or vessel.

"Enforceable document" means an order, consent decree, plan or other document that meets the requirements of 40 CFR 271.16(e) and is issued by the director to apply alternative requirements for closure, post-closure, ground water monitoring, corrective action or financial assurance under WAC 173-303-610 (1)(d), 173-303-645 (1)(e), or 173-303-620 (8)(d) or, as incorporated by reference at WAC 173-303-400, 40 CFR 265.90(f), 265.110(d), or 265.140(d). Enforceable documents include, but are not limited to, closure plans and post-closure plans, permits issued under chapter 70.105 RCW, orders issued under chapter 70.105 RCW and orders and consent decrees issued under chapter 70.105D RCW.

"Environment" means any air, land, water, or ground water.

"EPA/state identification number" or "EPA/state ID#" means the number assigned by EPA or by the department of ecology to each generator, transporter, and TSD facility.

"Existing tank system" or "existing component" means a tank system or component that is used for the storage or treatment of dangerous waste and that is in operation, or for which installation has commenced on or prior to February 3, 1989. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either:

A continuous on-site physical construction or installation program has begun; or

The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction of the site or installation of the tank system to be completed within a reasonable time.

"Excluded scrap metal" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.

"Existing TSD facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980, for wastes designated by 40 CFR Part 261, or August 9, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261. A facility has commenced construction if the owner or operator has obtained permits and approvals necessary under federal, state, and local statutes, regulations, and ordinances and either:

A continuous on-site, physical construction program has begun; or

The owner or operator has entered into contractual obligation, which cannot be canceled or modified without substantial loss, for physical construction of the facility to be completed within a reasonable time.

"Explosives or munitions emergency" means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

"Explosives or munitions emergency response" means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

"Explosives or munitions emergency response specialist" means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include Department of Defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and DOD-certified civilian or contractor personnel; and other federal, state, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

"Extremely hazardous waste" means those dangerous and mixed wastes designated in WAC 173-303-100 as extremely hazardous. The abbreviation "EHW" will be used in this chapter to refer to those dangerous and mixed wastes which are extremely hazardous. (See also "dangerous waste" and "hazardous waste" definitions.)

"Facility" means:

• All contiguous land, and structures, other appurtenances, and improvements on the land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous waste. A facility may consist of several treatment, storage, or disposal operational units (for example, one or more landfills, surface impoundments, or combination of them). Unless otherwise specified in this chapter, the terms "facility," "treatment, storage, disposal facility," "TSD facility," "dangerous waste facility" or "waste management facility" are used interchangeably.

• For purposes of implementing corrective action under WAC 173-303-64620 or 173-303-64630, "facility" also means all contiguous property under the control of an owner or operator seeking a permit under chapter 70.105 RCW or

chapter 173-303 WAC and includes the definition of facility at RCW 70.105D.020(4).

"Facility mailing list" means the mailing list for a facility maintained by the department in accordance with WAC 173-303-840 (3)(e)(I)(D).

"Final closure" means the closure of all dangerous waste management units at the facility in accordance with all applicable closure requirements so that dangerous waste management activities under WAC 173-303-400 and 173-303-600 through 173-303-670 are no longer conducted at the facility. Areas only subject to generator standards WAC 173-303-170 through 173-303-230 need not be included in final closure.

"Fish LC50" means the concentration that will kill fifty percent of the exposed fish in a specified time period. For book designation, LC50 data must be derived from an exposure period greater than or equal to twenty-four hours. A hierarchy of species LC50 data should be used that includes (in decreasing order of preference) salmonids, fathead minnows (Pimephales promelas), and other fish species. For the ninety-six-hour static acute fish toxicity test, described in WAC 173-303-110 (3)(b)(i), coho salmon (Oncorhynchus kisutch), rainbow trout (Oncorhynchus mykiss), or brook trout (Salvelinus fontinalis) must be used.

"Food chain crops" means tobacco, crops grown for human consumption, and crops grown to feed animals whose products are consumed by humans.

"Freeboard" means the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

"Fugitive emissions" means the emission of contaminants from sources other than the control system exit point. Material handling, storage piles, doors, windows and vents are typical sources of fugitive emissions.

"Generator" means any person, by site, whose act or process produces dangerous waste or whose act first causes a dangerous waste to become subject to regulation.

"Genetic properties" means those properties which cause or significantly contribute to mutagenic, teratogenic, or carcinogenic effects in man or wildlife.

"Ground water" means water which fills voids below the land surface and in the earth's crust.

"Halogenated organic compounds" (HOC) means any organic compounds which, as part of their composition, include one or more atoms of fluorine, chlorine, bromine, or iodine which is/are bonded directly to a carbon atom. This definition does not apply to the federal land disposal restrictions of 40 CFR Part 268 which are incorporated by reference at WAC 173-303-140 (2)(a). Note: Additional information on HOCs may be found in *Chemical Testing Methods for Designating Dangerous Waste*, Ecology Publication #97-407.

"Hazardous debris" means debris that contains a hazardous waste listed in WAC 173-303-9903 or 173-303-9904, or that exhibits a characteristic of hazardous waste identified in WAC 173-303-090.

"Hazardous substances" means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090 or 173-303-100.

"Hazardous wastes" means those solid wastes designated by 40 CFR Part 261, and regulated as hazardous and/or mixed waste by the United States EPA. This term will never be abbreviated in this chapter to avoid confusion with the abbreviations "DW" and "EHW." (See also "dangerous waste" and "extremely hazardous waste" definitions.)

"Home scrap metal" is scrap metal as generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings.

"Ignitable waste" means a dangerous waste that exhibits the characteristic of ignitability described in WAC 173-303-090(5).

"Inactive portion" means that portion of a facility which has not recycled, treated, stored, or disposed dangerous waste after:

The effective date of the waste's designation, for wastes designated under 40 CFR Part 261; and

March 10, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261.

"Inactive range" means a military range that is not currently being used, but that is still under military control and considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities.

"Incinerator" means any enclosed device that:

Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or

Meets the definition of infrared incinerator or plasma arc incinerator.

"Incompatible waste" means a dangerous waste which is unsuitable for placement in a particular device or facility because it may corrode or decay the containment materials, or is unsuitable for mixing with another waste or material because the mixture might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, fumes, mists, or gases, or flammable fumes or gases.

"Independent qualified registered professional engineer" means a person who is licensed by the state of Washington, or a state which has reciprocity with the state of Washington as defined in RCW 18.43.100, and who is not an employee of the owner or operator of the facility for which construction or modification certification is required. A qualified professional engineer is an engineer with expertise in the specific area for which a certification is given.

"Industrial-furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy: Cement kilns; lime kilns; aggregate kilns; phosphate kilns; blast furnaces; smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters and foundry furnaces); titanium dioxide chloride process oxidation reactors; coke ovens; methane reforming furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; pulping liquor recovery furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; and halogen acid furnaces (HAFs) for the production of acid from halogenated dangerous waste generated by chemical production facilities where the furnace is located on the site of a chemical produc-

tion facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing process, and, except for dangerous waste burned as fuel, dangerous waste fed to the furnace has a minimum halogen content of 20% as-generated. The department may decide to add devices to this list on the basis of one or more of the following factors:

The device is designed and used primarily to accomplish recovery of material products;

The device burns or reduces secondary materials as ingredients in an industrial process to make a material product;

The device burns or reduces secondary materials as effective substitutes for raw materials in processes using raw materials as principal feedstocks;

The device burns or reduces raw materials to make a material product;

The device is in common industrial use to produce a material product; and

Other factors, as appropriate.

"Infrared incinerator" means any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

"Inground tank" means a device meeting the definition of "tank" in this section whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

"Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the waste or reagents used to treat the waste.

"Installation inspector" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

"Interim status permit" means a temporary permit given to TSD facilities which qualify under WAC 173-303-805.

"Knowledge" means sufficient information about a waste to reliably substitute for direct testing of the waste. To be sufficient and reliable, the "knowledge" used must provide information necessary to manage the waste in accordance with the requirements of this chapter.

Note: "Knowledge" may be used by itself or in combination with testing to designate a waste pursuant to WAC 173-303-070 (3)(c), or to obtain a detailed chemical, physical, and/or biological analysis of a waste as required in WAC 173-303-300(2).

"Lamp," also referred to as "universal waste lamp" means any type of high or low pressure bulb or tube portion of an electric lighting device that generates light through the discharge of electricity either directly or indirectly as radiant energy. Universal waste lamps include, but are not limited to, fluorescent, mercury vapor, metal halide, high-pressure sodium and neon. As a reference, it may be assumed that four, four-foot, one-inch diameter unbroken fluorescent tubes are equal to 2.2 pounds in weight.

"Land disposal" means placement in or on the land, except in a corrective action management unit or staging pile, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

"Landfill" means a disposal facility, or part of a facility, where dangerous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, or an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

"Land treatment" means the practice of applying dangerous waste onto or incorporating dangerous waste into the soil surface so that it will degrade or decompose. If the waste will remain after the facility is closed, this practice is disposal.

"Large quantity handler of universal waste" means a universal waste handler (as defined in this section) who accumulates 11,000 pounds or more total of universal waste (batteries, thermostats, mercury-containing equipment, and lamps calculated collectively) and/or who accumulates more than 2,200 pounds of lamps at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 11,000 pounds or more total of universal waste and/or 2,200 pounds of lamps is accumulated.

"Leachable inorganic waste" means solid dangerous waste (i.e., passes paint filter test) that is not an organic/carbonaceous waste and exhibits the toxicity characteristic (dangerous waste numbers D004 to D011, only) under WAC 173-303-090(8).

"Leachate" means any liquid, including any components suspended in the liquid, that has percolated through or drained from dangerous waste.

"Leak-detection system" means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of dangerous waste or accumulated liquid in the secondary containment structure. Such a system must employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of dangerous waste into the secondary containment structure.

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Liner" means a continuous layer of man-made or natural materials which restrict the escape of dangerous waste, dangerous waste constituents, or leachate through the sides, bottom, or berms of a surface impoundment, waste pile, or landfill.

"Major facility" means a facility or activity classified by the department as major.

"Manifest" means the shipping document, prepared in accordance with the requirements of WAC 173-303-180, which is used to identify the quantity, composition, origin, routing, and destination of a dangerous waste while it is being transported to a point of transfer, disposal, treatment, or storage.

"Manufacturing process unit" means a unit which is an integral and inseparable portion of a manufacturing operation, processing a raw material into a manufacturing intermediate or finished product, reclaiming spent materials or reconditioning components.

"Marine terminal operator" means a person engaged in the business of furnishing wharfage, dock, pier, warehouse, covered and/or open storage spaces, cranes, forklifts, bulk loading and/or unloading structures and landings in connection with a highway or rail carrier and a water carrier. A marine terminal operator includes, but is not limited to, terminals owned by states and their political subdivisions; railroads who perform port terminal services not covered by their line haul rates; common carriers who perform port terminal services; and warehousemen and stevedores who operate port terminal facilities.

"Mercury-containing equipment" means a device or part of a device (excluding batteries, thermostats, and lamps) that contains elemental mercury necessary for its operation. Examples of mercury-containing equipment include thermometers, manometers, and electrical switches.

"Micronutrient fertilizer" means a produced or imported commercial fertilizer that contains commercially valuable concentrations of micronutrients but does not contain commercially valuable concentrations of nitrogen, phosphoric acid, available phosphorous, potash, calcium, magnesium, or sulfur. Micronutrients are boron, chlorine, cobalt, copper, iron, manganese, molybdenum, sodium, and zinc.

"Military" means the Department of Defense (DOD), the Armed Services, Coast Guard, National Guard, Department of Energy (DOE), or other parties under contract or acting as an agent for the foregoing, who handle military munitions.

"Military munitions" means all ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: Confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include nonnuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.

"Military range" means designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas.

"Miscellaneous unit" means a dangerous waste management unit where dangerous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 40 CFR Part 146, containment building, corrective action management unit, temporary unit, staging pile, or unit eligible for a research, development, and demonstration permit under WAC 173-303-809.

"Mixed waste" means a dangerous, extremely hazardous, or acutely hazardous waste that contains both a nonradioactive hazardous component and, as defined by 10 CFR 20.1003, source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.).

"New tank system" or "new tank component" means a tank system or component that will be used for the storage or treatment of dangerous waste and for which installation has commenced after February 3, 1989; except, however, for purposes of WAC 173-303-640 (4)(g)(ii) and 40 CFR 265.193 (g)(2) as adopted by reference in WAC 173-303-400(3), a new tank system is one for which construction commences after February 3, 1989. (See also "existing tank system.")

"New TSD facility" means a facility which began operation or for which construction commenced after November 19, 1980, for wastes designated by 40 CFR Part 261, or August 9, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261.

"NIOSH registry" means the registry of toxic effects of chemical substances which is published by the National Institute for Occupational Safety and Health.

"Nonsudden accident" or "nonsudden accidental occurrence" means an unforeseen and unexpected occurrence which takes place over time and involves continuous or repeated exposure.

"Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage which the owner or operator neither expected nor intended to occur.

"Off-specification used oil fuel" means used oil fuel that exceeds any specification level described in Table 1 in WAC 173-303-515.

"Onground tank" means a device meeting the definition of "tank" in this section and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

"On-site" means the same or geographically contiguous property which may be divided by public or private right of way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right of way. Noncontiguous properties owned by the same person but connected by a right of way which they control and to which the public does not have access, are also considered on-site property.

"Operator" means the person responsible for the overall operation of a facility. (See also "state operator.")

"Oral LD_{50}" means the single dosage in milligrams per kilogram (mg/kg) body weight, when orally administered,

which, within 14 days, kills half a group of ten or more white rats each weighing between 200 and 300 grams.

"Organic/carbonaceous waste" means a dangerous waste that contains combined concentrations of greater than ten percent organic/carbonaceous constituents in the waste; organic/carbonaceous constituents are those substances that contain carbon-hydrogen, carbon-halogen, or carbon-carbon chemical bonding.

"Partial closure" means the closure of a dangerous waste management unit in accordance with the applicable closure requirements of WAC 173-303-400 and 173-303-600 through 173-303-695 at a facility that contains other active dangerous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other dangerous waste management unit, while other units of the same facility continue to operate.

"Permit" means an authorization which allows a person to perform dangerous waste transfer, storage, treatment, or disposal operations, and which typically will include specific conditions for such facility operations. Permits must be issued by one of the following:

The department, pursuant to this chapter;

United States EPA, pursuant to 40 CFR Part 270; or

Another state authorized by EPA, pursuant to 40 CFR Part 271.

"Permit-by-rule" means a provision of this chapter stating that a facility or activity is deemed to have a dangerous waste permit if it meets the requirements of the provision.

"Persistence" means the quality of a material that retains more than half of its initial activity after one year (365 days) in either a dark anaerobic or dark aerobic environment at ambient conditions. Persistent compounds are either halogenated organic compounds (HOC) or polycyclic aromatic hydrocarbons (PAH) as defined in this section.

"Person" means any person, firm, association, county, public or municipal or private corporation, agency, or other entity whatsoever.

"Pesticide" means but is not limited to: Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, nematode, mollusk, fungus, weed, and any other form of plant or animal life, or virus (except virus on or in living man or other animal) which is normally considered to be a pest or which the department of agriculture may declare to be a pest; any substance or mixture of substances intended to be used as a plant regulator, defoliant, or desiccant; any substance or mixture of substances intended to be used as spray adjuvant; and, any other substance intended for such use as may be named by the department of agriculture by regulation. Herbicides, fungicides, insecticides, and rodenticides are pesticides for the purposes of this chapter.

"Pile" means any noncontainerized accumulation of solid, nonflowing dangerous waste that is used for treatment or storage.

"Plasma arc incinerator" means any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

"Point source" means any confined and discrete conveyance from which pollutants are or may be discharged. This term includes, but is not limited to, pipes, ditches, channels, tunnels, wells, cracks, containers, rolling stock, concentrated animal feeding operations, or watercraft, but does not include return flows from irrigated agriculture.

"Polycyclic aromatic hydrocarbons" (PAH) means those hydrocarbon molecules composed of two or more fused benzene rings. For purposes of this chapter, the PAHs of concern for designation are: Acenaphthene, acenaphthylene, fluorene, anthracene, fluoranthene, phenanthrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, pyrene, chrysene, benzo(a)pyrene, dibenz(a,h) anthracene, indeno(1,2,3-c,d)pyrene, benzo(g,h,i)perylene, dibenzo [(a,e), (a,h), (a,i), and (a,1)] pyrenes, and dibenzo (a,j) acridine.

"Post-closure" means the requirements placed upon disposal facilities (e.g., landfills, impoundments closed as disposal facilities, etc.) after closure to ensure their environmental safety for a number of years after closure. (See also "closure.")

"Processed scrap metal" is scrap metal that has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to, scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (that is, sorted), and fines, drosses and related materials that have been agglomerated. Note: Shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled (WAC 173-303-071 (3)(gg)).

"Prompt scrap metal" is scrap metal as generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap is also known as industrial or new scrap metal.

"Publicly owned treatment works" or "POTW" means any device or system, owned by the state or a municipality, which is used in the treatment, recycling, or reclamation of municipal sewage or liquid industrial wastes. This term includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW.

"Qualified ground water scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and has sufficient training and experience in ground water hydrology and related fields to make sound professional judgments regarding ground water monitoring and contaminant fate and transport. Sufficient training and experience may be demonstrated by state registration, professional certifications, or completion of accredited university courses.

"Reactive waste" means a dangerous waste that exhibits the characteristic of reactivity described in WAC 173-303-090(7).

"Reclaim" means to process a material in order to recover useable products, or to regenerate the material. Reclamation is the process of reclaiming.

"Recover" means extract a useable material from a solid or dangerous waste through a physical, chemical, biological, or thermal process. Recovery is the process of recovering.

"Recycle" means to use, reuse, or reclaim a material.

"Recycling unit" is a contiguous area of land, structures and equipment where materials designated as dangerous waste or used oil are placed or processed in order to recover useable products or regenerate the original materials. For the purposes of this definition, "placement" does not mean "storage" when conducted within the provisions of WAC 173-303-120(4). A container, tank, or processing equipment alone does not constitute a unit; the unit includes containers, tanks or other processing equipment, their ancillary equipment and secondary containment system, and the land upon which they are placed.

"Registration number" means the number assigned by the department of ecology to a transporter who owns or leases and operates a ten-day transfer facility within Washington state.

"Regulated unit" means any new or existing surface impoundment, landfill, land treatment area or waste pile that receives any dangerous waste after:

July 26, 1982, for wastes regulated by 40 CFR Part 261;

October 31, 1984 for wastes designated only by this chapter and not regulated by 40 CFR Part 261; or

The date six months after a waste is newly identified by amendments to 40 CFR Part 261 or this chapter which cause the waste to be regulated.

"Release" means any intentional or unintentional spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous wastes, or dangerous constituents as defined at WAC 173-303-64610(4), into the environment and includes the abandonment or discarding of barrels, containers, and other receptacles containing dangerous wastes or dangerous constituents and includes the definition of release at RCW 70.105D.020(20).

"Remediation waste" means all solid and dangerous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, that are managed for implementing cleanup.

"Replacement unit" means a landfill, surface impoundment, or waste pile unit from which all or substantially all of the waste is removed, and that is subsequently reused to treat, store, or dispose of dangerous waste. "Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with an approved closure plan or EPA or state approved corrective action.

"Representative sample" means a sample which can be expected to exhibit the average properties of the sample source.

"Reuse or use" means to employ a material either:

As an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

In a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

"Runoff" means any rainwater, leachate, or other liquid which drains over land from any part of a facility.

"Run-on" means any rainwater, leachate, or other liquid which drains over land onto any part of a facility.

"Satellite accumulation area" means a location at or near any point of generation where hazardous waste is initially accumulated in containers (during routine operations) prior to consolidation at a designated ninety-day accumulation area or storage area. The area must be under the control of the operator of the process generating the waste or secured at all times to prevent improper additions of wastes into the satellite containers.

"Schedule of compliance" means a schedule of remedial measures in a permit including an enforceable sequence of interim requirements leading to compliance with this chapter.

"Scrap metal" means bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

"Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility. This term does not include the treated effluent from a wastewater treatment plant.

"Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wet-weight basis.

"Small quantity handler of universal waste" means a universal waste handler (as defined in this section) who does not accumulate 11,000 pounds or more total of universal waste (batteries, thermostats, mercury-containing equipment, and lamps, calculated collectively) and/or who does not accumulate more than 2,200 pounds of lamps at any time.

"Solid acid waste" means a dangerous waste that exhibits the characteristic of low pH under the corrosivity tests of WAC 173-303-090 (6)(a)(iii).

"Solid waste management unit" or "SWMU" means any discernible location at a facility, as defined for the purposes of corrective action, where solid wastes have been placed at any time, irrespective of whether the location was intended for the management of solid or dangerous waste. Such locations include any area at a facility at which solid wastes, including spills, have been routinely and systematically released. Such units include regulated units as defined by chapter 173-303 WAC.

"Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both. *Sorb* means to either adsorb or absorb, or both.

"Special incinerator ash" means ash residues resulting from the operation of incineration or energy recovery facilities managing municipal solid waste from residential, commercial and industrial establishments, if the ash residues are designated as dangerous waste only by this chapter and not designated as hazardous waste by 40 CFR Part 261.

"Special waste" means any state-only dangerous waste that is solid only (nonliquid, nonaqueous, nongaseous), that

is: Corrosive waste (WAC 173-303-090 (6)(b)(ii)), toxic waste that has Category D toxicity (WAC 173-303-100(5)), PCB waste (WAC 173-303-9904 under State Sources), or persistent waste that is not EHW (WAC 173-303-100(6)). Any solid waste that is regulated by the United States EPA as hazardous waste cannot be a special waste.

"Spent material" means any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

"Stabilization" and "solidification" means a technique that limits the solubility and mobility of dangerous waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes the waste by bonding or chemically reacting with the stabilizing material.

"Staging pile" means an accumulation of solid, nonflowing, remediation waste that is not a containment building or a corrective action management unit and that is used for temporary storage of remediation waste for implementing corrective action under WAC 173-303-646 or other clean up activities.

"State-only dangerous waste" means a waste designated only by this chapter, chapter 173-303 WAC, and is not regulated as a hazardous waste under 40 CFR Part 261.

"State operator" means the person responsible for the overall operation of the state's extremely hazardous waste facility on the Hanford Reservation.

"Storage" means the holding of dangerous waste for a temporary period. "Accumulation" of dangerous waste, by the generator on the site of generation, is not storage as long as the generator complies with the applicable requirements of WAC 173-303-200 and 173-303-201.

"Sudden accident" means an unforeseen and unexpected occurrence which is not continuous or repeated in nature.

"Sump" means any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serves to collect dangerous waste for transport to dangerous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquid dangerous wastes or dangerous wastes containing free liquids. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"Tank" means a stationary device designed to contain an accumulation of dangerous waste, and which is constructed primarily of nonearthen materials to provide structural support.

"Tank system" means a dangerous waste storage or treatment tank and its associated ancillary equipment and containment system.

"Temporary unit" means a tank or container that is not an accumulation unit under WAC 173-303-200 and that is used for temporary treatment or storage of remediation waste for implementing corrective action under WAC 173-303-646 or other clean up activities.

"*TEQ*" means toxicity equivalence, the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.

"Thermal treatment" means the treatment of dangerous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the dangerous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge.

"Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of WAC 173-303-573 (9)(b)(ii) or (20)(b)(ii).

"TLm_{96}" means the same as "Aquatic LC_{50}."

"Totally enclosed treatment facility" means a facility for treating dangerous waste which is directly connected to a production process and which prevents the release of dangerous waste or dangerous waste constituents into the environment during treatment.

"Toxic" means having the properties to cause or to significantly contribute to death, injury, or illness of man or wildlife.

"Transfer facility" means any transportation related facility including loading docks, parking areas, storage areas, buildings, piers, and other similar areas where shipments of dangerous waste are held, consolidated, or transferred within a period of ten days or less during the normal course of transportation.

"Transport vehicle" means a motor vehicle, water vessel, or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, steamship, etc.) is a separate transport vehicle.

"Transportation" means the movement of dangerous waste by air, rail, highway, or water.

"Transporter" means a person engaged in the off-site transportation of dangerous waste.

"Travel time" means the period of time necessary for a dangerous waste constituent released to the soil (either by accident or intent) to enter any on-site or off-site aquifer or water supply system.

"Treatability study" means a study in which a dangerous waste is subjected to a treatment process to determine: Whether the waste is amenable to the treatment process; what pretreatment (if any) is required; the optimal process conditions needed to achieve the desired treatment; the efficiency of a treatment process for a specific waste or wastes; or the characteristics and volumes of residuals from a particular treatment process. Also included in this definition for the purpose of the exemptions contained in WAC 173-303-071 (3)(r) and (s), are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. A "treatability study" is not a means to commercially treat or dispose of dangerous waste.

"Treatment" means the physical, chemical, or biological processing of dangerous waste to make such wastes nondangerous or less dangerous, safer for transport, amenable for

energy or material resource recovery, amenable for storage, or reduced in volume, with the exception of compacting, repackaging, and sorting as allowed under WAC 173-303-400(2) and 173-303-600(3).

"Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which dangerous wastes are degraded, transformed or immobilized.

"Triple rinsing" means the cleaning of containers in accordance with the requirements of WAC 173-303-160 (2)(b), containers.

"Underground injection" means the subsurface emplacement of fluids through a bored, drilled, or driven well, or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

"Underground tank" means a device meeting the definition of "tank" in this section whose entire surface area is totally below the surface of and covered by the ground.

"Unexploded ordnance (UXO)" means military munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

"Unfit-for-use tank system" means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating dangerous waste without posing a threat of release of dangerous waste to the environment.

"Universal waste" means any of the following dangerous wastes that are subject to the universal waste requirements of WAC 173-303-573:

Batteries as described in WAC 173-303-573(2);

Thermostats as described in WAC 173-303-573(3);

Lamps as described in WAC 173-303-573(5); and

Mercury-containing equipment as described in WAC 173-303-573(4).

"Universal waste handler":

Means:

A generator (as defined in this section) of universal waste; or

The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

Does not mean:

A person who treats (except under the provisions of WAC 173-303-573 (9)(a), (b), or (c) or (20)(a), (b), or (c)) disposes of, or recycles universal waste; or

A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

"Universal waste transfer facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

"Universal waste transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

"Unsaturated zone" means the zone between the land surface and the water table.

"Uppermost aquifer" means the geological formation nearest the natural ground surface that is capable of yielding ground water to wells or springs. It includes lower aquifers that are hydraulically interconnected with this aquifer within the facility property boundary.

"Used oil" means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities.

"Vessel" includes every description of watercraft, used or capable of being used as a means of transportation on the water.

"Waste-derived fertilizer" means a commercial fertilizer that is derived in whole or in part from solid waste as defined in chapter 70.95 or 70.105 RCW, or rules adopted thereunder, but does not include fertilizers derived from biosolids or biosolid products regulated under chapter 70.95J RCW or wastewaters regulated under chapter 90.48 RCW.

"Wastewater treatment unit" means a device that:

Is part of a wastewater treatment facility which is subject to regulation under either:

Section 402 or section 307(b) of the Federal Clean Water Act; or

Chapter 90.48 RCW, State Water Pollution Control Act, provided that the waste treated at the facility is a state-only dangerous waste; and

Handles dangerous waste in the following manner:

Receives and treats or stores an influent wastewater; or

Generates and accumulates or treats or stores a wastewater treatment sludge; and

Meets the definition of tank or tank system in this section.

"Water or rail (bulk shipment)" means the bulk transportation of dangerous waste which is loaded or carried on board a vessel or railcar without containers or labels.

"Zone of engineering control" means an area under the control of the owner/operator that, upon detection of a dangerous waste release, can be readily cleaned up prior to the release of dangerous waste or dangerous constituents to ground water or surface water.

Any terms used in this chapter which have not been defined in this section have either the same meaning as set forth in Title 40 CFR Parts 260, 264, 270, and 124 or else have their standard, technical meaning.

As used in this chapter, words in the masculine gender also include the feminine and neuter genders, words in the singular include the plural, and words in the plural include the singular.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-303-040, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-040, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-040, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-040, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-040, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-040, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-040, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-040, filed 1/4/89; 87-14-029 (Order

DE-87-4), § 173-303-040, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-040, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-040, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-040, filed 2/10/82. Formerly WAC 173-302-040.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-303-045 References to EPA's hazardous waste and permit regulations. (1) Any references in this chapter to any parts, subparts, or sections from EPA's hazardous waste regulations, including 40 CFR Parts 260 through 280 and Part 124, are in reference to those rules as they existed on July 1, 2003, except for the following: The National Environmental Performance Track Program accumulation requirements, incorporated at WAC 173-303-200(5), are from the April 22, 2004, Federal Register Volume 69, Number 78. Copies of the appropriate referenced federal requirements are available upon request from the department.

(2) The following sections and any cross-reference to these sections are not incorporated or adopted by reference because they are provisions that EPA cannot delegate to states:

(a) 40 CFR Parts 260.1 (b)(4)-(6).

(b) 40 CFR Parts 264.1 (d) and (f); 265.1 (c)(4); 264.149-150 and 265.149-150; 264.301(l); and 265.430.

(c) 40 CFR Parts 268.5 and 268.6; 268 Subpart B; 268.42(b) and 268.44 (a) through (g).

(d) 40 CFR Parts 270.1 (c)(1)(i); 270.3; 270.60(b); and 270.64.

(e) 40 CFR Parts 124.1 (b)-(e); 124.4; 124.5(e); 124.9; 124.10 (a)(1)(iv); 124.12(e); 124.14(d); 124.15 (b)(2); 124.16; 124.17(b); 124.18; 124.19; and 124.21.

(3) The following sections and any cross-references to these citations are not incorporated or adopted by reference: 40 CFR Parts 260.20-260.22.

(4) Where EPA's regulations are incorporated by reference:

(a) "Regional administrator" means "the department."

(b) "Administrator" means "director."

(c) "Director" means "department."

(d) These substitutions should be made as appropriate. They should not be made where noted otherwise in this chapter. They should not be made where another EPA region is referred to, where a provision cannot be delegated to the state, or where the director referred to is the director of another agency.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-045, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-045, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-045, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-045, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-045, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-045, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-045, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-045, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-045, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-045, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-045, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-045, filed 2/10/82.]

WAC 173-303-050 Department of ecology cleanup authority. The department may conduct or contract for the removal of dangerous wastes or hazardous substances where there has been or is a potential for discharge or release, regardless of quantity or concentration, which could pose a threat to public health or the environment.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-050, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-050, filed 2/10/82. Formerly WAC 173-302-060.]

WAC 173-303-060 Notification and identification numbers. (1) Any person who generates, transports, offers for transport, or transfers a dangerous waste, or who owns or operates a dangerous waste TSD facility must have a current EPA/state identification number (EPA/state ID#). An EPA/state ID# is issued to TSD facilities and generators by site. A state registration number is assigned to transfer facilities by site. Any person who offers a dangerous waste to a transporter or to a dangerous waste TSD facility that does not have an EPA/state ID#, or whose EPA/state ID# has been cancelled or withdrawn, is in violation of this regulation.

(2) Every person who must have an EPA/state ID#, and who has not already received their ID#, must notify the department by obtaining and completing a Washington State Dangerous Waste Site Identification Form according to the instructions on the form and submitting the completed form to the department. Any person already assigned an EPA/state ID# must notify the department of any changes to their company's name, mailing address, ownership, physical location, or type of dangerous waste activity, by submitting a revised form. A revised form must be submitted prior to adding or dropping any of the following activities: Permitted treating, storing and/or disposing, immediate recycling, transporting, permit by rule, and/or treatment by generator. Any change in site location will require the issuance of a new EPA/state ID# for waste generation and management facilities. An EPA/state ID# may not be used at new company locations. A company that has obtained an ID# as a "transporter only" can move to a new location and continue to use the same ID#. A revised Dangerous Waste Site Identification Form must be submitted to the department. A Dangerous Waste Site Identification Form and instructions for its completion may be obtained by contacting the department.

(3) Any person with an EPA/state ID# may request that his ID# be withdrawn if he will no longer be handling dangerous waste at the site the ID# has been assigned to. Any person whose ID# has been withdrawn must notify the department before he uses the ID# at any later date. Notification must be in writing, except in the case of emergencies (e.g., fires, spills, etc.) such notification may be provided by telephone first, and followed within one week by a written notification. Withdrawal will only be granted when all applicable requirements of this chapter and chapter 173-305 WAC have been met.

(4) Any person with an EPA/state ID# may request that his ID# be cancelled if he will no longer occupy the site. Notification must be in writing. An EPA/state ID# will be considered cancelled only after all applicable requirements of this chapter and chapter 173-305 WAC have been met.

(5) Any person with a current EPA/state ID# must submit an annual report as required by WAC 173-303-070(8), 173-303-220, and 173-303-390. Any person who has withdrawn or cancelled their ID# must submit an annual report up to the effective date of cancellation or withdrawal. The generator should write the effective date on the Dangerous Waste Site Identification Form for the cancellation or withdrawal; it is the date by which all regulated waste activities (generation, transportation, and management) have ceased at the site.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-060, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-060, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-060, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-060, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-060, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-060, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-060, filed 2/10/82.]

WAC 173-303-070 Designation of dangerous waste. (1) Purpose and applicability.

(a) This section describes the procedures for determining whether or not a solid waste is DW or EHW.

(b) The procedures in this section are applicable to any person who generates a solid waste (including recyclable materials) that is not exempted or excluded by this chapter or by the department. Any person who must determine whether or not their solid waste is designated must follow the procedures set forth in subsection (3) of this section. Any person who determines by these procedures that their waste is designated DW or EHW is subject to all applicable requirements of this chapter.

(c) The requirements for the small quantity generator exemption are found in subsection (8) of this section.

(2)(a) Except as provided at WAC 173-303-070 (2)(c), once a material has been determined to be a dangerous waste, then any solid waste generated from the recycling, treatment, storage, or disposal of that dangerous waste is a dangerous waste unless and until:

(i) The generator has been able to accurately describe the variability or uniformity of the waste over time, and has been able to obtain demonstration samples which are representative of the waste's variability or uniformity; and

(ii)(A) It does not exhibit any of the characteristics of WAC 173-303-090; however, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of WAC 173-303-140 (2)(a), even if they no longer exhibit a characteristic at the point of land disposal; and

(B) If it was a listed waste under WAC 173-303-080 through 173-303-083, it also has been exempted pursuant to WAC 173-303-910(3); or

(iii) If originally designated only through WAC 173-303-100, it does not meet any of the criteria of WAC 173-303-100.

Such solid waste will include but not be limited to any sludge, spill residue, ash emission control dust, leachate, or precipitation runoff. Precipitation runoff will not be considered a dangerous waste if it can be shown that the runoff has not been contaminated with the dangerous waste, or that the runoff is adequately addressed under existing state laws (e.g. chapter 90.48 RCW), or that the runoff does not exhibit any of the criteria or characteristics described in WAC 173-303-100.

(b) Materials that are reclaimed from solid wastes and that are used beneficially (as provided in WAC 173-303-016 and 173-303-017) are not solid wastes and hence are not dangerous wastes under this section unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.

(c)(i) A dangerous waste that is listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits one or more characteristics of ignitability as defined under WAC 173-303-090(5), corrosivity as defined under WAC 173-303-090(6), or reactivity as defined under WAC 173-303-090(7) is not a dangerous waste, if the waste no longer exhibits any characteristic of dangerous waste identified in WAC 173-303-090 or any criteria identified in WAC 173-303-100.

(ii) The exclusion described in (c)(i) of this subsection also pertains to:

(A) Any solid waste generated from treating, storing, or disposing of a dangerous waste listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under (a) and (b) of this section.

(B) Wastes excluded under this section are subject to 40 CFR Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a) (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

(3) Designation procedures.

(a) To determine whether or not a solid waste is designated as a dangerous waste a person must:

(i) First, determine if the waste is a listed discarded chemical product, WAC 173-303-081;

(ii) Second, determine if the waste is a listed dangerous waste source, WAC 173-303-082;

(iii) Third, if the waste is not listed in WAC 173-303-081 or 173-303-082, or for the purposes of compliance with the federal land disposal restrictions as adopted by reference in WAC 173-303-140, determine if the waste exhibits any dangerous waste characteristics, WAC 173-303-090; and

(iv) Fourth, if the waste is not listed in WAC 173-303-081 or 173-303-082, and does not exhibit a characteristic in WAC 173-303-090, determine if the waste meets any dangerous waste criteria, WAC 173-303-100.

(b) A person must check each section, in the order set forth, until they determine whether the waste is designated as a dangerous waste. Once the waste is determined to be a dangerous waste, further designation is not required except as required by subsection (4) or (5) of this section. If a person has checked the waste against each section and the waste is not designated, then the waste is not subject to the requirements of chapter 173-303 WAC.

Any person who wishes to seek an exemption for a waste which has been designated DW or EHW must comply with the requirements of WAC 173-303-072.

(c) For the purpose of determining if a solid waste is a dangerous waste as identified in WAC 173-303-080 through 173-303-100, a person must either:

(i) Test the waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110; or

(ii) Apply knowledge of the waste in light of the materials or the process used, when:

(A) Such knowledge can be demonstrated to be sufficient for determining whether or not it designated and/or designated properly; and

(B) All data and records supporting this determination in accordance with WAC 173-303-210(3) are retained on-site.

(4) Testing required. Notwithstanding any other provisions of this chapter, the department may require any person to test a waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110 to determine whether or not the waste is designated under the dangerous waste lists, characteristics, or criteria, WAC 173-303-080 through 173-303-100. Such testing may be required if the department has reason to believe that the waste would be designated DW or EHW by the dangerous waste lists, characteristics, or criteria, or if the department has reason to believe that the waste is designated improperly (e.g., the waste has been designated DW but should actually be designated EHW). If a person, pursuant to the requirements of this subsection, determines that the waste is a dangerous waste or that its designation must be changed, then they are subject to the applicable requirements of this chapter 173-303 WAC. The department will base a requirement to test a waste on evidence that includes, but is not limited to:

(a) Test information indicating that the person's waste may be DW or EHW;

(b) Evidence that the person's waste is very similar to another persons' already designated DW or EHW;

(c) Evidence that the persons' waste has historically been a DW or EHW;

(d) Evidence or information about a person's manufacturing materials or processes which indicate that the wastes may be DW or EHW; or

(e) Evidence that the knowledge or test results a person has regarding a waste is not sufficient for determining whether or not it designated and/or designated properly.

(5) Additional designation required. A generator must manage dangerous waste under the most stringent management standards that apply. The following subsections describe how waste that has been designated as DW under the dangerous waste lists, WAC 173-303-080 through 173-303-082, or characteristics, WAC 173-303-090, or in the case of (c) of this subsection, under the lists, characteristics, or criteria, must be further designated under the dangerous waste criteria, WAC 173-303-100. This further designation under the criteria is necessary because it may change how the waste must be managed. Additional designation is required when:

(a) The waste is designated as DW with a QEL of 220 pounds and the generator otherwise qualifies as a small quantity generator. In this case, a generator must determine if their DW is also designated as a toxic EHW, WAC 173-303-100, with a QEL of 2.2 pounds; or

(b) The waste is designated as DW and the waste is to be discharged to a POTW operating under WAC 173-303-802(4) (Permits by rule). In this case, a generator must determine if the waste is also an EHW under WAC 173-303-100; or

(c) The waste is designated as a state-only DW and the waste is to be:

(i) Burned for energy recovery, as used oil, under the provisions of WAC 173-303-515; or

(ii) Land disposed within the state. In this case, a generator must determine if the waste is also an EHW under WAC 173-303-100.

(6) Dangerous waste numbers. When a person is reporting or keeping records on a dangerous waste, they must use all the dangerous waste numbers which they know are assignable to the waste from the dangerous waste lists, characteristics, or criteria. For example, if the waste is ignitable *and* contains more than 5 mg/l leachable lead when tested for the toxicity characteristic, they must use the dangerous waste numbers of D001 and D008. This will not be construed as requiring a person to designate their waste beyond those designation requirements set forth in subsections (2), (3), (4), and (5) of this section.

(7) Quantity exclusion limits; aggregated waste quantities.

(a) Quantity exclusion limits. In each of the designation sections describing the lists, characteristics, and criteria, quantity exclusion limits (QEL) are identified. The QEL are used to distinguish when a dangerous waste is only subject to the small quantity generator provisions, and when a dangerous waste is subject to the full requirements of this chapter. Any solid waste which is not excluded or exempted and which is listed by or exhibits the characteristics or meets the criteria of this chapter is a dangerous waste. Small quantity generators who produce dangerous waste below the QEL are subject to the requirements described in subsection (8) of this section.

(b) Aggregated waste quantities. A person may be generating, accumulating, or storing more than one kind of dangerous waste. In such cases, they must consider the aggregate quantity of their wastes when determining whether or not their waste amounts exceed the specific limits for waste accumulation or the specific quantity exclusion limits (QEL) for waste generation. Waste quantities must be aggregated for all wastes with common QEL's. Example: If a person generates 100 pounds of an ignitable waste and 130 pounds of a persistent waste, then both wastes are regulated because their aggregate waste quantity (230 pounds) exceeds their common QEL of 220 pounds. On the other hand, if a person generates one pound of a toxic EHW and 218 pounds of a corrosive waste, their quantities would not be aggregated because they do not share a common QEL (2.2 pounds and 220 pounds, respective QEL's). (Note: In order to remain a small quantity generator, the total quantity of dangerous waste generated in one month, all DW and EHW regardless of their QELs, must not equal or exceed 220 pounds. Not more than 2.2 pounds of a waste with a 2.2 pound QEL may be part of that total.)

(c) When making the quantity determinations of this subsection and WAC 173-303-170 through 173-303-230, generators must include all dangerous wastes they generate, except dangerous waste that:

(i) Is exempt from regulation under WAC 173-303-071; or

(ii) Is recycled under WAC 173-303-120 (2)(a), (3)(c), (e), (h) or (5); or

(iii) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment

units, or totally enclosed treatment facilities as defined in WAC 173-303-040; or

(iv) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under WAC 173-303-120 (4)(a); or

(v) Is spent lead-acid batteries managed under the requirements of WAC 173-303-120 (3)(f) and 173-303-520; or

(vi) Is universal waste managed under WAC 173-303-077 and 173-303-573.

(d) In determining the quantity of dangerous waste generated, a generator need not include:

(i) Dangerous waste when it is removed from on-site storage; or

(ii) Reserve; or

(iii) Spent materials that are generated, reclaimed, and subsequently reused on-site, as long as such spent materials have been counted once (Note: If after treatment or reclamation a residue is generated with a different waste code(s), that residue must be counted); or

(iv) The container holding/containing the dangerous waste as described under WAC 173-303-160(1).

(8) Small quantity generators.

(a) A person is a small quantity generator and subject to the requirements of this subsection if:

(i) Their waste is dangerous waste under subsection (3) of this section, and the quantity of waste generated per month (or the aggregated quantity if more than one kind of waste is generated) does not equal or exceed the quantity exclusion limit (QEL) for such waste (or wastes) as described in WAC 173-303-070(7); and

(ii) The quantity accumulated or stored does not exceed 2200 pounds for wastes with a 220 pound QEL and 2.2 pounds for waste with a 2.2 pound QEL. (Exception: The accumulation limit for the acute hazardous wastes described in WAC 173-303-081 (2)(iv) and 173-303-082 (2)(b) is 220 lbs); and

(iii) The total quantity of dangerous waste generated in one month, all DW and EHW regardless of their QELs, does not equal or exceed 220 pounds. If a person generates any dangerous wastes that exceed the QEL or accumulates or stores waste that exceeds the accumulation limits, then all dangerous waste generated, accumulated, or stored by that person is subject to the requirements of this chapter. A small quantity generator who generates in excess of the quantity exclusion limits or, accumulates, or stores waste in excess of the accumulation limits becomes subject to the full requirements of this chapter and cannot again be a small quantity generator until after all dangerous waste on-site at the time he or she became fully regulated have been removed, treated, or disposed.

Example. If a person generates four pounds of an acute hazardous waste discarded chemical product (QEL is 2.2 pounds) and 200 pounds of an ignitable waste (QEL is 220 pounds), then both wastes are fully regulated, and the person is not a small quantity generator for either waste.

(Comment: If a generator generates acute hazardous waste in a calendar month in quantities greater than the QELs, all quantities of that acute hazardous waste are subject to full regulation under this chapter. "Full regulation" means the regulations applicable to generators of greater than 2200 pounds of dangerous wastes in a calendar month.)

(b) Small quantity generators will not be subject to the requirements of this chapter if they:

(i) Designate their waste in accordance with WAC 173-303-070; and

(ii) Manage their waste in a way that does not pose a potential threat to human health or the environment; and

(iii) Either treat or dispose of their dangerous waste in an on-site facility, or ensure delivery to an off-site facility, either of which, if located in the United States, is:

(A) Permitted (including permit-by-rule, interim status, or final status) under WAC 173-303-800 through 173-303-840;

(B) Authorized to manage dangerous waste by another state with a hazardous waste program approved under 40 CFR Part 271, or by EPA under 40 CFR Part 270;

(C) Permitted to manage moderate-risk waste under chapter 173-350 WAC (Solid waste handling standards), operated in accordance with state and local regulations, and consistent with the applicable local hazardous waste plan that has been approved by the department;

(D) A facility that beneficially uses or reuses, or legitimately recycles or reclaims the dangerous waste, or that treats the waste prior to such recycling activities;

(E) Permitted, licensed, or registered to manage municipal solid waste and, if managed in a municipal solid waste landfill is subject to 40 CFR Part 258 or chapter 173-351 WAC;

(F) Permitted, licensed, or registered by a state to manage nonmunicipal nonhazardous waste and, if managed in a nonmunicipal nonhazardous waste disposal unit after January 1, 1998, is subject to the requirements in 40 CFR 257.5 through 257.30;

(G) A publicly owned treatment works (POTW): Provided, That small quantity generator(s) comply with the provisions of the domestic sewage exclusion found in WAC 173-303-071 (3)(a); or

(H) For universal waste managed under WAC 173-303-573, a universal waste handler or destination facility subject to the requirements of WAC 173-303-573; and

(iv) Submit an annual report in accordance with WAC 173-303-220 if they have obtained an EPA/state identification number pursuant to WAC 173-303-060.

(c) If a small quantity generator's wastes are mixed with used oil, the mixture is subject to WAC 173-303-510 if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment is also regulated if it is destined to be burned for energy recovery.

(d) If a small quantity generator's used oil is to be recycled by being burned for energy recovery or re-refined, the used oil is subject to WAC 173-303-515.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-070, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-070, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-070, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-070, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-070, filed 10/19/95, effective 11/19/95; 94-

01-060 (Order 92-33), § 173-303-070, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 93-02-050 (Order 92-32), § 173-303-070, filed 1/5/93, effective 2/5/93. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-070, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-070, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-070, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-070, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-070, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-070, filed 2/10/82.]

WAC 173-303-071 Excluded categories of waste. (1) Purpose. Certain categories of waste have been excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, because they generally are not dangerous waste, are regulated under other state and federal programs, or are recycled in ways which do not threaten public health or the environment. WAC 173-303-071 describes these excluded categories of waste.

(2) Excluding wastes. Any persons who generate a common class of wastes and who seek to categorically exclude such class of wastes from the requirements of this chapter must comply with the applicable requirements of WAC 173-303-072. No waste class will be excluded if any of the wastes in the class are regulated as hazardous waste under 40 CFR Part 261.

(3) Exclusions. The following categories of waste are excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, 173-303-145, and 173-303-960, and as otherwise specified:

(a)(i) Domestic sewage; and

(ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works (POTW) for treatment provided:

(A) The generator or owner/operator has obtained a state waste discharge permit issued by the department, a temporary permit obtained pursuant to RCW 90.48.200, or pretreatment permit (or written discharge authorization) from a local sewage utility delegated pretreatment program responsibilities pursuant to RCW 90.48.165;

(B) The waste discharge is specifically authorized in a state waste discharge permit, pretreatment permit or written discharge authorization, or in the case of a temporary permit the waste is accurately described in the permit application;

(C) The waste discharge is not prohibited under 40 CFR Part 403.5; and

(D) The waste prior to mixing with domestic sewage must not exhibit dangerous waste characteristics for ignitability, corrosivity, reactivity, or toxicity as defined in WAC 173-303-090, and must not meet the dangerous waste criteria for toxic dangerous waste or persistent dangerous waste under WAC 173-303-100, unless the waste is treatable in the publicly owned treatment works (POTW) where it will be received. This exclusion does not apply to the generation, treatment, storage, recycling, or other management of dangerous wastes prior to discharge into the sanitary sewage system;

(b) Industrial wastewater discharges that are point-source discharges subject to regulation under Section 402 of the Clean Water Act. This exclusion does not apply to the collection, storage, or treatment of industrial waste-waters prior to discharge, nor to sludges that are generated during industrial wastewater treatment. Owners or operators of certain wastewater treatment facilities managing dangerous wastes may qualify for a permit-by-rule pursuant to WAC 173-303-802(5);

(c) Household wastes, including household waste that has been collected, transported, stored, or disposed. Wastes that are residues from or are generated by the management of household wastes (e.g., leachate, ash from burning of refuse-derived fuel) are not excluded by this provision. "Household wastes" means any waste material (including, but not limited to, garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste will not be deemed to be treating, storing, disposing of, or otherwise managing dangerous wastes for the purposes of regulation under this chapter, if such facility:

(i) Receives and burns only:

(A) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and

(B) Solid waste from commercial or industrial sources that does not contain dangerous waste; and

(ii) Such facility does not accept dangerous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that dangerous wastes are not received at or burned in such facility;

(d) Agricultural crops and animal manures which are returned to the soil as fertilizers;

(e) Asphaltic materials designated only for the presence of PAHs by WAC 173-303-100(6). For the purposes of this exclusion, asphaltic materials means materials that have been used for structural and construction purposes (e.g., roads, dikes, paving) that were produced from mixtures of oil and sand, gravel, ash or similar substances;

(f) Roofing tars and shingles, except that these wastes are not excluded if mixed with wastes listed in WAC 173-303-081 or 173-303-082, or if they exhibit any of the characteristics specified in WAC 173-303-090;

(g) Treated wood waste and wood products including:

(i) Arsenical-treated wood that fails the test for the toxicity characteristic of WAC 173-303-090(8) (dangerous waste numbers D004 through D017 only) or that fails any state criteria, if the waste is generated by persons who utilize the arsenical-treated wood for the materials' intended end use. Intended end use means the wood product must have been used in typical treated wood applications (for example, fence posts, decking, poles, and timbers).

(ii) Wood treated with other preservatives provided such treated wood and wood waste (for example, sawdust and shavings) are, within one hundred eighty days after becoming waste:

(A) Disposed of at a landfill that is permitted in accordance with chapter 173-350 WAC, Solid waste handling standards, or chapter 173-351 WAC, criteria for municipal solid waste landfills, and provided that such wood is neither a listed waste under WAC 173-303-9903 and 173-303-9904 nor a TCLP waste under WAC 173-303-090(8); or

(B) Sent to a facility that will legitimately treat or recycle the treated wood waste, and manage any residue in accordance with that state's dangerous waste regulations; or

(C) Sent off-site to a permitted TSD facility or placed in an on-site facility which is permitted by the department under WAC 173-303-800 through 173-303-845. In addition, creosote-treated wood is excluded when burned for energy recovery in an industrial furnace or boiler that has an order of approval issued pursuant to RCW 70.94.152 by ecology or a local air pollution control authority to burn creosote treated wood.

(h) Irrigation return flows;

(i) Reserve;

(j) Mining overburden returned to the mining site;

(k) Polychlorinated biphenyl (PCB) wastes:

(i) PCB wastes whose disposal is regulated by EPA under 40 CFR 761.60 (Toxic Substances Control Act) and that are dangerous either because:

(A) They fail the test for toxicity characteristic (WAC 173-303-090(8), Dangerous waste codes D018 through D043 only); or

(B) Because they are designated only by this chapter and not designated by 40 CFR Part 261, are exempt from regulation under this chapter except for WAC 173-303-505 through 173-303-525, 173-303-960, those sections specified in subsection (3) of this section, and 40 CFR Part 266;

(ii) Wastes that would be designated as dangerous waste under this chapter solely because they are listed as WPCB under WAC 173-303-9904 when such wastes are stored and disposed in a manner equivalent to the requirements of 40 CFR Part 761 Subpart D for PCB concentrations of 50 ppm or greater.

(l) Samples:

(i) Except as provided in (l)(ii) of this subsection, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this chapter, when:

(A) The sample is being transported to a lab for testing or being transported to the sample collector after testing; or

(B) The sample is being stored by the sample collector before transport, by the laboratory before testing, or by the laboratory after testing prior to return to the sample collector; or

(C) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action).

(ii) In order to qualify for the exemptions in (l)(i) of this subsection, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

(A) Comply with United States Department of Transportation (DOT), United States Postal Service (USPS), or any other applicable shipping requirements; or

(B) Comply with the following requirements if the sample collector determines that DOT or USPS, or other shipping requirements do not apply:

(I) Assure that the following information accompanies the sample:

(AA) The sample collector's name, mailing address, and telephone number;

(BB) The laboratory's name, mailing address, and telephone number;

(CC) The quantity of the sample;

(DD) The date of shipment;

(EE) A description of the sample; and

(II) Package the sample so that it does not leak, spill, or vaporize from its packaging.

(iii) This exemption does not apply if the laboratory determines that the waste is dangerous but the laboratory is no longer meeting any of the conditions stated in (l)(i) of this subsection;

(m) Reserve;

(n) Dangerous waste generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated nonwaste-treatment-manufacturing unit until it exits the unit in which it was generated. This exclusion does not apply to surface impoundments, nor does it apply if the dangerous waste remains in the unit more than ninety days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials;

(o) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (NAICS codes 331111 and 332111), except that these wastes are not excluded if they exhibit one or more of the dangerous waste criteria (WAC 173-303-100) or characteristics (WAC 173-303-090);

(p) Wastes from burning any of the materials exempted from regulation by WAC 173-303-120 (2)(a)(vii) and (viii). These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics or criteria;

(q) As of January 1, 1987, secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

(i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

(ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

(iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed;

(iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal; and

(v) A generator complies with the requirements of chapter 173-303 WAC for any residues (e.g., sludges, filters, etc.) produced from the collection, reclamation, and reuse of the secondary materials.

(r) Treatability study samples.

(i) Except as provided in (r)(ii) of this subsection, persons who generate or collect samples for the purpose of conducting treatability studies as defined in WAC 173-303-040 are not subject to the requirements of WAC 173-303-180, 173-303-190, and 173-303-200 (1)(a), nor are such samples included in the quantity determinations of WAC 173-303-070 (7) and (8) and 173-303-201 when:

(A) The sample is being collected and prepared for transportation by the generator or sample collector; or

(B) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

(C) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study; or

(D) The sample or waste residue is being transported back to the original generator from the laboratory or testing facility.

(ii) The exemption in (r)(i) of this subsection is applicable to samples of dangerous waste being collected and shipped for the purpose of conducting treatability studies provided that:

(A) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with nonacute dangerous waste, 1000 kg of nonacute dangerous waste other than contaminated media, 1 kg of acutely hazardous waste, 2500 kg of media contaminated with acutely hazardous waste for each process being evaluated for each generated waste stream; and

(B) The mass of each sample shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with nonacute dangerous waste or may include 2500 kg of media contaminated with acute hazardous waste, 1000 kg of dangerous waste, and 1 kg of acutely hazardous waste; and

(C) The sample must be packaged so that it will not leak, spill, or vaporize from its packaging during shipment and the requirements of (r)(ii)(C)(I) or (II) of this subsection are met.

(I) The transportation of each sample shipment complies with United States Department of Transportation (DOT), United States Postal Service (USPS), or any other applicable shipping requirements; or

(II) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:

(AA) The name, mailing address, and telephone number of the originator of the sample;

(BB) The name, address, and telephone number of the laboratory or testing facility that will perform the treatability study;

(CC) The quantity of the sample;

(DD) The date of shipment; and

(EE) A description of the sample, including its dangerous waste number.

(D) The sample is shipped, within ninety days of being generated or of being taken from a stream of previously generated waste, to a laboratory or testing facility which is exempt under (s) of this subsection or has an appropriate final facility permit or interim status; and

(E) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:

(I) Copies of the shipping documents;

(II) A copy of the contract with the facility conducting the treatability study;

(III) Documentation showing:

(AA) The amount of waste shipped under this exemption;

(BB) The name, address, and EPA/state identification number of the laboratory or testing facility that received the waste;

(CC) The date the shipment was made; and

(DD) Whether or not unused samples and residues were returned to the generator.

(F) The generator reports the information required under (r)(ii)(E)(III) of this subsection in its annual report.

(iii) The department may grant requests, on a case-by-case basis, for up to an additional two years for treatability studies involving bioremediation. The department may grant requests on a case-by-case basis for quantity limits in excess of those specified in (r)(ii)(A) and (B) of this subsection and (s)(iv) of this subsection, for up to an additional 5000 kg of media contaminated with nonacute dangerous waste, 500 kg of nonacute dangerous waste, 1 kg of acute hazardous waste, and 2500 kg of media contaminated with acute hazardous waste or for up to an additional 10,000 kg of wastes regulated only by this chapter and not regulated by 40 CFR Part 261, to conduct further treatability study evaluation:

(A) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process, (e.g., batch versus continuous), size of the unit undergoing testing (particularly in relation to scale-up considerations), the time/quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance calculations.

(B) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when:

There has been an equipment or mechanical failure during the conduct of a treatability study; there is a need to verify the results of previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

(C) The additional quantities and time frames allowed in (r)(iii)(A) and (B) of this subsection are subject to all the provisions in (r)(i) and (r)(ii)(C) through (F) of this subsection. The generator or sample collector must apply to the department where the sample is collected and provide in writing the following information:

(I) The reason the generator or sample collector requires additional time or quantity of sample for the treatability study evaluation and the additional time or quantity needed;

(II) Documentation accounting for all samples of dangerous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;

(III) A description of the technical modifications or change in specifications which will be evaluated and the expected results;

(IV) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

(V) Such other information that the department considers necessary.

(s) Samples undergoing treatability studies at laboratories and testing facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to chapter 70.105 RCW) are not subject to the requirements of this chapter, except WAC 173-303-050, 173-303-145, and 173-303-960 provided that the conditions of (s)(i) through (xiii) of this subsection are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to (s)(i) through (xiii) of this subsection. Where a group of MTUs are located at the same site, the limitations specified in (s)(i) through (xiii) of this subsection apply to the entire group of MTUs collectively as if the group were one MTU.

(i) No less than forty-five days before conducting treatability studies the laboratory or testing facility notifies the department in writing that it intends to conduct treatability studies under this subsection.

(ii) The laboratory or testing facility conducting the treatability study has an EPA/state identification number.

(iii) No more than a total of 10,000 kg of "as received" media contaminated with nonacute dangerous waste, 2500 kg of media contaminated with acute hazardous waste or 250 kg of other "as received" dangerous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

(iv) The quantity of "as received" dangerous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with nonacute dangerous waste, 2500 kg of media contaminated with acute hazardous waste, 1000 kg of nonacute dangerous wastes other than contaminated media, and 1 kg of acutely hazardous waste. This quantity limitation does not include treatment materials (including nondangerous solid waste) added to "as received" dangerous waste.

(v) No more than ninety days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

(vi) The treatability study does not involve the placement of dangerous waste on the land or open burning of dangerous waste.

(vii) The laboratory or testing facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

(A) The name, address, and EPA/state identification number of the generator or sample collector of each waste sample;

(B) The date the shipment was received;

(C) The quantity of waste accepted;

(D) The quantity of "as received" waste in storage each day;

(E) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;

(F) The date the treatability study was concluded;

(G) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated TSD facility, the name of the TSD facility and its EPA/state identification number.

(viii) The laboratory or testing facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.

(ix) The laboratory or testing facility prepares and submits a report to the department by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:

(A) The name, address, and EPA/state identification number of the laboratory or testing facility conducting the treatability studies;

(B) The types (by process) of treatability studies conducted;

(C) The names and addresses of persons for whom studies have been conducted (including their EPA/state identification numbers);

(D) The total quantity of waste in storage each day;

(E) The quantity and types of waste subjected to treatability studies;

(F) When each treatability study was conducted;

(G) The final disposition of residues and unused sample from each treatability study.

(x) The laboratory or testing facility determines whether any unused sample or residues generated by the treatability study are dangerous waste under WAC 173-303-070 and if so, are subject to the requirements of this chapter, unless the residues and unused samples are returned to the sample originator under the exemption in (r) of this subsection.

(xi) The laboratory or testing facility notifies the department by letter when it is no longer planning to conduct any treatability studies at the site.

(xii) The date the sample was received, or if the treatability study has been completed, the date of the treatability study, is marked and clearly visible for inspection on each container.

(xiii) While being held on site, each container and tank is labeled or marked clearly with the words "dangerous waste" or "hazardous waste." Each container or tank must also be marked with a label or sign which identifies the major risk(s) associated with the waste in the container or tank for employees, emergency response personnel and the public.

Note: If there is already a system in use that performs this function in accordance with local, state, or federal regulations, then such system will be adequate.

(t) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of WAC 173-303-090(8) (dangerous waste numbers D018 through D043 only) and are subject to the corrective action regulations under 40 CFR Part 280.

(u) Special incinerator ash (as defined in WAC 173-303-040).

(v) Wood ash that would designate solely for corrosivity by WAC 173-303-090 (6)(a)(iii). For the purpose of this exclusion, wood ash means ash residue and emission control dust generated from the combustion of untreated wood, wood treated solely with creosote, and untreated wood fiber materials including, but not limited to, wood chips, saw dust, tree stumps, paper, cardboard, residuals from waste fiber recycling, deinking rejects, and associated wastewater treatment solids. This exclusion allows for the use of auxiliary fuels including, but not limited to, oils, gas, coal, and other fossil fuels in the combustion process.

(w)(i) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and

(ii) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

(iii) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in (w)(i) and (ii) of this subsection, so long as they meet all of the following conditions:

(A) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose;

(B) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or ground water or both;

(C) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;

(D) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in Part 265, Subpart W which is incorporated by reference at WAC 173-303-400 (3)(a), regardless of whether the plant generates a total of less than 220 pounds/month of dangerous waste; and

(E) Prior to operating pursuant to this exclusion, the plant owner or operator submits to the department a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than three years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the department for reinstatement. The department may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur.

(F) Additional reports.

(I) Upon determination by the department that the storage of wood preserving wastewaters and spent wood preserving solutions in tanks and/or containers poses a threat to public health or the environment, the department may require the owner/operator to provide additional information regarding the integrity of structures and equipment used to store wood preserving wastewaters and spent wood preserving solutions. This authority applies to tanks and secondary containment systems used to store wood preserving wastewaters and spent wood preserving solutions in tanks and containers. The department's determination of a threat to public health or the environment may be based upon observations of factors that would contribute to spills or releases of wood preserving wastewaters and spent wood preserving solutions or the generation of hazardous by-products. Such observations may include, but are not limited to, leaks, severe corrosion, structural defects or deterioration (cracks, gaps, separation of joints), inability to completely inspect tanks or structures, or concerns about the age or design specification of tanks.

(II) When required by the department, a qualified, independent professional engineer registered to practice in Washington state must perform the assessment of the integrity of tanks or secondary containment systems.

(III) Requirement for facility repairs and improvements. If, upon evaluation of information obtained by the department under (w)(iii)(F)(I) of this subsection, it is determined that repairs or structural improvements are necessary in order to eliminate threats, the department may require the owner/operator to discontinue the use of the tank system or container storage unit and remove the wood preserving wastewaters and spent wood preserving solutions until such repairs or improvements are completed and approved by the department.

(x) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.

(y) Used oil filters that are recycled in accordance with WAC 173-303-120, as used oil and scrap metal.

(z) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

(aa) Wastes that fail the test for the toxicity characteristic in WAC 173-303-090 because chromium is present or are listed in WAC 173-303-081 or 173-303-082 due to the presence of chromium. The waste must not designate for any other characteristic under WAC 173-303-090, for any of the criteria specified in WAC 173-303-100, and must not be listed in WAC 173-303-081 or 173-303-082 due to the presence of any constituent from WAC 173-303-9905 other than chromium. The waste generator must be able to demonstrate that:

(i) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

(ii) The waste is generated from an industrial process that uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

(iii) The waste is typically and frequently managed in nonoxidizing environments.

(bb)(i) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in WAC 173-303-040 - blast furnaces, smelting, melting and refining furnaces, and other devices the department may add to the list - of the definition for "industrial furnace"), that are disposed in subtitle D units, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph for all constituents, and exhibit no characteristics of dangerous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

Constituent	Maximum for any single composite sample-TCLP (mg/l)
Generic exclusion levels for K061 and K062 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
(2)Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70
Generic exclusion levels for F006 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

(ii) A one-time notification and certification must be placed in the facility's files and sent to the department for K061, K062 or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to subtitle D units. The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes and/or if the subtitle D unit receiving the waste changes. However, the generator or treater need only notify the department on an annual basis if such changes occur. Such notification and certification should be sent to the department by the end of the calendar year, but no later than December 31. The notification must include the following information: The name and address of the subtitle D unit receiving the waste shipments; the dangerous waste number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of dangerous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment." These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics (WAC 173-303-090) or criteria (WAC 173-303-100).

(cc)(i) Oil-bearing hazardous secondary materials (that is, sludges, by-products, or spent materials) that are generated at a petroleum refinery (NAICS code 324110) and are inserted into the petroleum refining process (NAICS code 324110 - including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (that is, cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph: Provided, That the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in (cc)(ii) of this subsection, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (that is, from sources other than petroleum refineries) are not excluded under this section. Residuals generated from processing or recycling materials excluded under this paragraph, where such materials as generated would have otherwise met a listing under WAC 173-303-081 and 173-303-082, are designated as F037 listed wastes when disposed of or intended for disposal.

(ii) Recovered oil that is recycled in the same manner and with the same conditions as described in (cc)(i) of this subsection. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (NAICS codes 211111, 211112, 213111, 213112, 541360, 237120, 238910, 324110, 486110, 486910, 486210, 221210, 486210, 487110, 488210, 488999, 722310, 424710, 454311, 454312, 424720, 425110, 425120). Recovered oil does not include oil-bearing hazardous wastes listed in WAC 173-303-081 and 173-303-082; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in WAC 173-303-040.

(dd) Dangerous waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are dangerous only because they exhibit the toxicity characteristic (TC) specified in WAC 173-303-090(8) when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.

(ee) Biological treatment sludge from the treatment of one of the following wastes listed in WAC 173-303-9904 - organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (Dangerous Waste No. K156), and wastewaters from the production of carbamates and carbamoyl oximes (Dangerous Waste No. K157) unless it exhibits one or more of the characteristics or criteria of dangerous waste.

(ff) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

(gg) Shredded circuit boards being recycled: Provided, That they are:

(i) Stored in containers sufficient to prevent a release to the environment prior to recovery; and

(ii) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.

(hh) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (NAICS code 324110) along with normal petroleum refinery process streams, provided:

(i) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in WAC 173-303-090(5) and/or toxicity for benzene (WAC 173-303-090(8), waste code D018); and

(ii) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process.

An "associated organic chemical manufacturing facility" is a facility where the primary NAICS code is 325110, 325120, 325188, 325192, 325193, or 325199, but where operations may also include NAICS codes 325211, 325212, 325110, 325132, 325192; and is physically colocated with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (that is, sludges, by-products, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

(ii) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in WAC 173-303-016(5).

(jj) Catalyst inert support media separated from one of the following wastes listed in WAC 173-303-9904 Specific Sources - Spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and Spent hydrorefining catalyst (EPA Hazardous Waste No. K172). These wastes are not excluded if they exhibit one or more of the dangerous waste characteristics or criteria.

(kk) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed: Provided, That:

(i) The solid wastes disposed would meet one or more of the listing descriptions for Hazardous Waste Codes K169, K170, K171, K172, K174, K175, K176, K177, and K178 if these wastes had been generated after the effective date of the listing;

(ii) The solid wastes described in (kk)(i) of this subsection were disposed prior to the effective date of the listing;

(iii) The leachate or gas condensate does not exhibit any characteristic or criteria of dangerous waste nor is derived from any other listed hazardous waste;

(iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act.

(v) As of February 13, 2001, leachate or gas condensate derived from K169 - K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: If the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (for example, shutdown of wastewater treatment system): Provided, That the impoundment has a double liner, and: Provided further, That the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this paragraph after the emergency ends.

(ll) Dredged material. Dredged material as defined in 40 CFR 232.2 that is subject to:

(i) The requirements of a permit that has been issued by the U.S. Army Corps of Engineers or an approved state under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(ii) The requirements of a permit that has been issued by the U.S. Army Corps of Engineers under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or

(iii) In the case of a U.S. Army Corps of Engineers civil works project, the administrative equivalent of the permits referred to in (ll)(i) and (ii) of this subsection, as provided for in U.S. Army Corps of Engineers regulations, including, for example, 33 CFR 336.1, 336.2 and 337.3.

(mm) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

(nn)(i) Controlled substances, legend drugs, and over-the-counter drugs that are state-only dangerous wastes.

(A) Controlled substances as defined and regulated by chapter 69.50 RCW (Schedule I through V);

(B) Legend drugs as defined and regulated by chapter 69.41 RCW; and

(C) Over-the-counter drugs as defined and regulated by chapter 69.60 RCW.

(ii) Controlled substances, legend drugs, and over-the-counter drugs that are held in the custody of law enforcement agencies or possessed by any licensee as defined and regulated by chapter 69.50 RCW or Title 18 RCW and authorized to possess drugs within the state of Washington are excluded, provided the drugs are disposed of by incineration in a controlled combustion unit with a heat input rate greater than 250 million British thermal units/hour, a combustion zone temperature greater than 1500 degrees Fahrenheit, or a facility permitted to incinerate municipal solid waste.

(iii) For the purposes of this exclusion the term "drugs" means:

(A) Articles recognized in the official United States pharmacopoeia or the official homeopathic pharmacopoeia of the United States;

(B) Substances intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or

(C) Substances (other than food) intended to affect the structure or any function of the body of man or other animals, as defined in RCW 18.64.011(3). (Note: RCW 18.64.011 (3)(d) is intentionally not included in the definition of drugs for this exclusion.)

(iv) When possessed by any licensee the term drugs used in this exclusion means finished drug products.

(oo) Cathode ray tubes (CRTs) and glass removed from CRTs:

(i) Prior to processing: These materials are not solid wastes if they are destined for recycling and if they meet the following requirements:

(A) Storage. CRTs must be either:

(I) Stored in a building with a roof, floor, and walls; or

(II) Placed in a container (that is, a package or a vehicle) that is constructed, filled, and closed to minimize releases to the environment of CRT glass (including fine solid materials).

(B) Labeling. Each container in which the CRT is contained must be labeled or marked clearly with one of the following phrases: "Used cathode ray tube(s) - contains leaded glass" or "leaded glass from televisions or computers." It must also be labeled: "Do not mix with other glass materials."

(C) Transportation. CRTs must be transported in a container meeting the requirements of (oo)(i)(A)(II) and (B) of this subsection.

(D) Speculative accumulation and use constituting disposal. CRTs are subject to the limitations on speculative accumulation as defined in WAC 173-303-016 (5)(d). If they are used in a manner constituting disposal, they must comply with the applicable requirements of WAC 173-303-505 instead of the requirements of this section.

(E) Exports. In addition to the applicable conditions specified in (oo)(i)(A) through (D) of this subsection, exporters of CRTs must comply with the following requirements:

(I) Notify EPA of an intended export before the CRTs are scheduled to leave the United States. A complete notification should be submitted sixty days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a twelve-month or lesser period. The notification must be in writing, signed by the exporter, and include the following information:

• Name, mailing address, telephone number and EPA/state ID number (if applicable) of the exporter of the CRTs.

• The estimated frequency or rate at which the CRTs are to be exported and the period of time over which they are to be exported.

• The estimated total quantity of CRTs specified in kilograms.

• All points of entry to and departure from each foreign country through which the CRTs will pass.

• A description of the means by which each shipment of the CRTs will be transported (for example, mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.)).

• The name and address of the recycler and any alternate recycler.

• A description of the manner in which the CRTs will be recycled in the foreign country that will be receiving the CRTs.

• The name of any transit country through which the CRTs will be sent and a description of the approximate length of time the CRTs will remain in such country and the nature of their handling while there.

(II) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 1200 Pennsylvania Ave., N.W., Washington, D.C. In both cases, the following must be prominently displayed on the front of the envelope: "Attention: Notification of intent to export CRTs."

(III) Upon request by EPA, the exporter must furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(IV) EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of (oo)(i)(E)(I) of this subsection. Where a claim of confidentiality is asserted with respect to any notification information required by (oo)(i)(E)(I) of this subsection, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.

(V) The export of CRTs is prohibited unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the CRTs, EPA will forward an "Acknowledgment of Consent" to export CRTs to the exporter. Where the receiving country objects to receipt of the CRTs or withdraws a prior consent,

EPA will notify the exporter in writing. EPA will also notify the exporter of any responses from transit countries.

(VI) When the conditions specified on the original notification change, the exporter must provide EPA with a written renotification of the change, except for changes to the telephone number in (oo)(i)(E)(I)(first bullet) of this subsection and decreases in the quantity indicated pursuant to (oo)(i)(E)(I)(third bullet) of this subsection. The shipment cannot take place until consent of the receiving country to the changes has been obtained (except for changes to information about points of entry and departure and transit countries pursuant to (oo)(i)(E)(I)(fourth bullet) and (i)(E)(I)(eighth bullet) of this section) and the exporter of CRTs receives from EPA a copy of the "Acknowledgment of Consent" to export CRTs reflecting the receiving country's consent to the changes.

(VII) A copy of the "Acknowledgment of Consent" to export CRTs must accompany the shipment of CRTs. The shipment must conform to the terms of the Acknowledgment.

(VIII) If a shipment of CRTs cannot be delivered for any reason to the recycler or the alternate recycler, the exporter of CRTs must renotify EPA of a change in the conditions of the original notification to allow shipment to a new recycler in accordance with (oo)(i)(E)(VI) of this subsection and obtain another "Acknowledgment of Consent" to export CRTs.

(IX) Exporters must keep copies of notifications and "Acknowledgments of Consent" to export CRTs for a period of five years following receipt of the "Acknowledgment."

(ii) Requirements for used CRT processing: CRTs undergoing CRT processing as defined in WAC 173-303-040 are not solid wastes if they meet the following requirements:

(A) Storage. CRTs undergoing processing are subject to the requirement of (oo)(i)(D) of this subsection.

(B) Processing.

(I) All activities specified in the second and third bullets of the definition of "CRT processing" in WAC 173-303-040 must be performed within a building with a roof, floor, and walls; and

(II) No activities may be performed that use temperatures high enough to volatilize lead from CRTs.

(iii) Processed CRT glass sent to CRT glass making or lead smelting: Glass from CRTs that is destined for recycling at a CRT glass manufacturer or a lead smelter after processing is not a solid waste unless it is speculatively accumulated as defined in WAC 173-303-016 (5)(d).

(iv) Use constituting disposal: Glass from used CRTs that is used in a manner constituting disposal must comply with the requirements of WAC 173-303-505.

(v) Notification and recordkeeping for cathode ray tubes (CRTs) exported for reuse.

(A) Persons who export CRTs for reuse must send a one-time notification to the U.S. EPA Regional Administrator. The notification must include a statement that the notifier plans to export CRTs for reuse, the notifier's name, address, and EPA/state ID number (if applicable) and the name and phone number of a contact person.

(B) Persons who export CRTs for reuse must keep copies of normal business records, such as contracts, demonstrating that each shipment of exported CRTs will be reused. This documentation must be retained for a period of at least five years from the date the CRTs were exported.

(pp) Zinc fertilizers made from hazardous wastes provided that:

(i) The fertilizers meet the following contaminant limits:

(A) For metal contaminants:

Maximum Allowable Total Concentration Constituent in Fertilizer, per Unit (1%) of Zinc (ppm)	
Arsenic	0.3
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

(B) For dioxin contaminants the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).

(ii) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the product(s) introduced into commerce.

(iii) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of (pp)(ii) of this subsection. Such records must at a minimum include:

(A) The dates and times product samples were taken, and the dates the samples were analyzed;

(B) The names and qualifications of the person(s) taking the samples;

(C) A description of the methods and equipment used to take the samples;

(D) The name and address of the laboratory facility at which analyses of the samples were performed;

(E) A description of the analytical methods used, including any cleanup and sample preparation methods; and

(F) All laboratory analytical results used to determine compliance with the contaminant limits specified in this subsection (3)(pp).

(qq) Debris. Provided the debris does not exhibit a characteristic identified in WAC 173-303-090, the following materials are not subject to regulation under this chapter:

(i) Hazardous debris that has been treated using one of the required extraction or destruction technologies specified in Table 1 of 40 CFR section 268.45, which is incorporated by reference at WAC 173-303-140 (2)(a); persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

(ii) Debris that the department, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-303-071, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.-007. 04-24-065 (Order 03-10), § 173-303-071, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-071, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-071, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018, (Order 97-03), § 173-303-071, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-071, filed 10/19/95, effective 11/19/95; 94-12-018 (Order 93-34), § 173-303-071, filed 5/23/94, effective 6/23/94; 94-01-060 (Order 92-33), § 173-303-071, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-071, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-071, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-071, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-071, filed 6/3/86; 85-09-042 (Order DE-85-02), § 173-303-071, filed 4/15/85; 84-09-088 (Order DE 83-36), § 173-303-071, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-071, filed 2/10/82.]

WAC 173-303-072 Procedures and bases for exempting and excluding wastes. (1) Purpose and applicability.

(a) The purpose of this section is to describe the procedures that will be followed by generators and the department when wastes are considered for exemption or exclusion from the requirements of this chapter. Any person(s) whose waste is exempted or excluded will not be subject to the requirements of this chapter unless the department revokes the exemption or exclusion.

(b) Any person seeking a waste exemption must submit a petition to the department according to the procedures of WAC 173-303-910(3). A petition for exemption will be assessed against the applicable bases for exemption described in subsections (3), (4), and (5) of this section.

(c) Any persons seeking to categorically exclude a class of wastes must submit a petition to the department according to the procedures of WAC 173-303-910(4). A petition for exclusion will be assessed against the applicable bases for exclusion described in subsection (6) of this section.

(2) Department procedures. When considering, granting, or denying a petition for exemption or exclusion, the department will follow the appropriate procedures described in WAC 173-303-910(1).

(3) Bases for exempting wastes. To successfully petition the department to exempt a waste, the petitioner must demonstrate to the satisfaction of the department that:

(a) He has been able to accurately describe the variability or uniformity of his waste over time, and has been able to obtain demonstration samples which are representative of his waste's variability or uniformity; and, either

(b) The representative demonstration samples of his waste are not designated DW or EHW by the dangerous waste criteria, WAC 173-303-100; or

(c) It can be shown, from information developed by the petitioner through consultation with the department, that his waste does not otherwise pose a threat to public health or the environment. However, this basis for exemption is not applicable to wastes that exhibit any of the characteristics specified in WAC 173-303-090, except 173-303-090 (6)(a)(iii).

(4) Additional bases for exempting listed wastes. In addition to the demonstrations required by subsections (3)(a) and (b) of this section, for wastes listed in WAC 173-303-081 or 173-303-082 the petitioner must also demonstrate to the satisfaction of the department that his waste is not capable of posing a substantial present or potential threat to public health or the environment when improperly treated, stored, transported, disposed of or otherwise managed. The following factors will be considered by the department when assessing such a demonstration:

(a) Whether or not the listed waste contains the constituent or constituents which caused it to be listed. (For the purposes of this subsection, the constituents referred to will include any of the dangerous waste constituents listed in WAC 173-303-9905);

(b) The nature of the threat posed by the waste constituent(s);

(c) The concentration of the constituent(s) in the waste;

(d) The potential of the constituent(s) or any degradation product of the constituent(s) to migrate from the waste into the environment under the types of improper management considered in (h) of this subsection;

(e) The persistence of the constituent(s) or any degradation product of the constituent(s);

(f) The potential for the constituent(s) or any degradation product of the constituent(s) to degrade into nonharmful constituents and the rate of degradation;

(g) The degree to which the constituent(s) or degradation product of the constituent(s) bioaccumulates in ecosystems;

(h) The plausible types of improper management to which the waste could be subjected;

(i) The quantities of the waste generated at individual generation sites or on a statewide basis. Under this factor, the department will also consider whether or not the waste is listed under WAC 173-303-081 as a discarded chemical product and occurs in a relatively pure form. Any waste discarded chemical product which exceeds the quantity exclusion limit specified in WAC 173-303-081(2) for that waste will not be exempted;

(j) The nature and severity of the public health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent(s);

(k) Actions taken by other governmental agencies or regulatory programs based on the health or environmental threat posed by the waste or waste constituent(s); and

(l) Such other factors as may be appropriate.

(5) Reserve.

(6) Bases for categorically excluding classes of wastes. This subsection does not apply to any waste class that includes hazardous waste regulated under 40 CFR Part 261. To successfully petition the department to categorically exclude a class of wastes, petitioners must demonstrate to the satisfaction of the department that the petition or petitions for exclusion:

(a) Accurately describe the class of wastes for which categorical exclusion is sought and show that the class of wastes does not include any wastes which would be regulated as hazardous waste under 40 CFR Part 261;

(b) Describe the variability or uniformity of the class of wastes over time and in relation to the individual wastes that comprise the class of waste;

(c) Discuss the generators and their individual wastes that belong to the class of wastes and, to the extent practical,

any generators or individual wastes that, although belonging to the class of wastes, are not represented by the petition or petitions; and

(d) For each individual waste within the class of wastes, provide the demonstration described by subsection (3) of this section, except that where it is determined by consultation with the department to be impractical to provide the demonstration for each individual waste, the petitioner or petitioners will provide the demonstration for samples of the individual wastes determined by consultation with the department to be representative of the class of wastes.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-072, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-072, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-072, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-14-031 (Order DE 84-22), § 173-303-072, filed 6/27/84.]

WAC 173-303-073 Conditional exclusion of special wastes. (1) Purpose. Special wastes pose a relatively low hazard to human health and the environment. The department believes that special wastes can be safely managed with a level of protection that is intermediate between dangerous and nondangerous solid wastes. This section establishes a conditional exclusion for the management of special wastes.

(2) Exclusion. Special wastes are excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050; 173-303-060; 173-303-140 (4)(c); 173-303-145; 173-303-960; and 173-303-510 excluding subsections (4)(a), (4)(b)(iii), (5), (6)(c), and (6)(d). In addition, special waste must be treated as dangerous waste for purposes of pollution prevention planning as required in chapters 173-307 and 173-305 WAC. Special wastes will not be considered as dangerous waste, provided they are managed in accordance with the standards in this subsection and provided they are disposed, legitimately recycled, or treated on-site consistent with the requirements of WAC 173-303-170 (3)(c).

(a) Generators may not accumulate special waste on-site for more than one hundred eighty days from the date the quantity of waste exceeds two thousand two hundred pounds. The generator must keep a written record showing the dates when accumulation of the wastes began;

(b) During accumulation, special waste must be stored in a manner to prevent releases to the environment. This includes, but is not limited to, storing wastes in compatible containers, on impermeable surfaces, or in secondary containment structures, etc.;

(c) Facilities that receive special waste for recycling must meet the requirements of (b) of this subsection and store special wastes for no more than one hundred eighty days.

(d) All workers handling special wastes must be informed of the waste's potential hazard, either through worker training, health and safety plans, or notification of workers on a case-by-case basis;

(e) Special wastes must be transported directly from their site of generation to any off-site recycling, treatment, or disposal destination. The wastes must not pass through any intermediate solid waste processing facility, such as a transfer station, unless:

(i) The transfer station operator has made specific provisions for managing special waste by physical segregation, packing, or other means to ensure that workers and the public are not exposed to the waste stream at the transfer station;

(ii) The provisions are reflected in the facilities operating plans;

(iii) The plans have been approved by the transfer station's solid waste permitting authority; and

(iv) The transfer station operator has informed workers of the wastes' potential hazard according to (d) of this subsection;

(f) A document must accompany special waste during transit which identifies the type and amount of special waste, its place of origin, the identity of the generator, and the facility to which it is directed. An example form is provided in WAC 173-303-9906. The generator and the receiving facility must maintain a record of the facilities receipt of the special waste for at least five years;

(g) Disposal of special waste must be in landfill units which:

(i) Are permitted in accordance with chapter 173-351 WAC, provided that an engineered liner is used to meet the requirements of arid landfill design requirements, WAC 173-351-300 (2)(b), or are permitted under WAC 173-303-800 through 173-303-840 or if out-of-state under 40 CFR Part 258 or Part 270; and

(ii) Are not currently undergoing corrective action under WAC 173-351-440(6), 40 CFR 258.56, or a similar requirement in state regulations approved by the United States EPA pursuant to 42 USC 6945 (c)(1)(B).

(3) Reserve.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-073, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-073, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-073, filed 10/19/95, effective 11/19/95.]

WAC 173-303-075 Certification of designation. (1) Purpose and applicability.

(a) The purpose of WAC 173-303-075 is to establish procedures by which the generator of a solid waste may apply to the department for a review of his waste, and for a determination of the designation of his waste. When a final determination is made, the department will issue a certificate of designation which will describe the status of the generator's waste with respect to the designation requirements of this chapter 173-303 WAC.

(b) The provisions of this section are applicable to any person who produces a solid waste, who may be subject to the requirements of this chapter 173-303 WAC as the generator of a dangerous waste and who wishes to obtain a certificate designating the status of his waste.

(2) Certification. Any person who produces a solid waste which could be a dangerous waste may apply to the department, in accordance with the guidelines published pursuant to WAC 173-303-075(4), for a certificate of designation for his waste.

(a) The certificate of designation will describe the status of the designation for a waste or wastes as follows:

(i) Either, the certificate will state that the waste or wastes listed in the certificate are designated dangerous waste; or

(ii) The certificate will state that the waste or wastes listed in the certificate are not designated dangerous waste under the designation lists or characteristics of WAC 173-303-080 through 173-303-090; or

(iii) The certificate will state that the waste or wastes listed in the certificate are not designated dangerous waste under the dangerous waste lists, characteristics or criteria, WAC 173-303-080 through 173-303-100.

(b) The certificate of designation will, at a minimum, include the following information:

(i) The name, address, telephone number and, where applicable, the EPA/state identification number of the person to whom the certificate is issued;

(ii) A statement of the status of the designation of the waste or wastes listed in the certificate and, if designated, whether DW or EHW;

(iii) A listing of the waste or wastes for which the certificate has been issued;

(iv) The signature of the director or his designee;

(v) The date on which the certificate was issued; and

(vi) The period of time or conditions for which the certificate is valid.

(c) Once a certificate of designation has been issued to a person, that person is no longer subject to the designation procedures of WAC 173-303-080 through 173-303-100, unless the period of time for which the certificate is valid expires, the conditions under which the certificate is valid change, or the department withdraws its certification of designation in accordance with WAC 173-303-075(5). If the certificate states that the waste or wastes listed in it are designated, then the person to whom the certificate is issued must comply with all applicable requirements of this chapter 173-303 WAC. If the certificate states that the waste or wastes listed in it are not designated, then the person to whom the certificate is issued is not subject to the requirements of this chapter 173-303 WAC, unless the certificate becomes invalid or the department withdraws its certification.

(d) While an application for a certificate of designation is pending final action by the department, the person applying for certification must comply with all applicable requirements of this chapter 173-303 WAC.

(e) While a certificate of designation is being amended, in accordance with WAC 173-303-075(5), the certificate will remain in effect except for those parts of the certificate which the department specifically suspends.

(3) Designation. Determination of the status of designation for a waste or wastes for which a certificate of designation is being sought will follow the procedures set forth in this subsection.

(a) A waste will be certified as a dangerous waste if it is designated under any of the methods set forth in WAC 173-303-080 through 173-303-100.

(b) A waste will be certified as not a dangerous waste if:

(i) It has only been checked against WAC 173-303-080 through 173-303-090 (lists and characteristics) and it is not designated; or

(ii) It has been checked against the dangerous waste lists, characteristics and criteria, WAC 173-303-080 through 173-303-100, and it is not designated.

(4) Application. Any person who wishes to apply for a certificate of designation must do so according to the certification guidelines published by and available from the department. The department will follow the procedures specified in the certification guidelines when considering an application for a certificate.

(5) Review of certification. Review of and changes to or withdrawal of certificates of designation will be performed by the department according to the procedures specified in the certification guidelines, available from the department. At a minimum, the certification guidelines provide for the following procedures:

(a) The department will periodically review each certificate of designation to insure that it is current and accurately states the proper designation for the waste or wastes listed on the certificate.

(b) The department may amend, or any person with a certificate of designation may request the department to amend, any certificate in the event that changes to the certificate are necessary to keep it current or maintain its accuracy. The person will obtain concurrence of the department if he wishes to amend his certificate to reflect changes in the information on the certificate (e.g., new wastes, changes in waste properties, changes of address, etc.).

(c) The department reserves the authority to withdraw any certificate of designation if there is reason to believe that the certificate results in a threat to public health or the environment. If a certificate is withdrawn, then the waste or wastes listed on the certificate will be subject to all applicable requirements of this chapter 173-303 WAC.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-075, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-075, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-075, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-075, filed 2/10/82.]

WAC 173-303-077 Requirements for universal waste. The wastes listed in this section are exempt from regulation under WAC 173-303-140, 173-303-170 through 173-303-9907 (except for WAC 173-303-960), and except as specified in WAC 173-303-573, and therefore are not fully regulated as dangerous waste. The wastes listed in this section are subject to regulation under WAC 173-303-573:

(1) Batteries as described in WAC 173-303-573(2);

(2) Thermostats as described in WAC 173-303-573(3);

(3) Mercury-containing equipment as described in WAC 173-303-573(4); and

(4) Lamps as described in WAC 173-303-573(5).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-077, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-077, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-077, filed 1/12/98, effective 2/12/98.]

WAC 173-303-080 Dangerous waste lists. The dangerous waste lists include:

(1) WAC 173-303-081, Discarded chemical products;

(2) WAC 173-303-082, Dangerous waste sources.

[Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-080, filed 1/4/89. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-080, filed 2/10/82.]

WAC 173-303-081 Discarded chemical products. (1) A waste will be designated as a dangerous waste if it is handled in any of the manners described in (e) of this subsection, and if it is a residue from the management of:

(a) A commercial chemical product or manufacturing chemical intermediate which has the generic name listed in the discarded chemical products list, WAC 173-303-9903;

(b) An off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have the generic name listed in the discarded chemical products list, WAC 173-303-9903;

(c) Any containers, inner liners, or residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate that has, or any off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have, the generic name listed on the "P" or "U" discarded chemical products list of WAC 173-303-9903, unless the containers or inner liners are empty as described in WAC 173-303-160(2);

(d) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of a commercial chemical product or manufacturing chemical intermediate which has, or of an off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have, the generic name listed in the discarded chemical products list, WAC 173-303-9903;

(e) The materials or items described in (a), (b), (c), and (d) of this subsection are dangerous wastes when they are:

(i) Discarded or intended to be discarded as described in WAC 173-303-016 (3)(b)(i);

(ii) Burned for purposes of energy recovery in lieu of their original intended use;

(iii) Used to produce fuels in lieu of their original intended use;

(iv) Applied to the land in lieu of their original intended use; or

(v) Contained in products that are applied to the land in lieu of their original intended use.

(2) Quantity exclusion limits:

(a) A person with a waste or wastes (including residues from the management of wastes) identified in subsection (1) of this section, will be a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the amount of his waste exceeds the following quantity exclusion limits:

(i) For chemicals designated on the "P" discarded chemical products list of WAC 173-303-9903 - 2.2 lbs. (1.0 kg) per month or per batch. Such wastes are designated DW and are identified as acute hazardous wastes;

(ii) For chemicals, and for residues from the cleanup of spills involving chemicals, designated on the "U" discarded chemical products list of WAC 173-303-9903 - 220 lbs. (100 kg) per month or per batch. Such wastes are designated DW;

(iii) For containers or inner liners which held any chemical designated on the "P" discarded chemical products list of WAC 173-303-9903 - 2.2 lbs. (1.0 kg) of residue remaining in the containers or inner liners per month or per batch unless the containers or inner liners meet the definition of empty and have been triple rinsed as described in WAC 173-303-160(2). Such wastes are designated DW and are identified as acute hazardous wastes;

(iv) For residues, contaminated soil, water, or other debris from the cleanup of a spill of any chemical designated on the "P" discarded chemical products list of WAC 173-303-9903 - 220 lbs. (100 kg) per month or per batch. Such wastes are designated DW and are identified as acute hazardous wastes.

(b) A person's total monthly waste quantity is the sum of all their wastes which share a common quantity exclusion limit (e.g., the total quantity of all discarded chemical products with a 2.2 pound QEL, the total quantity of all residues contaminated by discarded chemical products with a 2.2 pound QEL, etc.) which were generated during a month or a batch operation at each specific waste generation site.

(3) Dangerous waste numbers and mixtures. A waste that has been designated as a discarded chemical product dangerous waste must be assigned the dangerous waste number or numbers listed in WAC 173-303-9903 next to the generic chemical or chemicals that caused the waste to be designated. A mixture of a solid waste with a waste that would be designated as a discarded chemical product under this section must be designated. The mixture designation is the same as the designation for the discarded chemical product that was mixed with the solid waste unless it has been excluded under WAC 173-303-070 (2)(c). For example, a mixture containing 2.2 lbs. (1 kg) of Aldrin (dangerous waste number P004, DW designation, QEL of 2.2 lbs.) and 22 lbs. (10 kg) of a solid waste, would be designated DW, and identified as acute hazardous waste. The mixture would have the dangerous waste number P004.

(4) Reserve.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-081, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-081, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-081, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-081, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-081, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-081, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-081, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-081, filed 2/10/82.]

WAC 173-303-082 Dangerous waste sources. (1) The dangerous waste sources list appears in WAC 173-303-9904. Any waste that is listed or is a residue from the management of a waste listed on the dangerous waste sources list must be designated a dangerous waste, and identified as DW.

(2) Quantity exclusion limit. A person whose waste is listed in WAC 173-303-9904 (including residues from the management of such wastes) is a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the amount of his waste exceeds the following quantity exclusion limits:

(a) 2.2 lbs. (1 kg) per month or per batch for wastes listed with the dangerous waste numbers F020, F021, F022, F023, F026, or F027. These wastes are designated DW and identified as acute hazardous wastes;

(b) 220 lbs. (100 kg) per month or per batch of any residue or contaminated soil, waste or other debris resulting from

the cleanup of a spill, into or on any land or water of a waste listed in (a) of this subsection, or of an acute hazardous waste listed in WAC 173-303-9904 under specific sources ("K" wastes). Note: Acute hazardous K listed wastes are followed by an "H." These wastes are designated DW and identified as acute hazardous wastes; or

(c) 220 lbs. (100 kg) per month or per batch for all other wastes.

(3) Care should be taken in the proper designation of these wastes and of mixtures of these wastes and solid wastes. A mixture of a solid waste with a waste that would be designated as a dangerous waste source under this section must be designated as a dangerous waste source unless it has been excluded under WAC 173-303-070 (2)(c). The mixture has the same designation (DW), and the same dangerous waste number as the dangerous waste source which was mixed with the solid waste.

(4) 40 CFR Part 261 Appendix VII *Basis for Listing Hazardous Waste* is adopted by reference.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-082, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-082, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-082, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-082, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-082, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-082, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-082, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-082, filed 2/10/82.]

WAC 173-303-083 Deletion of certain dangerous waste codes following equipment cleaning and replacement. (1) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of subsections (2) and (3) of this section. These wastes may, however, continue to meet another dangerous waste listing description or may exhibit one or more of the dangerous waste characteristics.

(2) Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams, in a manner that minimizes or eliminates the escape of dangerous waste or constituents, leachate, contaminated drippage, or dangerous waste decomposition products to the ground water, surface water, or atmosphere.

(a) Generators will do one of the following:

(i) Prepare and follow an equipment cleaning plan and clean equipment in accordance with this section;

(ii) Prepare and follow an equipment replacement plan and replace equipment in accordance with this section; or

(iii) Document cleaning and replacement in accordance with this section, carried out after termination of use of chlorophenolic preservatives.

(b) Cleaning requirements.

(i) Prepare and sign a written equipment cleaning plan that describes:

(A) The equipment to be cleaned;

(B) How the equipment will be cleaned;

(C) The solvent to be used in cleaning;

(D) How solvent rinses will be tested; and

(E) How cleaning residues will be disposed.

(ii) Equipment must be cleaned as follows:

(A) Remove all visible residues from process equipment;

(B) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

(iii) Analytical requirements.

(A) Rinses must be tested in accordance with SW-846, Method 8290.

(B) "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, Table 1.

(iv) The generator must manage all residues from the cleaning process as F032 waste.

(c) Replacement requirements.

(i) Prepare and sign a written equipment replacement plan that describes:

(A) The equipment to be replaced;

(B) How the equipment will be replaced; and

(C) How the equipment will be disposed.

(ii) The generator must manage the discarded equipment as F032 waste.

(d) Documentation requirements. Document that previous equipment cleaning and/or replacement was performed in accordance with this section and occurred after cessation of use of chlorophenolic preservatives.

(3) The generator must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:

(a) The name and address of the facility;

(b) Formulations previously used and the date on which their use ceased in each process at the plant;

(c) Formulations currently used in each process at the plant;

(d) The equipment cleaning or replacement plan;

(e) The name and address of any persons who conducted the cleaning and replacement;

(f) The dates on which cleaning and replacement were accomplished;

(g) The dates of sampling and testing;

(h) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;

(i) A description of the tests performed, the date the tests were performed, and the results of the tests;

(j) The name and model numbers of the instrument(s) used in performing the tests;

(k) QA/QC documentation; and

(l) The following statement signed by the generator or his authorized representative: I certify under penalty of law that all process equipment required to be cleaned or replaced under WAC 173-303-083 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-083, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-083, filed 12/8/93, effective 1/8/94. Statutory

Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-083, filed 2/10/82.]

WAC 173-303-084 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-084, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-084, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-084, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-084, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-084, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-084, filed 2/10/82.]

WAC 173-303-090 Dangerous waste characteristics.

(1) Purpose. The purpose of this section is to set forth characteristics which a solid waste might exhibit and which would cause that waste to be a dangerous waste.

(2) Representative samples. The department will consider a sample obtained using any of the applicable sampling methods described in WAC 173-303-110(2), sampling and testing methods, to be a representative sample.

(3) Equivalent test methods. The testing methods specified in this section are the only acceptable methods, unless the department approves an equivalent test method in accordance with WAC 173-303-910(2).

(4) Quantity exclusion limit. A solid waste is a dangerous waste if it exhibits one or more of the dangerous waste characteristics described in subsections (5), (6), (7), and (8) of this section. If a person's solid waste exhibits one or more of these characteristics, then he or she is a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the quantity of their waste exceeds 220 lbs. (100 kg) per month or per batch.

(5) Characteristic of ignitability.

(a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

(i) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60 degrees C (140 degrees F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78;

(ii) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard;

(iii) It is an ignitable compressed gas that is defined in 49 CFR 173.115 and is determined to be flammable by the test methods described in that regulation; or,

(iv) It is an oxidizer, if it is defined as such in 49 CFR 173.127.

(b) A solid waste that exhibits the characteristic of ignitability must be designated DW, and assigned the dangerous waste number of D001.

(6) Characteristic of corrosivity.

(a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has any one or more of the following properties:

(i) It is aqueous and has a pH less than or equal to 2, or greater than or equal to 12.5, as determined by a pH meter using Method 9040 in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,*" EPA Publication SW-846, as incorporated by reference in WAC 173-303-110 (3)(a);

(ii) It is liquid and corrodes steel (SAE 1020) at a rate greater than 0.250 inch (6.35 mm) per year at a test temperature of 55 degrees C (130 degrees F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,*" EPA Publication SW-846, as incorporated by reference in WAC 173-303-110 (3)(a); or

(iii) It is solid or semisolid which, upon testing using Method 9045 in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*" (SW 846), results in a pH less than or equal to 2, or greater than or equal to 12.5.

(b) A solid waste that exhibits the characteristic of corrosivity because:

(i) It has either of the properties described in (a)(i) or (ii) of this subsection will be designated DW, and assigned the dangerous waste number of D002;

(ii) It only has the property described in (a)(iii) of this subsection will be designated DW, and assigned the dangerous waste number of WSC2.

(7) Characteristic of reactivity.

(a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

(i) It is normally unstable and readily undergoes violent change without detonating;

(ii) It reacts violently with water;

(iii) It forms potentially explosive mixtures with water;

(iv) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;

(v) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5 can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;

(vi) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement;

(vii) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or

(viii) It is a forbidden explosive as defined in 49 CFR 173.54, or a Class 1 explosive, Division 1.1, Division 1.2, Division 1.3, and Division 1.5, as defined in 49 CFR 173.50.

(b) A solid waste that exhibits the characteristic of reactivity must be designated DW, and assigned the dangerous waste number of D003.

(8) Toxicity characteristic.

(a) A solid waste exhibits the characteristic of toxicity if, using the *Toxicity Characteristic Leaching Procedure* (TCLP), test Method 1311 in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,*" EPA Publication SW-846, as incorporated by reference in WAC 173-303-110 (3)(a), the extract from a representative sample of the waste contains any of the contaminants listed in the toxicity charac-

teristic list in (c) of this subsection, at concentrations equal to or greater than the respective value given in the list. When the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of this subsection.

(b) A solid waste that exhibits the toxicity characteristic has the dangerous waste number specified in the list which corresponds to the toxic contaminant causing it to be dangerous.

(c) Toxicity characteristic list. Any waste that contains contaminants which occur at concentrations at or above the DW threshold must be designated DW.

TOXICITY CHARACTERISTICS LIST:

Maximum Concentration of Contaminants for the Toxicity Characteristic

Dangerous Waste Number	Contaminant	(Chemical Abstracts Services #)	DW (mg/L)
D004	Arsenic	(7440-38-2)	5.0
D005	Barium	(7440-39-3)	100.0
D018	Benzene	(71-43-2)	0.5
D006	Cadmium	(7440-43-9)	1.0
D019	Carbon tetrachloride	(56-23-5)	0.5
D020	Chlordane	(57-74-9)	0.03
D021	Chlorobenzene	(108-90-7)	100.0
D022	Chloroform	(67-66-3)	6.0
D007	Chromium	(7440-47-3)	5.0
D023	o-Cresol	(95-48-7)/1/	200.0
D024	m-Cresol	(108-39-4)/1/	200.0
D025	p-Cresol	(106-44-5)/1/	200.0
D026	Cresol	/1/	200.0
D016	2,4-D	(94-75-7)	10.0
D027	1,4-Dichlorobenzene	(106-46-7)	7.5
D028	1,2-Dichloroethane	(107-06-2)	0.5
D029	1,1-Dichloroethylene	(75-35-4)	0.7
D030	2,4-Dinitrotoluene	(121-14-2)/2/	0.13
D012	Endrin	(72-20-8)	0.02
D031	Heptachlor (and its epoxide)	(76-44-8)	0.008
D032	Hexachlorobenzene	(118-74-1)/2/	0.13
D033	Hexachlorobutadiene	(87-68-3)	0.5
D034	Hexachloroethane	(67-72-1)	3.0
D008	Lead	(7439-92-1)	5.0
D013	Lindane	(58-89-9)	0.4
D009	Mercury	(7439-97-6)	0.2
D014	Methoxychlor	(72-43-5)	10.0
D035	Methyl ethyl ketone	(78-93-3)	200.0
D036	Nitrobenzene	(98-95-3)	2.0
D037	Pentachlorophenol	(87-86-5)	100.0
D038	Pyridine	(110-86-1)/2/	5.0
D010	Selenium	(7782-49-2)	1.0
D011	Silver	(7440-22-4)	5.0
D039	Tetrachloroethylene	(127-18-4)	0.7
D015	Toxaphene	(8001-35-2)	0.5
D040	Trichloroethylene	(79-01-6)	0.5
D041	2,4,5-Trichlorophenol	(95-95-4)	400.0
D042	2,4,6-Trichlorophenol	(88-06-2)	2.0
D017	2,4,5-TP (Silvex)	(93-72-1)	1.0
D043	Vinyl chloride	(75-01-4)	0.2

/1/ If 0-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used.

/2/ At the time the TC rule was adopted, the quantitation limit was greater than the calculated regulatory level. The quantitation limit therefore became the regulatory level.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-090, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-090, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-090, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-090, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-090, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-090, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-090, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-090, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-090, filed 2/10/82.]

WAC 173-303-100 Dangerous waste criteria. (1) Purpose. The purpose of this section is to describe methods for determining if a solid waste is a dangerous waste by the criteria set forth in this section. The dangerous waste criteria consist of:

(a) Toxic dangerous wastes; and

(b) Persistent dangerous wastes.

(2) References. The National Institute for Occupational Safety and Health's (NIOSH) Registry of Toxic Effects of Chemical Substances (RTECS), Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 is adopted by reference.

(3) A person must use data which is available to him, and, when such data is inadequate for the purposes of this section, must refer to the NIOSH RTECS to determine:

(a) Toxicity data or toxic category for each known constituent in the waste;

(b) Whether or not each known constituent of the waste is a halogenated organic compound or a polycyclic aromatic hydrocarbon as defined in WAC 173-303-040.

(4) Quantity exclusion limit. A solid waste is a dangerous waste if it meets one or more of the dangerous waste criteria described in subsections (5) and (6) of this section. If a person's solid waste meets one or more of these criteria then he or she is a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the quantity of the waste exceeds the following quantity exclusion limits:

(a) For toxic dangerous wastes designated as EHW (WT01), the quantity exclusion limit is 2.2 lbs. per month.

(b) For all other wastes designating under this section the quantity exclusion limit is 220 lbs. (100 kg) per month or per batch.

(5) Toxicity criteria. Except as provided in WAC 173-303-070 (4) or (5), a person must determine if a solid waste meets the toxicity criteria under this section by following either the instructions for book designation, when his knowledge of the waste is sufficient, or by testing the waste using the biological testing methods adopted under WAC 173-303-110(3).

(a) Except as provided in WAC 173-303-070(4), if a person knows only some of the toxic constituents in the waste or only some of the constituent concentrations, and if the waste is undesignated for those known constituents or concentrations, then the waste is not designated for toxicity under this subsection.

(b) Book designation procedure. A person may determine if a waste meets the toxicity criteria by following the book designation instructions as follows:

(i) A person must determine the toxic category for each known constituent. The toxic category for each constituent

may be determined from available data, including the NIOSH RTECS, and checking this data against the toxic category table, below. If data are available for more than one of the test endpoints (fish, oral, inhalation, or dermal), then the data indicating severest toxicity must be used, and the most acutely toxic category must be assigned to the constituent. If the NIOSH RTECS or other data sources do not agree on the same category (for the same test endpoint), then the category arrived at using the NIOSH RTECS will be used to determine the toxic category. If toxicity data for a constituent cannot be found in the NIOSH RTECS, or other source reasonably available to a person, then the toxic category need not be determined for that constituent.

TOXIC CATEGORY TABLE

Toxic Category	Fish LC_{50}(mg/L)*	Oral (Rat) LD_{50}(mg/kg)	Inhalation (Rat) LC_{50}(mg/L)	Dermal (Rabbit) LD_{50}(mg/kg)
X	<0.01	<.5	<.02	< 2
A	0.01 - <0.1	.5 - <5	.02 - <.2	2 - <20
B	0.1 - <1	5 - <50	.2 - <2	20 - <200
C	1 - <10	50 - <500	2 - <20	200 - <2000
D	10 - 100	500 - 5000	20 - 200	2000 - 20,000

* The LC_{50} data must be from an exposure period greater than or equal to twenty-four hours. LC_{50} data from any species is acceptable, however, if salmonid LC_{50} data is available it will supersede all other fish data. If salmonid data is unavailable but fathead minnow data is available, it will supersede all other fish species data.

Note: "Inhalation LC_{50}" means a concentration in milligrams of substance per liter of air which, when administered to the respiratory tract for four hours or less, kills within fourteen days half of a group of ten rats each weighing between 200 and 300 grams.

(ii) A person whose waste contains one or more toxic constituents must determine the equivalent concentration for the waste from the following formula:

$$\text{Equivalent Concentration (\%)} = \frac{\sum X\%}{1} + \frac{\sum A\%}{10} + \frac{\sum B\%}{100} + \frac{\sum C\%}{1000} + \frac{\sum D\%}{10{,}000}$$

where $\sum$(X,A,B,C, or D)% is the sum of all the concentration percentages for a particular toxic category.

Example 1. A person's waste contains: Aldrin (A Category) - .01%; Endrin (A Category) - 1%; Benzene (D Category) - 4%; Phenol (C Category) - 2%; Dinoseb (B Category) - 5%; Water (nontoxic) - 87%. The equivalent concentration (E.C.) would be:

$$\text{E.C. (\%)} = \frac{0\%}{1} + \frac{(0.01\% + 1.0\%)}{10} + \frac{5.0\%}{100} + \frac{2.0\%}{1000} + \frac{4.0\%}{10{,}000}$$

$$= 0\% + 0.101\% + 0.05\% + 0.002\% + 0.0004\% = 0.1534\%$$

So the equivalent concentration equals 0.1534%.

(iii) A person whose waste contains toxic constituents must determine its designation according to the value of the equivalent concentration:

(A) If the equivalent concentration is less than 0.001%, the waste is not a toxic dangerous waste; or

(B) If the equivalent concentration is equal to or greater than 0.001% and less than 1.0%, the person will designate the waste as DW and assign the dangerous waste number WT02; and

(C) If the equivalent concentration is equal to or less than 0.01%, the DW may also be a special waste; or

(D) If the equivalent concentration is equal to or greater than 1.0%, the person will designate the waste as EHW and assign the dangerous waste number WT01.

Example 1. Continued. The equivalent concentration of 0.1534% (from Example 1. above) is greater than 0.001% and less than 1.0%. The waste is DW and the dangerous waste number WT02 must be assigned. Since 0.1534% is also greater than 0.01%, the waste is not a special waste.

(iv) Reserve.

(c) Designation from bioassay data. A person may determine if a waste meets the toxicity criteria by following the bioassay designation instructions of either:

(i) The DW bioassay. To determine if a waste is DW, a person must establish the toxicity category range (D category toxicity or greater toxicity) of a waste by means of the 100 mg/L acute static fish test or the 5000 mg/kg oral rat test, as described in the biological testing methods (bioassay) adopted in WAC 173-303-110(3). If data from the test indicates that the waste is DW, then the person will assign the dangerous waste number WT02. Otherwise, the waste is not regulated as toxic dangerous waste. No further testing must be done except as provided in WAC 173-303-070 (4) and (5), or if the person chooses to determine whether the waste is EHW, or in the case of state-only solid dangerous waste, if the person chooses to determine whether the waste is special waste; or

(ii) The EHW and special waste bioassay. To determine if a waste is EHW, a person must establish the toxicity category range of a waste by means of the fish bioassay at 10 mg/L or the rat bioassay at 50 mg/Kg, as described in the biological testing methods (bioassay) adopted in WAC 173-303-110(3). (NOTE: A fish bioassay at 1 mg/L corresponds with the definition of EHW, which includes toxic categories X-B. However, the fish bioassay is not reproducible at these low levels.) If data from the test indicates that the waste is EHW, then the person will assign the dangerous waste number WT01. Otherwise, the waste will be designated DW, and the person will assign the dangerous waste number WT02. A person with state-only solid waste may choose to test a waste to determine if it is special waste. Testing levels for special waste must be at 10 mg/L for the fish bioassay or 500 mg/Kg for the oral rat bioassay. No further testing must be done except as provided in WAC 173-303-070 (4) and (5), or if the person chooses to test the waste in accordance with WAC 173-303-100 (5)(c)(i) to determine if the waste is not regulated as toxic dangerous waste.

(d) If the designation acquired from book designation and bioassay data do not agree, then bioassay data will be used to designate a waste. If a waste is designated as DW or EHW following the book designation procedure, a person may test the waste by means of the biological testing methods (bioassay) adopted under WAC 173-303-110(3), using either the static acute fish or the acute oral rat method, to demonstrate that the waste is not a dangerous waste or should be designated as DW and not EHW.

(e) A waste designated as DW by toxicity criteria must be assigned the dangerous waste number of WT02. A waste designated as EHW by toxicity criteria must be assigned the dangerous waste number of WT01.

(6) Persistence criteria. For the purposes of this section, persistent constituents are chemical compounds which are either halogenated organic compounds (HOC), or polycyclic aromatic hydrocarbons (PAH), as defined under WAC 173-303-040. Except as provided in WAC 173-303-070 (4) or (5), a person may determine the identity and concentration of persistent constituents by either applying knowledge of the waste or by testing the waste according to WAC 173-303-110 (3)(c) *Chemical Testing Methods for Designating Dangerous Waste* Publication #97-407.

(a) Except as provided in WAC 173-303-070(4), if a person knows only some of the persistent constituents in the waste, or only some of the constituent concentrations, and if the waste is undesignated for those known constituents or concentrations, then the waste is not designated for persistence under this subsection.

(b) When a waste contains one or more halogenated organic compounds (HOC) for which the concentrations are known, the total halogenated organic compound concentration must be determined by summing the concentration percentages for all of the halogenated organic compounds for which the concentration is known.

Example 2. A waste contains: Carbon tetrachloride - .009%; DDT - .012%; 1,1,1 - trichloroethylene - .020%. The total halogenated organic compound concentration would be:

Total HOC Concentration (%) = .009% + .012% + .020% =.041%

(c) A person whose waste contains polycyclic aromatic hydrocarbons (PAH) as defined in WAC 173-303-040, must determine the total PAH concentration by summing the concentration percentages of each of the polycyclic aromatic hydrocarbons for which they know the concentration.

Example 3. A person's waste contains: Chrysene - .08%; 3,4 - benzo(a)pyrene - 1.22%. The total polycyclic aromatic hydrocarbon concentration would be:

Total PAH Concentration (%) = .08% + 1.22% = 1.30%

(d) A person whose waste contains halogenated organic compounds and/or polycyclic aromatic hydrocarbons must determine its designation from the persistent dangerous waste table.

PERSISTENT DANGEROUS WASTE TABLE

If your waste contains...	At a total concentration level of...	Then your waste's designation, and waste # are...
Halogenated Organic Compounds (HOC)	0.01% to 1.0%	DW, WP02
	greater than 1.0%	EHW, WP01
Polycyclic Aromatic Hydrocarbons (PAH)	greater than 1.0%	EHW*, WP03

*No DW concentration level for PAH.

(7) Reserve.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-100, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-100, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-100, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-100, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-100, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-100, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-100, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-100, filed 2/10/82.]

WAC 173-303-101 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-101, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-101, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-101, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-101, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-101, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-102 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-102, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-102, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-102, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-102, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-102, filed 2/10/82. Formerly WAC 173-302-130.]

WAC 173-303-103 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-103, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-103, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-103, filed 6/26/87; 84-14-031 (Order DE 84-22), § 173-303-103, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-103, filed 2/10/82.]

WAC 173-303-104 State-specific dangerous waste numbers. (1) Purpose. This section sets forth the dangerous waste number for each of the dangerous waste criteria designations and for listed and characteristic waste codes that are unique to Washington state.

(2) Characteristics. A waste that exhibits any of the dangerous waste characteristics, WAC 173-303-090, must be assigned the dangerous waste number corresponding to the characteristic(s) exhibited by the waste (see WAC 173-303-090).

For state-only solid corrosive wastes, the dangerous waste number of WSC2 must be assigned.

(3) Criteria. The following table must be used for assigning dangerous waste numbers to wastes designated by the dangerous waste criteria at WAC 173-303-100.

GENERIC DANGEROUS WASTE NUMBERS TABLE

Dangerous Waste#	Dangerous Waste Criteria and Designation
	Toxic Dangerous Wastes
WT01	EHW
WT02	DW
	Persistent Dangerous Wastes Halogenated Organic Compounds
WP01	EHW
WP02	DW
	Polycyclic Aromatic Hydrocarbons
WP03	EHW

(4) State source listed PCB wastes (WAC 173-303-9904) must be assigned the dangerous waste code of WPCB.

(5) Labpacks. State-only EHW labpacks must be assigned the dangerous waste code of WL01 and DW labpacks must be assigned the waste code WL02.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-104, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-104, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-104, filed 10/19/95, effective 11/19/95; 94-12-018 (Order 93-34), § 173-303-104, filed 5/23/94, effective 6/23/94. Statutory Authority: Chapter 70.105 RCW. 84-14-031 (Order DE 84-22), § 173-303-104, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-104, filed 2/10/82.]

WAC 173-303-110 Sampling and testing methods. (1) Purpose. This section sets forth the testing methods to be used to comply with the requirements of this chapter. Quality control procedures specified by the testing method or an approved equivalent method must be followed for the analytical result to be considered valid for designation. All methods and publications listed in this section are incorporated by reference.

(2) Representative samples.

(a) The methods and equipment used for obtaining representative samples of a waste will vary with the type and form of the waste. The department will consider samples collected using the sampling methods below or the most recent version of such methods for wastes with properties similar to the indicated materials, to be representative samples of the wastes:

(i) Crushed or powdered material - ASTM Standard D346-75;

(ii) Extremely viscous liquid - ASTM Standard D140-70;

(iii) Fly ash-like material - ASTM Standard D2234-86;

(iv) Soil-like material - ASTM Standard D1452-80 (Reapproved 1990);

(v) Soil or rock-like material - ASTM Standard D420-93;

(vi) Containerized liquid wastes - "COLIWASA" described in SW-846, as incorporated by reference at WAC 173-303-110 (3)(a), or the equivalent representative sampling method known as the plunger type sampler, described in ASTM D 5743-97, section 8.6; and,

(vii) Liquid waste in pits, ponds, lagoons, and similar reservoirs - "Pond Sampler" described in SW-846, as incorporated by reference at WAC 173-303-110 (3)(a).

(b) Copies of these representative sampling methods are available from the department except for the ASTM standards and the AC & D Liquid Sampler Method which can be obtained by writing to:

ASTM
1916 Race Street
Philadelphia, PA 19103.

AC & D Liquid Sampler Method

AC & D Liquid Samplers
77 Symons Street
Richland, WA 99352

(3) Test procedures. Copies of the test procedures listed in this subsection can be obtained by writing to the appropriate address below:

For copies of Department of Ecology test methods:

Attn: Test Procedures
Hazardous Waste Section
Department of Ecology
PO Box 47600
Olympia, Washington 98504-7600

For copies of SW 846, including updates, and 40 CFR Part 261:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
(202) 512-1800

For copies of ASTM methods:

ASTM
1916 Race Street
Philadelphia, PA 19103

For copies of APTI methods:

APTI
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

The document titles and included test procedures are as follows:

(a) *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication, SW-846* (Third Edition (November 1986) as amended by Updates I (dated July 1992), II (dated September 1994), IIA (dated August 1993), IIB (dated January 1995), III (dated December 1996), and IIIA (dated April 1998)). The Third Edition of SW-846 and its Updates (document number 955-001-00000-1) are available from the Superintendent of Documents. Update IIIA is available through EPA's Methods Information Communication Exchange (MICE) Service. MICE can be contacted by phone at (703) 821-4690. Update IIIA can also be obtained by contacting the U.S. Environmental Protection Agency, Office of Solid Waste (5307W), OSW Methods Team, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Copies of the Third Edition and all of its updates are also available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 605-6000 or (800) 553-6847;

(b) *Biological Testing Methods*, Department of Ecology Publication #80-12, the latest revision, describing procedures for:

(i) Static acute fish toxicity test; and

(ii) Acute oral rat toxicity test;

(c) *Chemical Testing Methods for Designating Dangerous Waste*, Department of Ecology Publication #97-407, February 1998 describing methods for testing:

(i) Ignitability;

(ii) Corrosivity;

(iii) Reactivity;

(iv) Toxicity characteristic leaching procedure;

(v) Halogenated organic compounds; and

(vi) Polycyclic aromatic hydrocarbons.

(d) Reserve;

(e)(i) The determination of Polychlorinated Biphenyls in Transformer Fluids and Waste Oils, EPA-600/4-81-045; and

(ii) Analysis of Polychlorinated Biphenyls in Mineral Insulating Oils by Gas Chromatography, ASTM Standard D 4059-86.

(f) 40 CFR Part 261 Appendix III *Chemical Analysis Test Methods*, which refers to appropriate analytical procedures to determine whether a sample contains a given toxic constituent in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846*, and 40 CFR Part 261 Appendix II, which refers to *Method 1311 Toxicity Characteristic Leaching Procedure*.

(g) The following publications for air emission standards.

(i) ASTM Standard Method for Analysis of Reformed Gas by Gas Chromatography, ASTM Standard D 1946-82.

(ii) ASTM Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), ASTM Standard D 2382-83.

(iii) ASTM Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, ASTM Standard E 169-87.

(iv) ASTM Standard Practices for General Techniques of Infrared Quantitative Analysis, ASTM Standard E 168-88.

(v) ASTM Standard Practice for Packed Column Gas Chromatography, ASTM Standard E 260-85.

(vi) ASTM Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, ASTM Standard D 2267-88.

(vii) ASTM Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, ASTM Standard D 2879-92.

(viii) APTI Course 415: Control of Gaseous Emissions, EPA Publication EPA-450/2-81-005, December 1981.

(ix) "API Publication 2517, Third Edition," February 1989, "Evaporative Loss from External Floating-Roof Tanks," available from the American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005.

(x) "ASTM Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteriscope," ASTM Standard D 2879-92, available from American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103.

(h) The following publications:

(i) "Flammable and Combustible Liquids Code" (1977 or 1981), available from the National Fire Protection Association, 470 Atlantic Avenue, Boston, MA 02210.

(ii) U.S. EPA, "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, EPA Publication No. EPA-450/R-92-019, Environmental Protection Agency, Research Triangle Park, NC.

(iii) "ASTM Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals," ASTM Standard E926-88, Test Method C-Bomb, Acid Digestion Method, available from American Society for Testing Materials, 1916 Race Street, Philadelphia, PA 19103.

(iv) Method 1664, Revision A, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Nonpolar Material) by Extraction and Gravimetry. Available from NTIS, PB99-121949, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

(v) ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester, ASTM Standard D-3278-78, available from American Society for Testing and Materials.

(vi) ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Tester, ASTM Standard D-93-79 or D-93-80.

(vii) API Publication 2517, Third Edition, February 1989, "Evaporative Loss from External Floating-Roof Tanks," available from the American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005.

(4) Substantial changes to the testing methods described above will be made only after the department has provided adequate opportunity for public review and comment on the proposed changes. The department may, at its discretion, schedule a public hearing on the proposed changes.

(5) Equivalent testing methods. Any person may request the department to approve an equivalent testing method by submitting a petition, prepared in accordance with WAC 173-303-910(2), to the department.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-110, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-110, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.-007. 00-11-040 (Order 99-01), § 173-303-110, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-110, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-110, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-110, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-110, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-110, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-110, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-110, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-110, filed 2/10/82.]

WAC 173-303-120 Recycled, reclaimed, and recovered wastes. (1) This section describes the requirements for persons who recycle materials that are solid wastes and dangerous. Except as provided in subsections (2) and (3) of this section, dangerous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of subsection (4) of this section. Dangerous wastes that are recycled will be known as "recyclable materials."

(2)(a) The following recyclable materials are solid wastes and sometimes are dangerous wastes. However, they are subject only to the requirements of (b) of this subsection, WAC 173-303-050, 173-303-145 and 173-303-960:

(i) Industrial ethyl alcohol that is reclaimed (except that, unless provided otherwise in an international agreement as specified in 40 CFR 262.58: See export requirements at 40 CFR 261.6 (3)(i)(A) and (B) that are incorporated by reference at WAC 173-303-230(1));

(ii) Reserve;

(iii) Reserved;

(iv) Scrap metal that is not excluded under WAC 173-303-071 (3)(ff);

(v) Fuels produced from the refining of oil-bearing dangerous wastes along with normal process streams at a petro-

leum refining facility if such wastes result from normal petroleum refining, production, and transportation practices (this exemption does not apply to fuels produced from oil recovered from oil-bearing dangerous wastes where such recovered oil is already excluded under WAC 173-303-071 (3)(cc));

(vi) Reserve;

(vii) Coke and coal tar from the iron and steel industry that contains dangerous waste from the iron and steel production process;

(viii)(A) Dangerous waste fuel produced from oil-bearing dangerous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such dangerous wastes, where such dangerous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under 40 CFR 279.11 (which is incorporated by reference at WAC 173-303-515(4)) and so long as no other dangerous wastes are used to produce the dangerous waste fuel;

(B) Dangerous waste fuel produced from oil-bearing dangerous waste from petroleum refining production, and transportation practices, where such dangerous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under 40 CFR 279.11 (which is incorporated by reference at WAC 173-303-515(4)); and

(C) Oil reclaimed from oil-bearing dangerous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under 40 CFR 279.11 (which is incorporated by reference at WAC 173-303-515(4)).

(b) Any recyclable material listed in (a) of this subsection will be subject to the applicable requirements listed in subsection (4) of this section if the department determines, on a case-by-case basis, that:

(i) It is being accumulated, used, reused, or handled in a manner that poses a threat to public health or the environment; or

(ii) Due to the dangerous constituent(s) in it, any use or reuse would pose a threat to public health or the environment. Such recyclable material will be listed in WAC 173-303-016(6).

(3) The recyclable materials listed in (a) through (h) of this subsection are not subject to the requirements of this section but are subject to the requirements of WAC 173-303-070 through 173-303-110, 173-303-160, 173-303-500 through 173-303-525, and all applicable provisions of WAC 173-303-800 through 173-303-840.

In addition to these requirements, owners and operators of facilities that receive recyclable materials from off-site are subject to WAC 173-303-610 (2) and (12) and to WAC 173-303-620 (1)(e).

(a) Recycling requirements for state-only dangerous wastes (see WAC 173-303-500);

(b) Recyclable materials used in a manner constituting disposal (see WAC 173-303-505);

(c) Spent CFC or HCFC refrigerants that are recycled on-site or sent to be reclaimed off-site (see WAC 173-303-506);

(d) Dangerous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under Subpart O of 40 CFR Part 265 or WAC 173-303-670 (see WAC 173-303-510);

(e) Reserved;

(f) Spent lead-acid batteries that are being reclaimed (see WAC 173-303-520);

(g) Recyclable materials from which precious metals are reclaimed (see WAC 173-303-525); and

(h) Spent antifreeze that is recycled on-site or sent to be recycled off-site (see WAC 173-303-522).

(4) Those recycling processes not specifically discussed in subsections (2) and (3) of this section are generally subject to regulation only up to and including storage prior to recycling. For the purpose of this section, the department may determine on a case-by-case basis that recyclable materials received from off-site are not stored if they are moved into an active recycling process within a period of time not to exceed seventy-two hours after being received. In making such a determination, the department will consider factors including, but not limited to, the types and volumes of wastes being recycled, operational factors of the recycling process, and the compliance history of the owner or operator. An active recycling process refers to a dynamic recycling operation that occurs within a recycling unit such as a distillation or centrifuge unit. The phrase does not refer to passive storage-like activities that occur, for example, when tanks or containers are used for phase separation or for settling impurities. Passive storage-like activities are not eligible for the recycling exemption under this subsection.

The recycling process itself is generally exempt from permitting unless the department determines, on a case-by-case basis, that the recycling process poses a threat to public health or the environment.

Unless specified otherwise in subsections (2) and (3) of this section:

(a) Generators of recyclable materials are subject to all applicable requirements of this chapter including, but not limited to, WAC 173-303-170 through 173-303-230;

(b) Transporters of recyclable materials are subject to all applicable requirements of this chapter including, but not limited to, WAC 173-303-240 through 173-303-270;

(c) Owners or operators of facilities that receive recyclable materials from off-site and recycle these recyclable materials without storing them before they are recycled are subject to the following requirements:

(i) WAC 173-303-060,

(ii) WAC 173-303-120 (4)(e),

(iii) WAC 173-303-283 through 173-303-290,

(iv) WAC 173-303-310 through 173-303-395,

(v) WAC 173-303-610 (2) and (12),

(vi) WAC 173-303-620 (1)(e),

(vii) WAC 173-303-630 (2) through (10), and

(viii) WAC 173-303-640 (2) through (10) except that requirements to post-closure planning or care in WAC 173-303-640(8) will not apply to closure of recycling units. In lieu of the dates in WAC 173-303-640 (2) and (4), for existing tank systems regulated under this subsection, owners and

operators must complete the assessment of the tank system's integrity by June 1, 1992, and must meet the secondary containment requirements of WAC 173-303-640(4) by January 12, 1993;

(vii) The owner or operator must obtain data, by screening-type analysis if necessary, confirming the designation of each waste stream, such that each dangerous waste received can be effectively recycled without jeopardizing human health or the environment. The owner or operator must verify the waste designation periodically, so that it is accurate and current, but at least once every six months or on a batch basis if shipments of a specific waste stream are less frequent. Copies of all analyses and data must be retained for at least five years and made available to the department upon request.

(d) Owners and operators of facilities that store recyclable materials before they are recycled are subject to the following requirements including, but not limited to:

(i) For all recyclers, the applicable provisions of:

(A) WAC 173-303-280 through 173-303-395,

(B) WAC 173-303-800 through 173-303-840,

(C) WAC 173-303-140 (2)(a),

(D) WAC 173-303-120 (4)(e);

(ii) For recyclers with interim status permits, the applicable storage provisions of WAC 173-303-400 including Subparts F through L of 40 CFR Part 265;

(iii) For recyclers with final facility permits, the applicable storage provisions of:

(A) WAC 173-303-600 through 173-303-650, and

(B) WAC 173-303-660.

(e) Owners and operators of facilities subject to dangerous waste permitting requirements with dangerous waste management units that recycle hazardous wastes are subject to the requirements of WAC 173-303-690, 173-303-691 (Air emission standards for process vents and equipment leaks), and WAC 173-303-692 (Air emission standards for tanks, surface impoundments, and containers) for final status facilities, and 40 CFR Part 265 Subparts AA, BB, and CC, incorporated by reference at WAC 173-303-400(3) for interim status facilities.

(5) Used oil that is recycled and is also a dangerous waste solely because it exhibits a dangerous waste characteristic or criteria is not subject to the requirements of this chapter except for 40 CFR Part 279 which is incorporated by reference at WAC 173-303-515. Used oil that is recycled includes any used oil that is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil that is re-refined, reclaimed, burned for energy recovery, or reprocessed.

(6) Hazardous waste that is exported to or imported from designated member countries of the Organization for Economic Cooperation and Development (OECD) (as defined in 40 CFR 262.58 (a)(1)) for purpose of recovery is subject to the requirements of 40 CFR part 262, subpart H, if it is subject to either the manifesting requirements at WAC 173-303-180 or to the universal waste management standards of WAC 173-303-573.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-120, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-120, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-120, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-120, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-120, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 93-02-050 (Order 92-32), § 173-303-120, filed 1/5/93, effective 2/5/93. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-120, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-120, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-120, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-120, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-120, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-120, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-120, filed 2/10/82.]

WAC 173-303-121 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-121, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-121, filed 4/18/84.]

WAC 173-303-130 Containment and control of infectious wastes. (Reserved.)

[Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-130, filed 2/10/82.]

WAC 173-303-140 Land disposal restrictions. (1) Purpose.

(a) The purpose of this section is to encourage the best management practices for dangerous wastes according to the priorities of RCW 70.105.150 which are, in order of priority:

(i) Reduction;

(ii) Recycling;

(iii) Physical, chemical, and biological treatment;

(iv) Incineration;

(v) Stabilization and solidification; and

(vi) Landfill.

(b) This section identifies dangerous wastes that are restricted from land disposal, describes requirements for restricted wastes, and defines the circumstances under which a prohibited waste may continue to be land disposed.

(c) For the purposes of this section, the term "landfill," as stated in the priorities of RCW 70.105.150, will be the same as the term "land disposal." Land disposal will be used in this section to identify the lowest waste management priority.

(2) Applicability.

The land disposal restrictions of this section apply to any person who owns or operates a dangerous waste treatment, storage, or disposal facility in Washington state and to any person who generates or transports dangerous waste.

(a) Land disposal restrictions for wastes designated in accordance with WAC 173-303-070 (3)(a)(i), (ii), and (iii) are the restrictions set forth by the Environmental Protection Agency in 40 CFR Part 268 which are incorporated by reference into this regulation and the restrictions set forth in subsections (3) through (7) of this section. The words "regional administrator" (in 40 CFR) will mean the "department," except for 40 CFR Parts 268.5 and 268.6; 268 Subpart B; 268.42(b) and 268.44 (a) through (g). The authority for implementing these excluded CFR sections remains with the U.S. Environmental Protection Agency. The word "EPA" (in 40 CFR) means "Ecology" at 40 CFR 268.44(m). The exemption and exception provisions of subsections (3)

through (7) of this section are not applicable to the federal land disposal restrictions.

(b) Land disposal restrictions for state-only dangerous waste are the restrictions set forth in subsections (3) through (7) of this section.

(3) Definitions.

When used in this section the following terms have the meaning provided in this subsection. All other terms have the meanings given under WAC 173-303-040.

(a) "Dangerous waste constituents" means those constituents listed in WAC 173-303-9905 and any other constituents which have caused a waste to be a dangerous waste under this chapter.

(b) "Land disposal" means placement in a facility or on the land with the intent of leaving the dangerous waste at closure, and includes, but is not limited to, placement for disposal purposes in a: Landfill; surface impoundment; waste pile; injection well; land treatment facility; salt dome or salt bed formation; underground cave or mine; concrete vault or bunker.

(c) "Organic/carbonaceous waste" means a dangerous waste that contains combined concentrations of greater than ten percent organic/carbonaceous constituents in the waste; organic/carbonaceous constituents are those substances that contain carbon-hydrogen, carbon-halogen, or carbon-carbon chemical bonding.

(d) "Solid acid waste" means a dangerous waste that exhibits the characteristic of low pH under the corrosivity test of WAC 173-303-090 (6)(a)(iii).

(e) "Stabilization" and "solidification" mean a technique that limits the solubility and mobility of dangerous waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes the waste by bonding or chemically reacting with the stabilizing material.

(4) Land disposal restrictions and prohibitions. The land disposal requirements of this subsection apply to land disposal in Washington state.

(a) Disposal of extremely hazardous waste (EHW). No person may land dispose of EHW, except as provided in subsection (5) of this section, at any land disposal facility in the state. No person may land dispose of EHW at the facility established under RCW 70.105.050, except as provided by subsections (5), (6), and (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process EHW to remove or reduce its harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(b) Disposal of liquid waste. Special requirements for bulk and containerized liquids.

(i) Effective May 8, 1985, the placement of bulk or noncontainerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited. (40 CFR 264.314(a) which applies prior to May 8, 1985, is incorporated by reference.)

(ii) Containers holding free liquids must not be placed in a landfill unless:

(A) All free-standing liquid:

(I) Has been removed by decanting, or other methods; or

(II) Has been mixed with sorbent or stabilized (solidified) so that free-standing liquid is no longer observed; or

(III) Has been otherwise eliminated; or

(B) The container is very small, such as an ampule; or

(C) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

(D) The container is a labpack and is disposed of in accordance with WAC 173-303-161 and this chapter.

(iii) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following tests must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" EPA Publication SW-846 as incorporated by reference in WAC 173-303-110 (3)(a).

(iv) Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are: Materials listed or described in (b)(iv)(A) of this subsection; materials that pass one of the tests in (b)(iv)(B) of this subsection; or materials that are determined by the department to be nonbiodegradable through WAC 173-303-910.

(A) Nonbiodegradable sorbents.

(I) Inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites; calcium carbonate (organic free limestone); oxides/hydroxides, alumina, lime, silica (sand), diatomaceous earth; perlite (volcanic glass); expanded volcanic rock; volcanic ash; cement kiln dust; fly ash; rice hull ash; activated charcoal/activated carbon); or

(II) High molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, crosslinked allylstyrene and tertiary butyl copolymers). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or

(III) Mixtures of these nonbiodegradable materials.

(B) Tests for nonbiodegradable sorbents.

(I) The sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a) - Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or

(II) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b) - Standard Practice for Determining Resistance of Plastics to Bacteria; or

(III) The sorbent material is determined to be nonbiodegradable under OECD (Organization for Economic Cooperation and Development) test 301B: [CO_2 Evolution (Modified Sturm Test)].

(v) Effective November 8, 1985, the placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates to the department, or the department determines, that:

(A) The only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains, or may reasonably be anticipated to contain, hazardous waste; and

(B) Placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in 40 CFR Section 144.3).

(c) Disposal of solid acid waste. No person may land dispose solid acid waste, except as provided in subsections (5), (6), or (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(d) Disposal of organic/carbonaceous waste.

(i) No person may land dispose organic/carbonaceous waste, except as provided in subsections (5), (6), or (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter. Organic/carbonaceous wastes must be incinerated as a minimum management method according to the dangerous waste management priorities as defined in subsection (1)(a) of this section.

(ii) This prohibition against the land disposal of organic/carbonaceous waste does not apply to black mud generated from the caustic leach recovery of cryolite at primary aluminum smelting plants.

(iii) This prohibition against the land disposal of organic/carbonaceous waste does not apply to any person who certifies to the department that recycling, treatment and incineration facilities are not available within a radius of one thousand miles from Washington state's borders. Such certification must be sent to the department by certified mail and must include: The name, address and telephone number of the person certifying; a brief description of the organic/carbonaceous waste covered by the certification; a discussion of the efforts undertaken to identify available recycling, treatment and incineration facilities; and the signature of the person responsible for the certification and development of information used to support the certification. Records and information supporting the certification must be retained by the certifying person and must be made available to the department upon request.

A certification that has been properly submitted to the department will remain valid until the department determines that a recycling, treatment or incineration facility is available within a radius of one thousand miles from Washington state's borders and the person who submitted the certification is unable to demonstrate otherwise. A recycling, treatment or incineration facility will be considered by the department to be available if such facility: Is operating, and; can safely and legally recycle, treat or incinerate the organic/carbonaceous waste, and; has sufficient capacity to receive and handle significant amounts of the waste, and; agrees to accept the waste.

(5) Treatment in land disposal facilities. The land disposal restrictions in subsection (4) of this section do not apply to persons treating dangerous wastes in surface impoundments, waste piles, or land treatment facilities provided that such treatment is performed in accordance with the requirements of this subsection and this chapter.

(a) Surface impoundment treatment.

Liquid waste, extremely hazardous waste (EHW), solid acid waste, and organic/carbonaceous waste may be placed in surface impoundments for purposes of treatment provided the owner/operator can demonstrate that effective treatment of the dangerous waste constituents will occur and at closure the owner/operator complies with the prohibitions and restrictions of subsection (4) of this section.

(b) Waste pile treatment.

Liquid waste, extremely hazardous waste (EHW), solid acid waste, and organic/carbonaceous waste may be placed in waste piles for purposes of treatment provided the owner/operator can demonstrate that effective treatment of dangerous waste constituents will occur and that at closure the owner/operator will be in compliance with the prohibitions and restrictions of subsection (4) of this section.

(c) Land treatment.

Liquid waste, extremely hazardous waste (EHW), and organic/carbonaceous waste may be land treated provided that the owner/operator can demonstrate that effective treatment of dangerous waste constituents will occur, and at the end of the post-closure care period the owner/operator will be in compliance with subsection (4) of this section.

(6) Case-by-case exemptions to a land disposal prohibition. Any person may petition the department for an exemption from a prohibition in subsection (4) of this section for the land disposal of a dangerous waste. The procedures to submit a petition to the department are specified in WAC 173-303-910(6). The department may deny any petition if it determines that there is a potential for dangerous waste constituents to migrate from the land disposal facility where the waste is to be placed. The department will deny any petition when exemption would result in a substantial or imminent threat to public health or the environment. The department will deny any petition when exemption would result in a violation of applicable state laws.

The department may grant an exemption from the prohibitions and restrictions of subsection (4) of this section based on the demonstrations specified in (a), (b) or (c) of this subsection.

(a) Land disposal exemption for treatment residuals. Any person may request an exemption from a land disposal prohibition in subsection (4) of this section for treatment residuals by demonstrating to the department that:

(i) The person has applied the best achievable management method to the original waste; and

(ii) Application of additional management methods to the treatment residuals would prevent the person from utilizing the best achievable management methods for the original dangerous waste; and

(iii) The land disposal of the treatment residuals does not pose a greater risk to the public health and the environment than land disposal of the original dangerous waste would pose.

(b) Economic hardship exemption. Any person may request an exemption from a prohibition in subsection (4) of this section for the land disposal of a dangerous waste by demonstrating to the department that alternative management of the dangerous waste will impose an unreasonable economic burden in relation to the threat of harm to public health and the environment. It will be solely within the discretion of

the department to approve or deny the requests for exemptions based on economic hardship.

(c) Organic/carbonaceous waste exemption. Any person may request an exemption from the requirements in subsection (4) of this section by demonstrating to the department that:

(i) Alternative management methods for organic/carbonaceous waste are less protective of public health and the environment than stabilization or landfilling; or

(ii)(A) The organic/carbonaceous waste has a heat content less than 3,000 BTU/LB or contains greater than sixty-five percent water or other noncombustible moisture; and

(B) Incineration is the only management method available within a radius of one thousand miles from Washington state's border (i.e., recycling or treatment are not available).

(7) Emergency cleanup provision. The department may, on a case-by-case basis, grant an exception to the land disposal restrictions in subsection (4) of this section for an emergency cleanup where an imminent threat to public health and the environment exists. Any exception will require compliance with applicable state law and will require (consistent with the nature of the emergency and imminent threat) application of the waste management priorities of RCW 70.105.-150.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-140, filed 3/13/03, effective 4/13/03; 98-03-018 (Order 97-03), § 173-303-140, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-140, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-140, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-140, filed 1/5/88, effective 2/5/88; 84-09-088 (Order DE 83-36), § 173-303-140, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-140, filed 2/10/82.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-303-141 Treatment, storage, or disposal of dangerous waste. (1) A person may offer a designated dangerous waste only to a TSD facility which is operating either: Under a permit issued pursuant to the requirements of this chapter; or, if the TSD facility is located outside of this state, under interim status or a permit issued by United States EPA under 40 CFR Part 270, or under interim status or a permit issued by another state which has been authorized by United States EPA pursuant to 40 CFR Part 271.

(2) A person may offer a state only designated dangerous waste (not regulated as a hazardous waste by EPA) to a facility which is located outside of this state and which does not meet the requirements of subsection (1) of this section if:

(a) The facility receiving the waste will legitimately treat or recycle the dangerous waste (disposal is an unacceptable management practice);

(b) The generator has on file a letter or copy of a letter signed by the regulatory authority in the receiving state that the receiving facility may accept the waste;

(c) The generator uses a transporter with a valid EPA/state identification number;

(d) The generator complies with all other applicable requirements, including manifesting, packaging and labeling, with respect to the shipping of the waste. However, the EPA/state identification number for the receiving facility is not required on the manifest or annual report; and

(e) The generator receives from the receiving facility a signed and dated copy of the manifest.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-141, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-141, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-141, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-141, filed 2/10/82.]

WAC 173-303-145 Spills and discharges into the environment. (1) Purpose and applicability. This section sets forth the requirements for any person responsible for a spill or discharge of a dangerous waste or hazardous substance into the environment, except when such release is otherwise permitted under state or federal law. For the purposes of complying with this section, a transporter who spills or discharges dangerous waste or hazardous substances during transportation will be considered the responsible person. This section applies when any dangerous waste or hazardous substance is intentionally or accidentally spilled or discharged into the environment (unless otherwise permitted) such that human health or the environment is threatened, regardless of the quantity of dangerous waste or hazardous substance.

(2) Notification. Any person who is responsible for a spill or nonpermitted discharge must immediately notify the individuals and authorities described for the following situations:

(a) For spills or discharges onto the ground or into ground water or surface water, notify all local authorities in accordance with the local emergency plan. If necessary, check with the local emergency service coordinator and the fire department to determine all notification responsibilities under the local emergency plan. Also, notify the appropriate regional office of the department of ecology;

(b) For spills or discharges which result in emissions to the air, notify all local authorities in accordance with the local emergency plan. If necessary, check with the local emergency service coordinator and the fire department to determine all notification responsibilities under the local emergency plan. Also, in western Washington notify the local air pollution control authority, or in eastern Washington notify the appropriate regional office of the department of ecology.

(3) Mitigation and control. The person responsible for a spill or nonpermitted discharge must take appropriate immediate action to protect human health and the environment (e.g., diking to prevent contamination of state waters, shutting of open valves).

(a) In addition, the person responsible for a spill or discharge must:

(i) Clean up all released dangerous wastes or hazardous substances, or take such actions as may be required or approved by federal, state, or local officials acting within the scope of their official responsibilities. This may include complete or partial removal of released dangerous wastes or hazardous substances as may be justified by the nature of the released dangerous wastes or hazardous substances, the human and environmental circumstances of the incident, and protection required by the Water Pollution Control Act, chapter 90.48 RCW;

(ii) Designate and treat, store or dispose of all soils, waters, or other materials contaminated by the spill or dis-

charge in accordance with this chapter 173-303 WAC. The department may require testing in order to determine the amount or extent of contaminated materials, and the appropriate designation, treatment, storage, or disposal for any materials resulting from cleanup; and

(iii) If the property on which the spill or discharge occurred is not owned or controlled by the person responsible for the incident, restore the area impacted by the spill or discharge, and replenish resources (e.g., fish, plants) in a manner acceptable to the department.

(b)(i) Where immediate removal, temporary storage, or treatment of spilled or discharged dangerous wastes or hazardous substances is necessary to protect human health or the environment, the department may direct persons to:

(A) Remove it without a manifest, by transporters who do not have EPA/state identification numbers;

(B) Temporarily store it at sites that are protective of human health and the environment and are secure from access by the public; and/or

(C) Treat it to reduce or control the hazards, under WAC 173-303-170.

(ii) When the department seeks to direct persons who are not responsible for a spill or discharge to carry out actions pursuant to this section, it will obtain their concurrence. It is the intent of the department that persons who provide these services may be deemed "good samaritans" under the provisions of chapter 70.136 RCW.

(4) Nothing in WAC 173-303-145 eliminates any obligations to comply with reporting requirements which may exist in a permit or under other state or federal regulations.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-145, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-145, filed 10/19/95, effective 11/19/95; 92-15-036 (Order 91-44), § 173-303-145, filed 7/8/92, effective 8/8/92. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-145, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-145, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-145, filed 2/10/82.]

WAC 173-303-150 Division, dilution, and accumulation. (1) Any action taken to evade the intent of this regulation by dividing or diluting wastes to change their designation shall be prohibited, except for the purposes of treating, neutralizing, or detoxifying such wastes.

(2) Separation of a homogeneous waste into heterogeneous phases (e.g., separation of a suspension into sludge and liquid phases, or of a solvent/water mixture into solvent and water phases, etc.) will not be considered as division, provided that the person generating the waste either:

(a) Designates the homogeneous waste before separation, and handles the entire waste accordingly; or

(b) Designates each phase of the heterogeneous waste, in accordance with the dangerous waste designation requirements of this chapter, and handles each phase accordingly.

(3) For the purposes of designation, quantities of continuously generated wastes must be summed monthly. All wastes generated less frequently than once a month will be considered as batch or single event wastes.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-150, filed 10/19/95, effective 11/19/95; 82-05-023 (Order DE 81-33), § 173-303-150, filed 2/10/82. Formerly WAC 173-302-150.]

WAC 173-303-160 Containers. (1) Waste quantity. Containers and inner liners will not be considered as a part of the waste when measuring or calculating the quantity of a dangerous waste. Only the weight of the residues in nonempty or nonrinsed containers or inner liners will be considered when determining waste quantities.

(2) A container or inner liner is "empty" when:

(a) All wastes in it have been taken out that can be removed using practices commonly employed to remove materials from that type of container or inner liner (e.g., pouring, pumping, aspirating, etc.) and, no more than one inch of waste remains at the bottom of the container or inner liner, or the volume of waste remaining in the container or inner liner is equal to three percent or less of the container's total capacity, or, if the container's total capacity is greater than one hundred ten gallons, the volume of waste remaining in the container or inner liner is no more than 0.3 percent of the container's total capacity. A container which held compressed gas is empty when the pressure inside the container equals or nearly equals atmospheric pressure; and

(b) If the container or inner liner held acutely hazardous waste, as defined in WAC 173-303-040, toxic EHW as defined in WAC 173-303-100 or pesticides bearing the danger or warning label, the container or inner liner has been rinsed at least three times with an appropriate cleaner or solvent. The volume of cleaner or solvent used for each rinsing must be ten percent or more of the container's or inner liner's capacity or of sufficient quantity to thoroughly decontaminate the container. In lieu of rinsing for containers that might be damaged or made unusable by rinsing with liquids (for example, fiber or cardboard containers without inner liners), an empty container may be vacuum cleaned, struck, with the open end of the container up, three times (for example, on the ground, with a hammer or hand) to remove or loosen particles from the inner walls and corners, and vacuum cleaned again. Equipment used for the vacuum cleaning of residues from containers or inner liners must be decontaminated before discarding, in accordance with procedures approved by the department. A container or inner liner is also considered "empty" if the container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal.

Any rinsate or vacuumed residue that results from the cleaning of containers or inner liners must, whenever possible, be reused in a manner consistent with the original intended purpose of the substance in the container or inner liner. In the case of a farmer, if the rinsate is a pesticide residue then the rinsate must be managed or reused in a manner consistent with the application instructions on the pesticide label. On-site disposal or burial of pesticide residues is prohibited. Otherwise, the rinsate must be checked against the designation requirements (WAC 173-303-070 through 173-303-100) and, if designated, managed according to the requirements of this chapter.

(c) In the case of a container, the inner liner, that prevented the container from contact with the commercial chemical product or manufacturing chemical, has been removed.

(3)(a) Any residues remaining in containers or inner liners that are "empty" as described in subsection (2) of this section will not be subject to the requirements of this chapter, and will not be considered as accumulated wastes for the purposes of calculating waste quantities.

(b) Any dangerous waste in either: A container that is not empty, or an inner liner removed from a container that is not empty (as defined in subsection (2) of this section) is subject to the requirements of this chapter.

(4) A person who cannot meet the provisions in (2)(b) of this section may petition the department to approve alternative container rinsing processes in accordance with WAC 173-303-910(1).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-160, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-160, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-160, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-160, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-160, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-160, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-160, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-160, filed 2/10/82. Formerly WAC 173-302-140.]

WAC 173-303-161 Overpacked containers (labpacks). Small containers of dangerous waste may be placed in overpacked drums (or labpacks) provided that the following conditions are met:

(1) Dangerous waste must be packaged in nonleaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. Inside containers must be tightly and securely sealed and, to the extent possible, should be full and have as little air as possible in them to minimize voids. The inside containers must be of the size and type specified in the Department of Transportation (DOT) hazardous materials regulations (49 CFR Parts 173, 178, and 179), if those regulations specify a particular inside container for the waste;

(2) The inside containers must be overpacked in an open head DOT-specification drum shipping container which meets all of the requirements of 49 CFR Parts 173, 178, and 179. The overpack container must not exceed a capacity of 416-liter (110 gallon). The overpack container must have a sufficient quantity of sorbent material to completely sorb all of the liquid contents of the inside containers. The sorbent in overpack containers to be placed in a landfill must be nonbiodegradable in accordance with WAC 173-303-140 (4)(b)(iv). The outer container must be full after it has been packed with inside containers and sorbent material;

(3) The sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers, in accordance with WAC 173-303-395 (1)(b);

(4) Incompatible wastes, as defined in WAC 173-303-040, must not be placed in the same outside container; and

(5) Reactive wastes, other than cyanide- or sulfide-bearing waste as defined in WAC 173-303-090 (7)(a)(v), must be treated or rendered nonreactive prior to packaging in accordance with subsections (1) through (4) of this section. Cyanide- and sulfide-bearing reactive waste may be packed in accordance with subsections (1) through (4) of this section without first being treated or rendered nonreactive.

(6) An itemized listing of the chemicals, their concentrations and quantities per labpack must be kept by the generator for five years and must be readily available in case of an emergency during shipment, and for the purposes of preparing annual reports under WAC 173-303-220.

(7) Such disposal is in compliance with the requirements of WAC 173-303-140 (2)(a). Persons who incinerate labpacks according to the requirements in 40 CFR 268.42(c)(1) (incorporated by reference at WAC 173-303-140 (2)(a)) may use fiber drums in place of metal outer containers. Such fiber drums must meet the DOT specifications in 49 CFR 173.12 and be overpacked according to the requirements in subsection (2) of this section.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-161, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-161, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-161, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-161, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-161, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-161, filed 4/18/84.]

WAC 173-303-170 Requirements for generators of dangerous waste. (1) A person is a dangerous waste generator if their solid waste is designated by the requirements of WAC 173-303-070 through 173-303-100.

(a) The generator is responsible for designating their waste as DW or EHW.

(b) The generator may request an exemption for their dangerous waste according to the procedures of WAC 173-303-072.

(2) A dangerous waste generator must notify the department and obtain an EPA/state identification number as required by WAC 173-303-060, and must comply with the requirements of WAC 173-303-170 through 173-303-230.

(3) Any generator who stores, treats, or disposes of dangerous waste on-site must perform their operations in accordance with the TSD facility requirements with the following exceptions:

(a) Generators who accumulate dangerous wastes for less than ninety days as allowed under WAC 173-303-200 or for less than one hundred eighty days as allowed under WAC 173-303-201 and 173-303-202;

(b) Generators who treat dangerous waste on-site in accumulation tanks, containers, and containment buildings provided that the generator maintains a log showing the date and amount of waste treated and complies with:

(i) The applicable requirements of WAC 173-303-200, 173-303-201, and 173-303-202; and

(ii) WAC 173-303-283(3);

(c) Generators who treat special waste on-site provided:

(i) The accumulation standards of WAC 173-303-073 (2)(a) and (b) are met;

(ii) When treated in units other than tanks or containers, the unit is designed, constructed, and operated in a manner that prevents:

(A) A release of waste and waste constituents to the environment;

(B) Endangerment of health of employees or the public;

(C) Excessive noise;

(D) Negative aesthetic impact on the use of adjacent property.

(iii) The treatment unit must also be inspected routinely for deterioration that would lead to a release and repairs must be conducted promptly.

(4) The generator must comply with the special land disposal restrictions for certain dangerous wastes in WAC 173-303-140.

(5) Persons responding to an explosives or munitions emergency in accordance with WAC 173-303-400 (2)(c)(xiii)(A)(IV) or 173-303-600 (3)(p)(i)(D) or (3)(p)(iv), and WAC 173-303-800 (7)(c)(i)(D) or (7)(c)(i)(E) are not required to comply with the standards of WAC 173-303-170 through 173-303-230.

(6) Any person who exports or imports hazardous waste subject to the manifesting requirements of WAC 173-303-180 or to the universal waste management standards of WAC 173-303-573, to or from the countries listed in 40 CFR 262.58 (a)(1) for recovery must comply with 40 CFR 262 subpart H. 40 CFR 262 subpart H is incorporated by reference at WAC 173-303-230(1).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-170, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-170, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-170, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-170, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-170, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-170, filed 1/5/88, effective 2/5/88; 87-14-029 (Order DE-87-4), § 173-303-170, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-170, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-170, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-170, filed 2/10/82.]

WAC 173-303-180 Manifest. Before transporting dangerous waste or offering dangerous waste for transport off the site of generation, the generator must prepare a manifest and must follow all applicable procedures described in this section.

(1) This subsection describes the form and contents of dangerous waste manifests. 40 CFR Part 262 Appendix - Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions) is adopted by reference. The manifest must be EPA Form 8700-22 and, if necessary, EPA Form 8700-22A. The manifest must be prepared in accordance with the instructions for these forms, as described in the uniform manifest Appendix of 40 CFR Part 262, and in addition must contain the following information in the specified shaded items of the uniform manifest:

(a) Item D - The first transporter's telephone number must be provided in this space;

(b) Item F - If a second transporter is used, then the second transporter's telephone number must be provided in this space;

(c) Item H - The designated receiving facility's telephone number must be provided in this space;

(d) Item I, and R if the continuation sheet 8700-22A is used - The dangerous waste number (e.g., F001, D006, WT02) must be provided in this space for each corresponding waste entered and described under Item 11, and 28 if the continuation sheet 8700-22A is used. (Note: The waste code does not have to be entered in this block if it already appears in the corresponding U.S. DOT Description block.) As discussed in subsection (5) of this section, dangerous waste numbers WL01 or WL02 may be used in this space for labpacks;

(e) Item O, (on the continuation sheet 8700-22A) - If a third transporter is used, then the third transporter's telephone number must be provided in this space; and

(f) Item Q, (on the continuation sheet 8700-22A) - If a fourth transporter is used, then the fourth transporter's telephone number must be provided in this space.

(2) The manifest must consist of enough copies to provide the generator, transporter(s), and facility owner/operator with a copy, and a copy for return to the generator.

(3) Manifest procedures.

(a) The generator must:

(i) Sign and date the manifest certification by hand;

(ii) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest; and

(iii) Retain one copy in accordance with WAC 173-303-210, Generator recordkeeping.

(b) The generator must give the remaining manifest copies to the transporter.

(c) If the transporter is unable to deliver the dangerous waste shipment to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste shipment.

(d) For shipments of dangerous waste within the United States solely by water (bulk shipments only), the generator must send three copies of the manifest dated and signed in accordance with this section to the owner or operator of the designated facility or the last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.

(e) For rail shipments of dangerous waste within the United States which originate at the site of generation, the generator must send at least three copies of the manifest dated and signed in accordance with this section to:

(i) The next nonrail transporter, if any; or

(ii) The designated facility if transported solely by rail; or

(iii) The last rail transporter to handle the waste in the United States if exported by rail.

(f) For shipments of federally regulated hazardous waste to a designated facility in an authorized state which has not yet obtained authorization to regulate that particular waste as hazardous, the generator must assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

(4) Special requirements for shipments to the Washington EHW facility at Hanford.

(a) All generators planning to ship dangerous waste to the EHW facility at Hanford must notify the facility in writing and by sending a copy of the prepared manifest prior to shipment.

(b) The generator must not ship any dangerous waste without prior approval from the EHW facility. The state operator may exempt classes of waste from the requirements of WAC 173-303-180 (4)(a) and (b) where small quantities or multiple shipments of a previously approved waste are involved, or there exists an emergency and potential threat to public health and safety.

(5) Special instructions for shipment of labpacks. For purposes of completing the uniform dangerous waste manifest, dangerous waste numbers WL01 (for labpacks containing wastes designated as EHW) or WL02 (for labpacks containing wastes designated only as DW) may be used to complete Items I and R in lieu of the dangerous waste numbers that would otherwise be assigned to the contents of the labpack.

(6) The requirements of this section and WAC 173-303-190(2) do not apply to the transport of dangerous wastes on a public or private right of way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right of way: Provided, That ecology has approved an alternative paper tracking system that serves the purpose of a manifest. Notwithstanding WAC 173-303-240(2), the generator or transporter must comply with the requirements for transporters set forth in WAC 173-303-270 and 173-303-145 in the event of a discharge of dangerous waste on a public or private right of way.

(7) Special instructions for state-only dangerous waste that designates only by the criteria under WAC 173-303-100 and is not regulated as a hazardous waste under 40 CFR Part 261 or as a hazardous material under the 49 CFR hazardous material regulations. For purposes of completing the uniform hazardous waste manifest, Item 11, and Item 28 if continuation sheet 8700-22A is used, or to describe a state-only dangerous waste on a shipping paper, the shipping description must include the following in sequence with no additional information interspersed:

(a) Material Not Regulated by DOT;

(b) Washington State Dangerous Waste Only followed by the appropriate criteria designation of the waste that is either toxic, persistent, solid corrosive or a combination of these entered in parentheses;

(c) Shipping description examples: Material Not Regulated by DOT (Washington State Dangerous Waste Only, Toxic); Material Not Regulated by DOT (Washington State Dangerous Waste Only, Toxic, Persistent); Material Not Regulated by DOT (Washington State Dangerous Waste Only, Solid Corrosive).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-180, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-180, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-180, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-180, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-180, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-180, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-180, filed 2/10/82. Formerly WAC 173-302-180 and 173-302-190.]

WAC 173-303-190 Preparing dangerous waste for transport. The generator must fulfill the following requirements before transporting off-site or offering for off-site transport any dangerous waste.

(1) Packaging. The generator must package all dangerous waste for transport in accordance with United States DOT regulations on packaging, 49 CFR Parts 173, 178, and 179.

(2) Labeling. The generator must label each package in accordance with United States DOT regulations, 49 CFR Part 172.

(3) Marking. The generator must:

(a) Mark each package of dangerous waste in accordance with United States DOT regulations, 49 CFR Part 172; and

(b) Mark each package containing one hundred ten gallons or less of dangerous waste with the following, or equivalent words and information, displayed in accordance with 49 CFR 172.304:

HAZARDOUS WASTE - State and federal law prohibits improper disposal. If found, contact the nearest police or public safety authority, and the Washington state department of ecology or the United States Environmental Protection Agency.

Generator's Name and Address

. . . . . .

. . . . . .

. . . . . .

Manifest Document Number

. . . . . .

(4) Placarding. The generator will placard, or offer to the initial transporter all appropriate placards in accordance with United States DOT regulations, 49 CFR Part 172, Subpart F.

(5) State-only dangerous waste that is not regulated as a hazardous waste under 40 CFR Part 261 or as a hazardous material under 49 CFR must fulfill the following requirements before transport:

(a) Package in a nonleaking, nonsievable container or in a package that is equivalent to the manufacturing and testing specifications for packagings and containers of 49 CFR Parts 173, 178 and 179.

(b) Mark each package containing one thousand gallons or less with the following:

(i) Washington State Dangerous Waste-State law prohibits improper disposal. If found, contact the nearest police or public safety authority, and the Washington State Department of Ecology. The generator's name and address and manifest number must also be included; and

(ii) The state shipping description as described in WAC 173-303-180(7).

(c) Use of any other markings for a state-only dangerous waste is prohibited.

(6) State-only dangerous waste that is also regulated as a hazardous material under 49 CFR must be packaged, labeled and marked in accordance with WAC 173-303-190 (1), (2), (3) and (5)(b)(i).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-190, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-190, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-190, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-190, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and

RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-190, filed 2/10/82.]

WAC 173-303-200 Accumulating dangerous waste on-site. (1) A generator, not to include transporters as referenced in WAC 173-303-240(3), may accumulate dangerous waste on-site without a permit for ninety days or less after the date of generation, provided that:

(a) All such waste is shipped off-site to a designated facility or placed in an on-site facility which is permitted by the department under WAC 173-303-800 through 173-303-845 or recycled or treated on-site in ninety days or less. The department may, on a case-by-case basis, grant a maximum thirty day extension to this ninety day period if dangerous wastes must remain on-site due to unforeseen, temporary and uncontrollable circumstances. A generator who accumulates dangerous waste for more than ninety days is an operator of a storage facility and is subject to the facility requirements of this chapter and the permit requirements of this chapter as a storage facility unless he has been granted an extension to the ninety day period allowed pursuant to this subsection;

(b)(i) The waste is placed in containers and the generator complies with WAC 173-303-630 (2), (3), (4), (5), (6), (8), (9), (10), and 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a). For container accumulation (including satellite areas as described in subsection (2) of this section), the department may require that the accumulation area include secondary containment in accordance with WAC 173-303-630(7), if the department determines that there is a potential threat to public health or the environment due to the nature of the wastes being accumulated, or due to a history of spills or releases from accumulated containers. In addition, any new container accumulation areas (but not including new satellite areas, unless required by the department) constructed or installed after September 30, 1986, must comply with the provisions of WAC 173-303-630(7); and/or

(ii) The waste is placed in tanks and the generator complies with 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a) and 173-303-640 (2) through (10), except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a). At WAC 173-303-640 (4)(c)(i) add "stress of installation" after "climatic conditions." (Note: A generator, unless otherwise required to do so, does not have to prepare a closure plan, a cost estimate for closure, or provide financial responsibility for his tank system to satisfy the requirements of this section.) Such a generator is exempt from the requirements of WAC 173-303-620 and 173-303-610, except for WAC 173-303-610 (2) and (5); and/or

(iii) The waste is placed on drip pads and the generator complies with WAC 173-303-675 (at WAC 173-303-675 (4)(a)(v) add "stress of installation" after "climatic conditions") and maintains the following records at the facility:

(A) A description of procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and

(B) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal; and/or

(iv) The waste is placed in containment buildings and the generator complies with 40 CFR Part 265 Subpart DD, which is incorporated by reference, and the generator has placed its professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101 in the facility's operating record no later than sixty days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit. The owner or operator shall maintain the following records at the facility:

(A) A written description of procedures to ensure that each waste volume remains in the unit for no more than ninety days, a written description of the waste generation and management practices for the facility showing that they are consistent with respecting the ninety-day limit, and documentation that the procedures are complied with; or

(B) Documentation that the unit is emptied at least once every 90 days.

In addition, such a generator is exempt from all the requirements in WAC 173-303-610 and 173-303-620, except for WAC 173-303-610(2) and 173-303-610(5).

(c) The date upon which each period of accumulation begins is marked and clearly visible for inspection on each container;

(d) While being accumulated on site, each container and tank is labeled or marked clearly with the words "dangerous waste" or "hazardous waste." Each container or tank must also be marked with a label or sign which identifies the major risk(s) associated with the waste in the container or tank for employees, emergency response personnel and the public (Note—If there is already a system in use that performs this function in accordance with local, state, or federal regulations, then such system will be adequate). The department may also require that a sign be posted at each entrance to the accumulation area, bearing the legend, "danger—unauthorized personnel keep out," or an equivalent legend, written in English, and legible from a distance of twenty-five feet or more; and

(e) The generator complies with the requirements for facility operators contained in:

(i) WAC 173-303-330 through 173-303-360 (personnel training, preparedness and prevention, contingency plan and emergency procedures, and emergencies) except for WAC 173-303-335 (Construction quality assurance program) and WAC 173-303-355 (SARA Title III coordination); and

(ii) WAC 173-303-320 (1), (2)(a), (b), (d), and (3) (general inspection); and

(f) The generator complies with 40 CFR 268.7(a)(5).

(2) Satellite accumulation.

(a) A generator may accumulate as much as fifty-five gallons of dangerous waste or one quart of acutely hazardous waste per waste stream in containers at or near any point of generation where waste initially accumulates (defined as a satellite accumulation area in WAC 173-303-040). The satellite area must be under the control of the operator of the process generating the waste or secured at all times to prevent improper additions of wastes to a satellite container. Satellite accumulation is allowed without a permit provided the generator:

(i) Complies with WAC 173-303-630 (2), (4), (5) (a) and (b), (8)(a), and (9) (a) and (b); and

(ii) Complies with subsection (1)(d) of this section.

(b) When fifty-five gallons of dangerous waste or one quart of acutely hazardous waste is accumulated per waste stream, the container(s) must be marked immediately with the accumulation date and moved within three days to a designated storage or accumulation area.

(c) On a case-by-case basis the department may require the satellite area to be managed in accordance with all or some of the requirements under subsection (1) of this section, if the nature of the wastes being accumulated, a history of spills or releases from accumulated containers, or other factors are determined by the department to be a threat or potential threat to human health or the environment.

(3) For the purposes of this section, the ninety-day accumulation period begins on the date that:

(a) The generator first generates a dangerous waste; or

(b) The quantity (or aggregated quantity) of dangerous waste being accumulated by a small quantity generator first exceeds the accumulation limit for such waste (or wastes); or

(c) Fifty-five gallons of dangerous waste or one quart of acutely hazardous waste, per waste stream, is accumulated in a satellite accumulation area.

(4)(a) A generator who generates 2200 pounds or greater of dangerous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the dangerous waste code F006, may accumulate F006 waste on-site for more than ninety days, but not more than one hundred eighty days without a permit or without having interim status provided that:

(i) The generator has implemented pollution prevention practices that reduce the amount of any dangerous substances, pollutants or contaminants entering F006 or otherwise released to the environment prior to its recycling;

(ii) The F006 waste is legitimately recycled through metals recovery;

(iii) No more than 44,000 pounds of F006 waste is accumulated on-site at any one time; and

(iv) The F006 waste is managed in accordance with the following:

(A) The F006 waste is placed:

(I) In containers and the generator complies with the applicable requirements of WAC 173-303-630 (2), (3), (4), (5), (6), (8), (9), (10), and 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a); and/or

(II) In tanks and the generator complies with the applicable requirements of 40 CFR Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a) and 173-303-640 (2) through (10), except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a). At WAC 173-303-640 (4)(c)(i) add "stress of installation" after "climatic conditions"; and/or

(III) In containment buildings and the generator complies with subpart DD of 40 CFR part 265 which is incorporated by reference at WAC 173-303-400(3), and has placed its professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101 in the facility's operating record prior to operation of the unit. The owner or operator must maintain the following records at the facility:

• A written description of procedures to ensure that the F006 waste remains in the unit for no more than one hundred eighty days, a written description of the waste generation and management practices for the facility showing that they are consistent with the one hundred eighty-day limit, and documentation that the generator is complying with the procedures; or

• Documentation that the unit is emptied at least once every one hundred eighty days.

(B) In addition, such a generator is exempt from all the requirements in subparts G and H of 40 CFR part 265, except for 265.111 and 265.114 which are incorporated by reference at WAC 173-303-400(3).

(C) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;

(D) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Dangerous Waste"; and

(E) The generator complies with the requirements for owners or operators in WAC 173-303-330, 173-303-340, and 173-303-350, and with 40 CFR 268.7 (a)(5) which is incorporated by reference at WAC 173-303-140 (2)(a).

(b) A generator who generates 2200 pounds or greater of dangerous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the dangerous waste code F006, and who must transport this waste, or offer this waste for transportation, over a distance of 200 miles or more for off-site metals recovery, may accumulate F006 waste on-site for more than ninety days, but not more than two hundred seventy days without a permit or without having interim status if the generator complies with the requirements of (a)(i) through (iv) of this subsection.

(c) A generator accumulating F006 in accordance with (a) and (b) of this subsection who accumulates F006 waste on-site for more than one hundred eighty days (or for more than two hundred seventy days if the generator must transport this waste, or offer this waste for transportation, over a distance of two hundred miles or more), or who accumulates more than 44,000 pounds of F006 waste on-site is an operator of a storage facility and is subject to the facility and permit requirements of this chapter unless the generator has been granted an extension to the one hundred eighty-day (or two hundred seventy-day if applicable) period or an exception to the 44,000 pound accumulation limit. Such extensions and exceptions may be granted by the department if F006 waste must remain on-site for longer than one hundred eighty days (or two hundred seventy days if applicable) or if more than 44,000 pounds of F006 waste must remain on-site due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to thirty days or an exception to the accumulation limit may be granted at the discretion of the department on a case-by-case basis.

(5) **National environmental performance track.** 40 CFR Part 262.34 (j), (k), and (l) are incorporated by reference, except that:

(a) 262.34 (j)(3)(i) (container management) is replaced with the first sentence of WAC 173-303-200 (1)(b)(i) and 173-303-630(7) (secondary containment); and

(b) 262.34 (j)(3)(ii) (tank standards) is replaced with WAC 173-303-200 (1)(b)(ii); and

(c) 262.34 (j)(3)(iii) (drip pads) is replaced with WAC 173-303-200 (1)(b)(iii), except for (A) and (B); and

(d) 262.34 (j)(6) is replaced with WAC 173-303-200 (1)(c) and (d); and

(e) The first sentence of 262.34 (j)(7) is replaced with WAC 173-303-200 (1)(e) and (f). The second sentence is replaced with: In addition, the generator is exempt from all the requirements of WAC 173-303-610 and 173-303-620, except for WAC 173-303-610 (2) and (5). However, where drip pads are subject to closure requirements in WAC 173-303-675(6), the applicable portions of WAC 173-303-610 and 173-303-620 continue to apply.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-200, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-200, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.-007. 00-11-040 (Order 99-01), § 173-303-200, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-200, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-200, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-200, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-200, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-200, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-200, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-200, filed 2/10/82.]

WAC 173-303-201 Special accumulation standards. (1) This section applies to persons who generate more than 220 pounds but less than 2200 pounds per calendar month and do not accumulate on-site more than 2200 pounds of dangerous waste. The special provisions of this section do not apply to acutely hazardous wastes or Toxic EHW (WT01) that exceed the QEL that are being generated or accumulated by the generator.

(2) For purposes of accumulating dangerous waste on-site, persons who generate no more than 2200 pounds per month or who accumulate on-site no more than 2200 pounds of dangerous waste at any one time are subject to all applicable provisions of WAC 173-303-200 except as follows:

(a) In lieu of the ninety-day accumulation period, dangerous wastes may be accumulated for one hundred eighty days or less. The department may, on a case-by-case basis, grant a maximum ninety-day extension to this one hundred eighty-day period if the generator must transport his waste, or offer his waste for transportation, over a distance of two hundred miles or more for off-site treatment, storage, or disposal, and the dangerous wastes must remain on-site due to unforeseen, temporary and uncontrollable circumstances;

(b) The generator need not comply with WAC 173-303-330 (Personnel training);

(c) In lieu of the contingency plan and emergency procedures required by WAC 173-303-350 and 173-303-360, the generator must comply with the following:

(i) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in (c)(iv) of this subsection. This employee is the emergency coordinator.

(ii) The generator must post the following information next to all emergency communication devices (including telephones, two-way radios, etc.):

(A) The name and telephone number of the emergency coordinator;

(B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and

(C) The telephone number of the fire department, unless the facility has a direct alarm.

(iii) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(iv) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

(A) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

(B) In the event of a spill, contain the flow of dangerous waste to the extent possible, and as soon as is practicable, clean up the dangerous waste and any contaminated materials or soil;

(C) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached waters of the state, the generator must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their twenty-four hour toll free number 800/424-8802). The report must include the following information:

(I) The name, address, and EPA/state identification number of the generator;

(II) Date, time, and type of incident (e.g., spill or fire);

(III) Quantity and type of hazardous waste involved in the incident;

(IV) Extent of injuries, if any; and

(V) Estimated quantity and disposition of recovered materials, if any;

(d) For waste that is placed in tanks, generators must comply with WAC 173-303-202 in lieu of WAC 173-303-200 (1)(b);

(e) The generator does not need to comply with 40 CFR Part 265.176 and 40 CFR Subparts AA, BB, and CC, which have been incorporated by reference at WAC 173-303-400 (3)(a).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-201, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-201, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-201, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-201, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-201, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-201, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-201, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-201, filed 6/3/86.]

WAC 173-303-202 Special requirements for generators of between two hundred twenty and two thousand two hundred pounds per month that accumulate danger-

ous waste in tanks. (1) This section applies to generators of more than two hundred twenty pounds but less than two thousand two hundred pounds of dangerous waste in a calendar month, that accumulate dangerous waste in tanks for less than one hundred eighty days (or two hundred seventy days if the generator must ship the waste greater than two hundred miles), and do not accumulate over two thousand two hundred pounds on-site at any time.

(2) Generators of between two hundred twenty and two thousand two hundred pounds per month of dangerous waste must comply with the following general operating requirements:

(a) Treatment or storage of dangerous waste in tanks must comply with WAC 173-303-395(1).

(b) Dangerous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life.

(c) Uncovered tanks must be operated to ensure at least sixty centimeters (two feet) of freeboard, unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top sixty centimeters (two feet) of the tank.

(d) Where dangerous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow (e.g., waste feed cutoff system or by-pass system to a standby tank).

Note: These systems are intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., a malfunction in the treatment process, a crack in the tank, etc.).

(3) Generators of between two hundred twenty and two thousand two hundred pounds per month accumulating dangerous waste in tanks must inspect, where present:

(a) Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that it is in good working order;

(b) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design;

(c) The level of waste in the tank at least once each operating day to ensure compliance with subsection (2)(c) of this section;

(d) The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams; and

(e) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes,) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

Note: As required by WAC 173-303-320(3), the owner or operator must remedy any deterioration or malfunction he finds.

(4) Generators of between two hundred twenty and two thousand two hundred pounds per month accumulating dangerous waste in tanks must, upon closure of the facility, remove all dangerous waste from tanks, discharge control equipment, and discharge confinement structures.

Note: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with WAC 173-303-070 (2)(a) or (b), that any solid waste removed from his tank is not a dangerous waste, the owner or operator becomes a generator of dangerous waste and must manage it in accordance with all applicable requirements of this chapter.

(5) Generators of between two hundred twenty and two thousand two hundred pounds per month must comply with the following special requirements for ignitable or reactive waste:

(a) Ignitable or reactive waste must not be placed in a tank, unless:

(i) The waste is treated, rendered, or mixed before or immediately after placement in a tank so that:

(A) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090 (5) or (7) of this chapter; and

(B) WAC 173-303-395(1) is complied with; or

(ii) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

(iii) The tank is used solely for emergencies.

(b) The owner or operator of a facility which treats or stores ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981).

(6) Generators of between two hundred twenty and two thousand two hundred pounds per month must comply with the following special requirements for incompatible wastes:

(a) Incompatible wastes, or incompatible wastes and materials, (see 40 CFR Part 265 Appendix V for examples) must not be placed in the same tank, unless WAC 173-303-395(1) is complied with.

(b) Dangerous waste must not be placed in an unwashed tank which previously held an incompatible waste or material, unless WAC 173-303-395(1) is complied with.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-202, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-202, filed 1/4/89.]

WAC 173-303-210 Generator recordkeeping. (1) The generator must keep a copy of each manifest signed by the initial transporter in accordance with WAC 173-303-180(3), manifest procedures, for three years, or until he receives a signed copy from the designated facility which received the waste. The signed facility copy must be retained for at least five years from the date the waste was accepted by the initial transporter.

(2) The generator must keep a copy of each annual report and exception report as required by WAC 173-303-220 for a period of at least five years from the due date of each report. The generator must keep a copy of his most recent Dangerous Waste Site Identification Form until he is no longer defined as a generator under this chapter.

(3) Waste designation records.

(a) The generator must keep records of any test results, waste analyses, or other determinations made in accordance with WAC 173-303-170(1) for designating dangerous waste for at least five years from the date that the waste was last

transferred for on-site or off-site treatment, storage, or disposal.

(b) At a minimum, test results must include:

(i) The sample source, sampling date, and sampling procedure used;

(ii) The laboratory performing the test;

(iii) The testing date, and testing method used;

(iv) The analytical result, or the quantitative range of the testing method for analytes not detected.

(4) Any other records required for generators accumulating wastes on-site as described in WAC 173-303-200 or 173-303-201 must be retained for at least five years, including, but not limited to such items as inspection logs.

(5) The periods of retention for any records described in this section will be automatically extended during the course of any unresolved enforcement action requiring those records or upon request by the director.

(6) All generator records, including plans required by this chapter, will be made available and furnished upon request by the director.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-210, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-210, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-210, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-210, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-210, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-210, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-210, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-210, filed 2/10/82.]

WAC 173-303-220 Generator reporting. The generator must submit the following reports to the department by the specified due date for each report, or within the time period allowed for each report.

(1) Annual reports.

(a) A generator or any person who has obtained an EPA/state identification number pursuant to WAC 173-303-060 must submit an annual report to the department, on the Dangerous Waste Annual Report according to the instructions on the form (copies are available from the department), no later than March 1 for the preceding calendar year.

(b) In addition, any generator who stores, treats, or disposes of dangerous waste on-site must comply with the annual reporting requirements of WAC 173-303-390, Facility reporting.

Reporting for exports of hazardous waste is required on the annual report form. In addition, a separate annual report requirement is set forth at 40 CFR 262.56, which is incorporated by reference at WAC 173-303-230(1).

(2) Exception reports.

(a) A generator who does not receive a copy of the manifest with the handwritten signature of the owner/operator of the designated facility within thirty-five days of the date the waste was accepted by the initial transporter must contact the transporter(s) and/or facility to determine the status of the dangerous waste shipment.

(b) A generator must submit an exception report to the department if he has not received a copy of the manifest with the handwritten signature of the owner/operator of the designated facility within forty-five days of the date the waste was accepted by the initial transporter.

(c) The exception report must include:

(i) A legible copy of the manifest for which the generator does not have confirmation of delivery; and

(ii) A cover letter signed by the generator or his representative explaining the efforts taken to locate the waste and the results of those efforts.

(d) The department may require a generator to submit exception reports in less than forty-five days if it finds that the generator frequently or persistently endangers public health or the environment through improper waste shipment practices.

(3) Additional reports. The director, as he deems necessary under chapter 70.105 RCW, may require a generator to furnish additional reports (including engineering reports, plans, and specifications) concerning the quantities and disposition of the generator's dangerous waste.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-220, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-220, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-220, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-220, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-220, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-220, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-220, filed 2/10/82.]

WAC 173-303-230 Special conditions. (1) Exporting dangerous waste.

Federal export requirements, administered by EPA, are set forth at 40 CFR 262 Subparts E and H and 40 CFR, 261.6 (a)(3)(i)(A) and (B), and specify the procedures applicable to generators and transporters of hazardous waste (as defined in WAC 173-303-040). These requirements are incorporated by reference. Copies of any forms or reports submitted to the administrator of United States EPA as required by 40 CFR 262 Subpart E must also be submitted to the department.

(2) Importing dangerous waste. When importing dangerous waste from a foreign country into Washington state, the United States importer must comply with all the requirements of this chapter for generators, including the requirements of WAC 173-303-180(1), except that:

(a) In place of the generator's name, address and EPA/state identification number, the name and address of the foreign generator and the importer's name, address and EPA/state identification number must be used; and

(b) In place of the generator's signature on the certification statement, the United States importer or his agent must sign and date the certification and obtain the signature of the initial transporter.

(c) A person who imports hazardous waste must obtain the manifest form from the consignment state if the state supplies the manifest and requires its use. If the consignment state does not supply the manifest form, then the manifest form may be obtained from any source.

(3) Empty containers. For the purposes of this chapter, a person who stores, treats, disposes, transports, or offers for transport empty containers of dangerous waste that were for his own use will not be treated as a generator or as a facility

owner/operator if the containers are empty as defined in WAC 173-303-160(2), and either:

(a) The rinsate is not a dangerous waste under this chapter; or

(b) He reuses the rinsate in a manner consistent with the original product or, if he is a farmer and the rinsate contains pesticide residues, he reuses or manages the rinsate in a manner consistent with the instructions on the pesticide label, provided that when the label instructions specify disposal or burial, such disposal or burial must be on the farmer's own (including rented, leased or tenanted) property.

(4) Tank cars. A person rinsing out dangerous waste tote tanks, truck or railroad tank cars must handle the rinsate according to this chapter, and according to chapter 90.48 RCW, Water pollution control.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-230, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-230, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-230, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-230, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-230, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-230, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-230, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-230, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-230, filed 2/10/82.]

WAC 173-303-240 Requirements for transporters of dangerous waste. (1) Applicability. This section establishes standards that apply to persons transporting dangerous waste and transporters who own or lease and operate a transfer facility.

(2) A transporter must have a current EPA/state ID#. Transporters must comply with the notification and identification requirements of WAC 173-303-060. A transporter who has previously obtained an EPA/state ID# in another state is not required to obtain a new ID# when operating in Washington state. Transporters who must comply with the generator requirements as a result of a spill at a transfer facility or during transport must obtain a separate generator EPA/state ID# for the spill.

(3) Any person who transports a dangerous waste must comply with the requirements of WAC 173-303-240 through 173-303-270, when the dangerous waste must be manifested in accordance with WAC 173-303-180.

(4) Any person who transports a dangerous waste must also comply with the requirements of WAC 173-303-170 through 173-303-230 for generators, if he:

(a) Transports dangerous waste into the state from another country; or

(b) Mixes dangerous waste of different United States DOT shipping descriptions by mixing them into a single container.

(5) These requirements do not apply to on-site (as defined in WAC 173-303-040) transportation of dangerous waste by generators, or by owners or operators of permitted TSD facilities.

(6) Transfer facility. The requirements of this subsection apply to a transporter or marine terminal operator who owns or leases and operates a transfer facility. Transfer of a shipment of dangerous waste from one transport vehicle to another transport vehicle, from one container to another container, and from one transporter to another transporter and any ten-day storage activities may only occur at a transfer facility that is registered with the department. A transporter may store manifested shipments of dangerous waste in containers meeting the requirements of WAC 173-303-190 (1), (2), (3), and (5) for ten days or less at a transfer facility: Provided, That he or she complies with the following:

(a) A transporter who owns or leases and operates a transfer facility within Washington that is related to their dangerous waste transportation activities must register with the department. Washington registration is not required for a transporter whose activities are limited to passing through Washington with shipments of dangerous waste or picking up shipments from Washington generators or delivering shipments to designated treatment, storage or disposal facilities. In order to obtain registration, a transporter must complete a Dangerous Waste Site Identification Form according to the instructions and submit it to the department;

(b) Maintains ten-day storage records that include the dates that a manifested shipment of dangerous waste entered the facility and departed the facility. The ten-day records must be retained for a period of three years from the date the shipment was transported from the transfer facility;

(c) WAC 173-303-310 (1) and (2), Security. Instead of WAC 173-303-310(2) for an enclosed or an open flatbed transport vehicle parked at a transfer facility that has no twenty-four-hour surveillance system or natural or artificial barrier, the transport vehicle must meet the placarding requirements of 49 CFR Part 172 and be secured (that is, locked) or the shipment must be transferred to a secured area of the facility to prevent unknowing entry and minimize unauthorized entry;

(d) WAC 173-303-320, General inspection. Instead of keeping inspection records for a period of five years from the date of inspection in WAC 173-303-320 (2)(d), inspection records must be kept at the transfer facility for one year from the date of inspection;

(e) WAC 173-303-330, Personnel training;

(f) WAC 173-303-340, Preparedness and prevention except WAC 173-303-340(3), Aisle space;

(g) WAC 173-303-350, Contingency plan and emergency procedures;

(h) WAC 173-303-360, Emergencies;

(i) WAC 173-303-630 (2), (3), (4), (5)(a) and (b), (8), (9)(a) and (b) and (10), Use and management of containers;

(j) WAC 173-303-630(7) in areas where waste is transferred from container to container and in areas where containers are stored outside in the weather. The secondary containment system must be completed by October 15, 2001. The department may, on a case-by-case basis, grant an extension to the required completion date if the transporter has a design and has entered into binding financial or other agreements for construction prior to October 15, 2001;

(k) The requirements of WAC 173-303-630(7) may be required in areas other than those described in WAC 173-303-240 (6)(j) if the department determines that there is a potential threat to public health and the environment due to the nature of the wastes being stored or due to a history of spills or releases from waste stored in containers.

(7) Transporter exemptions. A transporter will not be required to comply with the following:

(a) The requirements of WAC 173-303-240(6) in the event of an emergency or other unforeseen event beyond the reasonable control of the transporter during transit over public highway, rail track or water route and the waste shipment is loaded, reloaded or transferred to another transport vehicle or container to facilitate transportation;

(b) The requirements of WAC 173-303-240 (6)(i) and (j) for dangerous waste that is stored in a secured, enclosed transport vehicle, intermodal container or portable tank during the time it is parked at a transfer facility;

(c) The requirements of WAC 173-303-240 (6)(i) and (j) for a transfer facility that is located at a pier, dock or barge unloading facility and associated with the loading and unloading of water vessels: Provided, That the dangerous waste shipment is stored within a transport unit, as defined under 49 CFR Part 176, and accepted by the approval authority of the United States Coast Guard;

(d) The requirements of WAC 173-303-240 (6)(j) for dangerous waste that is stored within a building: Provided, That the floor is compatible with and sufficiently impervious to the waste stored and is designed and operated so that any release or spill will be captured within the building and will prevent any waste from migrating to the soil, ground water or surface water.

(8) A transporter who accumulates or stores manifested shipments of dangerous waste for more than ten days at a transfer facility is subject to the dangerous waste management facility general requirements and permit requirements of this chapter with respect to the storage of those wastes.

(9) Reference to WAC 173-303-200 in 173-303-240(4) does not constitute authority for storage in excess of ten days for a transporter who owns or leases and operates a transfer facility.

(10) The regulations in WAC 173-303-250 through 173-303-260 do not apply to transportation during an explosives or munitions emergency response, conducted in accordance with WAC 173-303-400 (2)(c)(xiii)(A)(IV) or (xiii)(D) or WAC 173-303-600 (3)(p)(i)(D) or (3)(p)(iv), and WAC 173-303-800 (7)(c)(i)(C) or (D).

(11) A transporter of hazardous waste subject to the manifesting requirements of WAC 173-303-180 or to the universal waste management standards of WAC 173-303-573, that is being imported from or exported to any of the countries listed in 40 CFR 262.58 (a)(1) for purposes of recovery is subject to this section and to all other relevant requirements of 40 CFR subpart H part 262, including, but not limited to, 40 CFR 262.84 for tracking documents. 40 CFR subpart H is incorporated by reference at WAC 173-303-230(1).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-240, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-240, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-240, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-240, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-240, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-240, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-240, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-240, filed 2/10/82. Formerly WAC 173-302-210.]

WAC 173-303-250 Dangerous waste acceptance, transport, and delivery. (1) A transporter must not accept dangerous waste from a generator unless it is accompanied by a manifest signed by the generator in accordance with WAC 173-303-180, Manifest.

In the case of exports other than those subject to 40 CFR subpart H part 262 (which is incorporated by reference at WAC 173-303-230(1)), a transporter may not accept such waste from a primary exporter or other person if he knows the shipment does not conform to the EPA Acknowledgment of Consent; and unless, in addition to a manifest signed in accordance with the provisions of WAC 173-303-180, such waste is also accompanied by an EPA Acknowledgment of Consent which, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)). For exports of hazardous waste subject to the requirements of 40 CFR subpart H part 262, a transporter may not accept hazardous waste without a tracking document that includes all information required by 40 CFR 262.84.

(2) Before transporting a dangerous waste shipment, the transporter must sign and date the manifest, acknowledging acceptance of the dangerous waste. The transporter shall return a signed copy to the generator before commencing transport.

(3) The transporter must insure that the manifest accompanies the dangerous waste shipment.

(4) A transporter who delivers a dangerous waste to another transporter, or to the designated facility must:

(a) Obtain the date of delivery and the handwritten signature of that transporter or designated facility owner/operator on the manifest;

(b) Retain one copy of the manifest in accordance with WAC 173-303-260, Transporter recordkeeping; and

(c) Give the remaining copies of the manifest to the accepting transporter or designated facility.

(5) The transporter must deliver the entire quantity of dangerous waste which he has accepted from a generator or a transporter to:

(a) The designated facility listed on the manifest; or

(b) The alternate designated facility, if the dangerous waste cannot be delivered to the designated facility because an emergency prevents delivery; or

(c) The next designated transporter; or

(d) The place outside the United States designated by the generator.

(6) If the dangerous waste cannot be delivered in accordance with subsection (5) of this section, the transporter must contact the generator for further directions, and must revise the manifest according to the generator's instructions.

(7) The requirements of subsections (3), (4), and (8) of this section do not apply to water (bulk shipment) transporters if:

(a) The dangerous waste is delivered by water (bulk shipment) to the designated facility;

(b) A shipping paper containing all the information required on the manifest (excluding the EPA/state identification numbers, generator certification, and signatures) accompanies the dangerous waste;

(c) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper;

(d) The person delivering the dangerous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and

(e) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with WAC 173-303-260(2).

(8) For shipments involving rail transportation, the requirements of subsections (3), (4), and (7) of this section do not apply and the following requirements do apply.

(a) When accepting dangerous waste from a nonrail transporter, the initial rail transporter must:

(i) Sign and date the manifest acknowledging acceptance of the dangerous waste;

(ii) Return a signed copy of the manifest to the nonrail transporter;

(iii) Forward at least three copies of the manifest to:

(A) The next nonrail transporter, if any; or

(B) The designated facility, if the shipment is delivered to that facility by rail; or

(C) The last rail transporter designated to handle the waste in the United States;

(iv) Retain one copy of the manifest and rail shipping paper in accordance with WAC 173-303-260(2).

(b) Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the EPA/state identification numbers, generator certification, and signatures) accompanies the dangerous waste at all times.

(c) When delivering dangerous waste to the designated facility, a rail transporter must:

(i) Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and

(ii) Retain a copy of the manifest or signed shipping paper in accordance with WAC 173-303-260(2).

(d) When delivering dangerous waste to a nonrail transporter a rail transporter must:

(i) Obtain the date of delivery and the handwritten signature of the next nonrail transporter on the manifest; and

(ii) Retain a copy of the manifest in accordance with WAC 173-303-260(2).

(e) Before accepting dangerous waste from a rail transporter, a nonrail transporter must sign and date the manifest and provide a copy to the rail transporter.

(9) Transporters who transport dangerous waste out of the United States must:

(a) Indicate on the manifest the date the dangerous waste left the United States;

(b) Sign the manifest and retain one copy in accordance with WAC 173-303-260(3), Transporter recordkeeping; and

(c) Return a signed copy of the manifest to the generator.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-250, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-250, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-250, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-250, filed 2/10/82. Formerly WAC 173-302-220 and 173-302-230.]

WAC 173-303-260 Transporter recordkeeping. (1) A transporter of dangerous waste must keep a copy of the manifest signed by the generator, himself, and the next designated transporter or the owner or operator of the designated facility for a period of three years from the date the dangerous waste was accepted by the initial transporter.

(2) Water (bulk shipment) and rail transporter recordkeeping.

(a) For shipments delivered to the designated facility by rail or water (bulk shipment), each rail or water (bulk shipment) transporter must retain a copy of a shipping paper containing all the information required on a manifest (excluding the EPA/state identification numbers, generator certification, and signatures) for a period of three years from the date the dangerous waste was accepted by the initial transporter.

(b) For shipments of dangerous waste by rail within the United States:

(i) The initial rail transporter must keep a copy of the manifest and shipping paper with all the information required on a manifest (excluding the EPA/state identification numbers, generator certification, and signatures) for a period of three years from the date the dangerous waste was accepted by the initial transporter; and

(ii) The final rail transporter must keep a copy of the signed manifest (or the shipping paper if signed by the designated facility in lieu of the manifest) for a period of three years from the date the dangerous waste was accepted by the initial transporter.

(3) A transporter who transports dangerous waste out of the United States must keep a copy of the manifest, indicating that the dangerous waste left the United States, for a period of three years from the date the dangerous waste was accepted by the initial transporter.

(4) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the director.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-260, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-260, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-260, filed 2/10/82.]

WAC 173-303-270 Discharges during transport. In the event of a spill or discharge of dangerous waste during transportation, the transporter must comply with the requirements of WAC 173-303-145, Spills and discharges into the environment. In addition to the notices required by WAC 173-303-145, the transporter must provide the following notifications:

(1) Give notice to the generator of the waste that a discharge has occurred;

(2) Give notice to the National Response Center (800-424-8802 or 202-426-2675), if required by 49 CFR 171.15;

(3) Report in writing as required by 49 CFR 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington D.C., 20590; and,

(4) For a water (bulk shipment) transporter, give the same notice as required by 33 CFR 153.203 for oil and hazardous substances.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-270, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-270, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-270, filed 2/10/82.]

WAC 173-303-280 General requirements for dangerous waste management facilities. (1) Applicability. The requirements of WAC 173-303-280 through 173-303-395 apply to all owners and operators of facilities which store, treat, or dispose of dangerous wastes and which must be permitted under the requirements of this chapter 173-303 WAC, unless otherwise specified in this chapter. Whenever a shipment of dangerous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements for generators, WAC 173-303-170 through 173-303-230.

(2) Imminent hazard. Notwithstanding any provisions of this chapter, enforcement actions may be brought in the event that the management practices of a facility present an imminent and substantial hazard to the public health and the environment, regardless of the quantity or concentration of a dangerous waste.

(3) Identification numbers. Every facility owner or operator must apply for an EPA/state identification number from the department in accordance with WAC 173-303-060.

(4) The owner or operator must comply with the special land disposal restrictions for certain dangerous wastes in WAC 173-303-140.

(5) Salt dome formations, salt bed formations, underground mines and caves. The placement of any noncontainerized or bulk liquid dangerous waste in any salt dome formation, salt bed formation, underground mine or cave is prohibited.

(6) The requirements of WAC 173-303-290 through 173-303-360 and WAC 173-303-395 do not apply to cleanup-only facilities. Instead, owners/operators of cleanup-only facilities must comply with the following requirements.

(a) Obtain an EPA/state identification number in accordance with WAC 173-303-060(2).

(b) Obtain a detailed chemical and physical analysis of a representative sample of the dangerous remediation waste to be treated, stored or disposed at the site. At a minimum, this analysis must contain all information that must be known to treat, store or dispose of the dangerous remediation waste according to WAC 173-303-140 (2)(a), 173-303-280 through 173-303–395 and WAC 173-303-600 through 173-303-695 and must be kept accurate and up to date.

(c) Prevent people who are unaware of the danger from entering, and minimize the possibility for unauthorized people or livestock to enter onto the active portion of the remediation waste management site, unless the owner or operator can demonstrate to the director that:

(i) Physical contact with the dangerous remediation waste, structures or equipment within the active portion of the remediation waste management site will not injure people or livestock who may enter the active portion of the remediation waste management site; and

(ii) Disturbance of the dangerous remediation waste or equipment by people or livestock who enter onto the active portion of the remediation waste management site will not cause a violation of the requirements of WAC 173-303-280 through 173-303-395 or WAC 173-303-600 through 173-303-695.

(d) Inspect the remediation waste management site for malfunctions, deterioration, operator errors, and discharges that may lead to a release of dangerous constituents to the environment or a threat to human health. Inspections must be conducted often enough to identify problems in time to correct them before they harm human health or the environment. Problems must be remedied before they lead to a human health or environmental threat. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

(e) Provide personnel with classroom or on-the-job training on how to perform their duties in a way that ensures the remediation waste management site complies with the requirements of WAC 173-303-280 through 173-303–395 and WAC 173-303-600 through 173-303-695 and on how to effectively respond to emergencies.

(f) Take precautions to prevent accidental ignition or reaction of ignitable or reactive dangerous remediation waste and prevent threats to human health and the environment from ignitable, reactive and incompatible dangerous remediation waste.

(g) Develop and maintain a construction quality assurance program for all surface impoundments, waste piles and landfill units that are required to comply with WAC 173-303-650 (2)(j) and (k), 173-303-660 (2)(j) and (k) or 173-303-655 (2)(h), (i) and (j). The construction quality assurance must meet the requirements of WAC 173-303-335.

(h) Develop and maintain procedures to prevent accidents and a contingency and emergency plan to control accidents that occur. The procedures must address proper design, construction, maintenance and operation of remediation waste management units at the site. The goal of the plan must be to minimize the possibility of, and the hazards from, a fire, explosion or any other unplanned sudden or nonsudden release of dangerous remediation waste or dangerous constituents to the air, soil or surface water that could threaten human health or the environment. The plan must explain specifically how to treat, store or dispose of the remediation waste in question and must be implemented immediately whenever a fire, explosion or release of dangerous remediation waste or dangerous constituents occurs and could threaten human health or the environment.

(i) Designate at least one employee, either on the remediation waste management site premises or on call (that is, available to respond to an emergency by reaching the remediation waste management site quickly), to coordinate all emergency response measures. The emergency coordinator must be thoroughly familiar with all aspects of the remediation waste management site contingency plan, all operations and activities at the site, the location and characteristics of dangerous remediation waste handled, the location of all records within the site, and the site layout. The emergency coordinator must have authority to commit the resources needed to carry out the contingency plan.

(j) Develop, maintain and implement a plan to meet the requirements of this subsection.

(k) Maintain records documenting compliance with this subsection.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-280, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-280, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-280, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-280, filed 1/5/88, effective 2/5/88; 87-14-029 (Order DE-87-4), § 173-303-280, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-280, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-280, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-280, filed 2/10/82.]

WAC 173-303-281 Notice of intent. (1) Purpose. The purpose of this section is to provide notification to the department, local communities and the public that the siting of a dangerous waste management facility is being considered. Also, to provide general information about the proposed facility owner/operator, the type of facility and the types of wastes to be managed and compliance with the siting criteria.

(2) Applicability. This section applies to owners/operators of proposed facilities. This section also applies to existing facilities applying for a significant expansion, as defined in WAC 173-303-282(3). This section does not apply to owners/operators of facilities or portions of facilities who are applying for research, development and demonstration permits, pursuant to section 3005(g) of the Resource Conservation and Recovery Act, codified in 40 CFR Part 270.65. In addition, this section does not apply to owners/operators of facilities operating under an emergency permit pursuant to WAC 173-303-804 or to persons at facilities conducting on-site cleanup of sites under the Comprehensive Environmental Response Compensation and Liability Act, Sections 3004(u), 3004(v), and 3008(h) of the Resource Conservation and Recovery Act, chapter 70.105 RCW, or chapter 70.105D RCW, provided the cleanup activities are being conducted under a consent decree, agreed order, or enforcement order, or is being conducted by the department or United States Environmental Protection Agency. As used in this section:

(a) "Proposed facility" means a facility which has not qualified for interim status under WAC 173-303-805 or for which the department has not issued a final facility permit under WAC 173-303-806 prior to the effective date of this section;

(b) "Existing facility" means a facility which has qualified for interim status under WAC 173-303-805 or for which the department has issued a final facility permit under WAC 173-303-806 prior to the effective date of this section; and

(c) "Expansion" means the enlargement of the land surface area of an existing facility from that described in an interim status permit application or final status permit, the addition of a new dangerous waste management process, or an increase in the overall design capacity of existing dangerous waste management processes at a facility.

(3) Notice of intent to file for an interim status or a dangerous waste permit.

(a) The notice of intent to be prepared by the owners/operators of the applicable facilities must consist of:

(i) The name, address, and telephone number of the owner, operator, and corporate officers;

(ii) The location of the proposed facility or expansion on a topographic map with specifications as detailed in WAC 173-303-806 (4)(a)(xviii);

(iii) A brief description of the types and amounts of wastes to be managed annually;

(iv) A brief description of the major equipment items proposed, if any, and the waste management activities requiring a permit or revision of an existing permit;

(v) Demonstration of compliance with the siting criteria as required under WAC 173-303-282 (6) and (7). The site conditions with regards to satisfying the criteria are to be assessed as of the date of submittal of the notice of intent to the department;

(vi) For informational purposes a complete summary of compliance violations of permit conditions at hazardous waste management facilities owned or operated by the applicant, its subsidiaries or its parent company, during the ten calendar years preceding the permit application. Along with the summary of compliance violations, as issued by appropriate state or federal regulatory agencies, the applicant must also submit responses to past violations and any written correspondence with regulatory agencies regarding the compliance status of any hazardous waste management facility owned or operated by the applicant, its subsidiaries or parent company of the owner or operator. A more detailed compliance record must be provided upon request by the department;

(vii) For informational purposes the need for the proposed facility or expansion must be demonstrated by one of the following methods:

(A) Current overall capacity within Washington is inadequate for dangerous wastes generated in Washington as determined by regional or state dangerous waste management plans; or

(B) The facility is a higher priority management method, as described in RCW 70.105.150, than is currently in place or practical and available for the types of waste proposed to be managed; or

(C) The facility will add to the types of technology available or will reduce cost impacts (not to include transportation costs) to Washington generators for disposal of dangerous wastes; and

(ix) For informational purposes it must be shown how the capacity of the proposed facility or expansion will affect the overall capacity within the state, in conjunction with existing facilities in Washington.

(b) The notice of intent must be filed with the department, and copies must be made available for public review, no less than one hundred fifty days prior to filing an application for a permit or permit revision. The department will send a copy of the notice of intent to the elected officials of the lead local government and all local governments within the potentially affected area as required by WAC 173-303-902 (5)(b)(i). The department will continue to coordinate with interested local governments throughout the review of the proposal.

(c) Reserved.

(4) Preapplication public meeting and notice.

(a) Applicability. The requirements of subsections (4), (5), and (6) of this section apply to all final facility (part B) applications seeking initial permits for dangerous waste management units over which the department has permit issuance authority. These requirements also apply to final facility part B applications seeking renewal of permits for such units,

where the renewal application is proposing a significant change in facility operations. For the purposes of these subsections, a "significant change" is any change that would qualify as a class 3 permit modification under WAC 173-303-840(4). For the purposes of these subsections only, "dangerous waste management units over which the department has permit issuance authority" refers to dangerous waste management units for which the department has been authorized to issue dangerous waste permits. The requirements of these subsections do not apply to permit modifications under WAC 173-303-840(4) or to applications that are submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

The applicant's meeting date must be coordinated with and approved by ecology. If timing allows, both the applicant and ecology's meetings may be held on the same day.

(b) Prior to the submission of a part B final facility permit application for a facility, the applicant must hold at least one meeting with the public in order to solicit questions from the community and inform the community of proposed dangerous waste management activities. The applicant must post a sign-in sheet or otherwise provide a voluntary opportunity for attendees to provide their names and addresses.

(c) The applicant must submit a summary of the meeting, along with the list of attendees and their addresses developed under (b) of this subsection, and copies of any written comments or materials submitted at the meeting, to the department as a part of the part B application, in accordance with WAC 173-303-806 (4)(a).

(d) The applicant must provide public notice of the preapplication meeting at least thirty days prior to the meeting. The applicant must maintain, and provide to the department upon request, documentation of the notice.

(i) The applicant must provide public notice in all of the following forms:

(A) A newspaper advertisement. The applicant must publish a notice, fulfilling the requirements in (d)(ii) of this subsection, in a newspaper of general circulation in the county or equivalent jurisdiction that hosts the proposed location of the facility. In addition, the department will instruct the applicant to publish the notice in newspapers of general circulation in adjacent counties, where the department determines that such publication is necessary to inform the affected public. The notice must be published as a display advertisement.

(B) A visible and accessible sign. The applicant must post a notice on a clearly marked sign at or near the facility, fulfilling the requirements in (d)(ii) of this subsection. If the applicant places the sign on the facility property, then the sign must be large enough to be readable from the nearest point where the public would pass by the site.

(C) A broadcast media announcement. The applicant must broadcast a notice, fulfilling the requirements in (d)(ii) of this subsection, at least once on at least one local radio station or television station. The applicant may employ another medium with prior approval of the department.

(D) A notice to the department. The applicant must send a copy of the newspaper notice to the department and to the appropriate units of state and local government, in accordance with WAC 173-303-840 (3)(e)(i)(E).

(ii) The notices required under (d)(i) of this subsection must include:

(A) The date, time, and location of the meeting;

(B) A brief description of the purpose of the meeting;

(C) A brief description of the facility and proposed operations, including the address or a map (e.g., a sketched or copied street map) of the facility location;

(D) A statement encouraging people to contact the facility at least seventy-two hours before the meeting if they need special access to participate in the meeting; and

(E) The name, address, and telephone number of a contact person for the applicant.

(5) Public notice requirements at the application stage.

(a) Applicability. The requirements of this section apply to all final facility part B applications seeking initial permits for dangerous waste management units over which the department has permit issuance authority. The requirements of this section also apply to final facility part B applications seeking renewal of permits for such units under WAC 173-303-806 (7)(a). For the purposes of this section only, "dangerous waste management units over which the department has permit issuance authority" refers to dangerous waste management units for which the department has been authorized to issue final facility permits. The requirements of this section do not apply to permit modifications under WAC 173-303-830(4) or permit applications submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

(b) Notification at application submittal.

(i) The department will provide public notice as set forth in WAC 173-303-840 (3)(e)(i)(D), and notice to appropriate units of state and local government as set forth in WAC 173-303-840 (3)(e)(i)(E), that a part B permit application has been submitted to the department and is available for review.

(ii) The notice will be published within a reasonable period of time after the application is received by the department. The notice must include:

(A) The name and telephone number of the applicant's contact person;

(B) The name and telephone number of the department's contact, and a mailing address to which information, opinions, and inquiries may be directed throughout the permit review process;

(C) An address to which people can write in order to be put on the facility mailing list;

(D) The location where copies of the permit application and any supporting documents can be viewed and copied;

(E) A brief description of the facility and proposed operations, including the address or a map (for example, a sketched or copied street map) of the facility location on the front page of the notice; and

(F) The date that the application was submitted.

(iii) Concurrent with the notice required under (b) of this subsection, the department will place the permit application and any supporting documents in a location accessible to the public in the vicinity of the facility or at the department's office.

(6) Information repository.

(a) Applicability. The requirements of this section apply to all applications seeking final facility permits for dangerous waste management units over which the department has per-

mit issuance authority. For the purposes of this section only, "dangerous waste management units over which the department has permit issuance authority" refers to dangerous waste management units for which the department has been authorized to issue dangerous waste permits.

(b) The department may assess the need, on a case-by-case basis, for an information repository. When assessing the need for an information repository, the department will consider a variety of factors, including: The level of public interest; the type of facility; the presence of an existing repository; and the proximity to the nearest copy of the administrative record. If the department determines, at any time after submittal of a permit application, that there is a need for a repository, then the department will notify the facility that it must establish and maintain an information repository. (See WAC 173-303-810(16) for similar provisions relating to the information repository during the life of a permit.)

(c) The information repository must contain all documents, reports, data, and information deemed necessary by the department to fulfill the purposes for which the repository is established. The department will have the discretion to limit the contents of the repository.

(d) The information repository must be located and maintained at a site chosen by the facility. If the department finds the site unsuitable for the purposes and persons for which it was established, due to problems with the location, hours of availability, access, or other relevant considerations, then the department will specify a more appropriate site.

(e) The department will specify requirements for informing the public about the information repository. At a minimum, the department will require the facility to provide a written notice about the information repository to all individuals on the facility mailing list.

(f) The facility owner/operator will be responsible for maintaining and updating the repository with appropriate information throughout a time period specified by the department. The department may close the repository at its discretion, based on the factors in (b) of this subsection.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-281, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-281, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-281, filed 12/8/93, effective 1/8/94. Statutory Authority: RCW 43.21A.080 and 70.105.210, et seq. 90-20-016, § 173-303-281, filed 9/21/90, effective 10/22/90. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-281, filed 9/6/88.]

WAC 173-303-282 Siting criteria. (1) **Purpose.** This section establishes siting criteria which serve as an initial screen in the consideration of sites for dangerous waste management facilities. The purpose of the siting criteria is to immediately disqualify proposed dangerous waste facility sites in locations considered unsuitable or inappropriate for the management of dangerous wastes. Under RCW 70.105.-200 (1)(d), siting criteria cannot prevent existing dangerous waste management facilities from operating at or below their present level of activity.

A proposed site which is not disqualified under these criteria will be further studied to determine if it qualifies under site specific rules. Compliance with the siting criteria does not imply that a given project at a given location poses an acceptable level of risk, nor does it commit the department to the issuance of a dangerous waste permit. Projects that demonstrate compliance with the siting criteria will be subjected to comprehensive environmental and technical review pursuant to applicable laws and regulations before the department makes a final decision on a dangerous waste permit.

The department may deny a permit or require protective measures such as engineering enhancements or increased setback distances from resources in order to ensure protection of human health and the environment.

(2) **Applicability.**

(a) Except as otherwise specifically provided, this section applies to:

(i) Owners/operators of proposed facilities; and

(ii) Owners or operators of existing land-based facilities at which an expansion of the land based unit is proposed;

(iii) Owners or operators of existing incinerators at which an expansion is proposed; and

(iv) Owners or operators proposing a significant expansion of other existing dangerous waste management facilities not subject to (a)(i), (ii) and (iii) of this subsection, unless the owner/operator can demonstrate to the satisfaction of the department that the proposed expansion will provide a net increase in protection to human health and the environment beyond that which is currently provided at the facility. However, demonstrations under this subsection (iv) must not result in treatment or storage facilities expanding into land-based or incineration facilities if siting criteria cannot be satisfied.

(b) This section does not apply to:

(i) Owners/operators of facilities or portions of facilities who are applying for research, development and demonstration permits, pursuant to section 3005(g) of the Resource Conservation and Recovery Act, codified in 40 CFR Part 270.65 or WAC 173-303-809;

(ii) Owners/operators of facilities operating under an emergency permit pursuant to WAC 173-303-804;

(iii) Persons at facilities conducting on-site cleanup of sites under the Comprehensive Environmental Response Compensation and Liability Act, Sections 3004(u), 3004(v), and 3008(h) of the Resource Conservation and Recovery Act, chapter 70.105 RCW, or chapter 70.105D RCW, provided the cleanup activities are being conducted under a consent decree, agreed order, or enforcement order, or is being conducted by the department or United States Environmental Protection Agency;

(iv) Persons managing solid wastes who become subject to dangerous waste regulations through amendments to this chapter after the effective date of this section. This provision applies only to those activities operated in accordance with local, state, and federal requirements and which were being conducted prior to becoming subject to dangerous waste regulations, chapter 173-303 WAC or expansions, if it can be demonstrated to the satisfaction of the department that the proposed expansion of such activities will provide a net increase in protection to human health and the environment beyond that which is currently provided at the facility; or

(v) Owners/operators of facilities which recycle hazardous waste and:

(A) Are otherwise exempt from regulation by this chapter under 120;

(B) Have notified the department pursuant to WAC 173-303-060, prior to the effective date of this section;

(C) Are currently operating as a recycling facility as of the effective date of this regulation; and

(D) Seek only to obtain a tank or container storage permit to support recycling operations under this chapter.

Further, significant expansions of such storage facilities meeting the qualifications for this exemption may be considered under subsection (2)(a)(iv) of this section.

(3) **Definitions.** Any terms used in this section that are not defined below have the meanings provided in WAC 173-303-040. For the purposes of this section, the following terms have the described meanings:

(a) "Aquifer of beneficial use" means an aquifer that contains sufficient quality and quantity of water to allow it to be withdrawn for beneficial uses which include, but are not limited to, uses for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, or recreational purposes.

(b) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(c) "Domestic water use" means any water used for human consumption, other domestic activities or livestock watering for which the department has issued a permit of water right for surface water diversions pursuant to chapter 90.03 RCW, or for a well pursuant to chapter 90.44 RCW, or for which the department has received a well water report pursuant to RCW 18.104.050, or for any other valid water right claimed in accordance with chapter 90.14 RCW. This does not apply to wells abandoned in compliance with chapter 173-160 WAC.

(d) "Existing facility" means a facility which has qualified for interim status under WAC 173-303-805 or for which the department has issued a final facility permit under WAC 173-303-806.

(e) "Expansion" means the enlargement of the land surface area of an existing facility from that described in an interim status permit application or final facility permit, the addition of a new dangerous waste management process, or an increase in overall design capacity of existing dangerous waste management processes at a facility. However, a process or equipment change within the existing handling code (not to include "other") as defined under WAC 173-303-380 (2)(d) will not be considered a new dangerous waste management process.

(f) "Fault" means a fracture along which rocks or soils on one side have been displaced with respect to those on the other side.

(g) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene to the present.

(h) "Land-based facility" means a dangerous waste management facility which falls under the definition of land disposal as defined in Section 3004(k) of the Resource Conservation and Recovery Act. These facilities use the land as an integral part of their waste management method and include, but are not limited to, landfills, surface impoundments, waste piles, and land treatment facilities. For the purposes of this section, this would not include waste piles in which the dangerous wastes are stored inside or under a structure that provides protection from precipitation and when runoff, leachate, or other types of waste dispersal are not generated under any conditions.

(i) "Nonland based facility" means a facility which does not use the land as an integral part of its waste management method and is not subject to the requirements of WAC 173-303-806 (4)(a)(xxi). These facilities include, but are not limited to, tanks, containers, and incinerators.

(j) "Perennial surface water body" means a surface water body which is normally continuous with natural flows throughout the year or an annually recurring body of water including lakes, rivers, ponds, streams, reservoirs, inland waters, and saltwaters. This does not include roadside ditches or storm drains. However, this definition does apply to irrigation or domestic water supply channels existing, or planned and approved by a governmental agency, at the time an owner/operator submits a notice of intent.

(k) "Preempted facility" means any facility that includes as a significant part of its activities any of the following operations: (i) Landfill; (ii) incineration; (iii) land treatment; (iv) surface impoundment to be closed as a landfill; or (v) waste pile to be closed as a landfill.

(l) "Prime farmland" means the land which has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber or oilseed crops, and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. In general, prime farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. Prime farmland is not excessively erodible or saturated with water for a long period of time, and it either does not flood frequently or is protected from flooding. Prime farmland will be determined by those general and specific criteria as defined in the National Soils Handbook, Soil Conservation Service, United States Department of Agriculture, Washington, D.C. and 7 CFR 2.62. Areas of prime farmland are identified in the most recent county soil survey maps prepared by the National Cooperative Soil Survey.

(m) "Proposed facility" means a facility which has not qualified for interim status under WAC 173-303-805 or for which the department has not issued a final facility permit under WAC 173-303-806.

(n) "Public gathering places" means a place such as a public or private health care or child care facility; an educational institution; a church; a government institution not associated with dangerous waste management; or a retail shopping center.

(o) "Residence" means any dwelling including, but not limited to, private homes, rental homes, boarding houses, apartments, motels, or hotels.

(p) "Significant expansion" means an expansion of an existing facility, operating under interim status or a final status permit, that is considered a class three modification as designated by 40 CFR Parts 270.41 and 270.42. Examples include, but are not limited to, a modification or addition of container units resulting in greater than a twenty-five percent increase in the facility's container storage capacity, storage of

different wastes in containers that require additional or different management practices from those authorized under interim status or by a final status permit, and a modification or addition of tank units resulting in greater than twenty-five percent increase in the facility's capacity. For the purposes of this section, a single or cumulative increase of greater than twenty-five percent of the process design capacity as described in the facility's original Part A permit application will be considered a significant expansion.

(q) "Slope and soil instability" means areas for which there is credible evidence of, or the potential for, landslides, slumps, avalanches, earth or mud flows, or other unsuitable slope conditions.

(r) "Subsidence" means areas for which there is credible evidence of, or potential for, sinking of the land surface. Areas of subsurface mines, caves, cavernous materials, or where there has been significant removal of fluids may provide credible evidence of subsidence.

(s) "Wetland" means land transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification a wetland must have one or more of the following three attributes: (i) At least periodically, the land supports predominantly hydrophytes; (ii) the substrate is predominantly undrained hydric soil; and (iii) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year. The *Joint Federal Methodology for Identifying and Delineating Wetlands* must be used for defining the upland boundary of wetlands.

(4) **Implementation.**

(a) Submittal of information to demonstrate compliance. Documentation that a proposed facility or expansion site meets the siting criteria must be submitted to the department:

(i) In the notice of intent for those facilities for which a notice of intent is filed after the effective date of this section; or

(ii) Within ninety days of the effective date of this section for proposed facilities for which a notice of intent or an application for a Part B permit has been submitted to the department prior to the effective date of this section.

(b) Consultation by department. The department will consult with the lead local government as defined in WAC 173-303-902 (4)(h) and consider those local land use, building, fire, air quality, and transportation standards to the extent they add to and do not conflict with the requirements of this section. Such consultation and consideration will be made prior to the department's rendering of a tentative decision under subsection (4)(c) of this section.

(c) Response by department. Within sixty days of receipt of a demonstration of compliance, the department will undertake one of the following actions:

(i) Return the demonstration of compliance as incomplete with written comments identifying the need for additional information. The owner or operator may resubmit the demonstration of compliance with complete information; or

(ii) Render a written tentative decision to approve or deny the demonstration of compliance.

(d) Public notice and hearing process. The department in making a tentative decision to approve or deny a demonstration of compliance with this section will take the following actions:

(i) For land-based facilities and incinerators:

(A) The department will publish a notice of its tentative decision in a daily or weekly newspaper of general circulation in the potentially affected area, and will give notice by other reasonable methods to persons potentially affected.

(B) The department will hold a public hearing at a location convenient to the public in the potentially affected area. Notice of the date, time, purpose, and place of the hearing will be provided in the publication of notice.

(C) The department will accept comments on its tentative decision for a minimum of forty-five days.

(D) After evaluating all public comments the department will make a final decision in accordance with chapter 34.05 RCW. The department will either approve or deny the owner/operator's demonstration of compliance.

(ii) For nonland-based facilities, excluding incinerators:

(A) The department will publish a notice of its tentative decision in a daily or weekly newspaper of general circulation in the potentially affected area, and will give notice by other reasonable methods to persons potentially affected.

(B) Upon the written request of any interested person, the department may hold a public hearing to consider public comments on the owner or operator's demonstration of compliance. A person requesting the hearing must state the issues to be raised and explain why written comments would not suffice. In any case, if ten or more persons request a public hearing on the subject of the department's tentative decision, the department will hold a public hearing for the purpose of receiving comments.

(C) The department will accept comments on its tentative decision for a minimum of forty-five days.

(D) After evaluating all public comments the department will make a final decision in accordance with chapter 34.05 RCW. The department will either approve or deny the owner or operator's demonstration of compliance.

(5) **Appeal of a department decision.** Any person who is adversely affected by a decision of the department under this section may appeal the decision to the pollution control hearings board pursuant to the authority of WAC 173-303-845.

(6) **Criteria for elements of the natural environment.** The following siting criteria establish locations from which facilities are excluded and establish minimum setback distances from identified resources. Unless otherwise stated, setback distances are measured horizontally from the dangerous waste management unit boundary to the identified resource.

These criteria will be used as an initial screening tool in the selection of sites which may be considered by the department for the purpose of managing dangerous waste. A more comprehensive evaluation of locational factors will occur during the department's review of a permit application. The department may deny a permit or impose additional setback distances or other permit requirements if necessary to protect human health and the environment.

(a) Earth. The intent of this subsection is to reduce the potential for the release of dangerous waste into the environment because of structural damage to facilities subject to the hazards identified below. The owner/operator must provide supportive geologic, geotechnical, and soils information.

(i) Seismic risk. All dangerous waste management facilities must be located such that the dangerous waste management unit boundary is located at least five hundred feet from a fault which has had displacement in Holocene times.

(ii) Subsidence. No dangerous waste management facility may be located such that the dangerous waste management unit is within an area of subsidence.

(iii) Slope or soil instability. No dangerous waste management facility may be located such that the dangerous waste management unit is within an area of slope or soil instability, nor in the areas affected by unstable slope or soil conditions.

(b) Air. The intent of this subsection is to reduce the potential for further degradation of air quality in areas currently experiencing air quality impacts.

(i) Incineration facilities may not be located in a Class I area designated in accordance with Section 162 or 164 of the Federal Clean Air Act (under WAC 173-300-030(13)).

(ii) Incineration facilities may not be located in a nonattainment area designated by the department unless compensating emission offset can be achieved.

(iii) Proposed incineration facilities must comply with WAC 173-303-806 (4)(a)(xxii) during the permitting process.

(c) Water. The intent of this subsection is to reduce the potential for contaminating waters of the state in the event of a release of dangerous wastes.

(i) Surface water.

(A) Flood, seiche, and tsunami protection.

(I) No dangerous waste management facility or dangerous waste management unit may be located within the one hundred-year flood plain as indicated in the most current Federal Emergency Management Agency maps.

(II) The owner/operator of a nonland-based facility must identify whether the facility is intended to be located within the five hundred-year flood plain, as indicated in the most current Federal Emergency Management Agency maps. Nonland-based facilities will require special design features so as to prevent flooding of the dangerous waste management unit in the event of a five hundred-year flood.

(III) Land-based facilities may not be located within the five hundred-year flood plain as indicated in the most current Federal Emergency Management Agency maps.

(IV) Dangerous waste management facilities may not be located in areas subject to seiches, or coastal flooding including tsunamis or storm surges as indicated in the most current maps of the National Flood Insurance Program of the Federal Emergency Management Agency.

(B) Perennial surface water bodies.

(I) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from a perennial surface water body.

(II) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from a perennial surface water body.

(C) Surface water supply.

(I) No dangerous waste management facility may be located in a watershed identified in the report submitted to, and approved by, the department of health under the authority of WAC 246-290-135(5), Watershed control.

(II) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the nearest surface water intake for domestic water.

(III) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from the nearest surface water intake for domestic water.

(ii) Ground water. To the extent feasible, proponents of land-based facilities should seek sites with natural site characteristics which are capable of providing protection of ground water resources. Natural features such as low permeability soils and substrata, relatively simple geologic formations, and high rates of evapotranspiration in relation to the seasonal occurrence of precipitation are preferable for the locations of land-based facilities. Proposed land-based facilities must comply with the contingent ground water protection program, WAC 173-303-806 (4)(a)(xxi), during the permitting process.

(A) Depth to ground water.

(I) Nonland-based facilities may not be located in areas where there is less than ten feet vertical separation between the lowest point of the dangerous waste management unit and the seasonal high water level of the uppermost aquifer of beneficial use.

(II) Land-based facilities may not be located in areas where there is less than fifty feet vertical separation between the lowest point of the dangerous waste management unit and the seasonal highwater level of the uppermost aquifer of beneficial use.

(B) Sole source aquifer. No land-based facilities may be located over an area designated as a sole source aquifer under section 1424(e) of the Federal Safe Drinking Water Act (P.L. 93-523).

(C) Ground water management areas. Owners/operators of facilities must identify whether the proposed facility location is within a ground water management area, as proposed or certified pursuant to RCW 90.44.130. In order to maintain consistency with the purpose and substantive requirements of certified ground water management area plans, the department may require additional protective measures or reject inconsistent projects.

(D) Ground water intakes.

(I) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the nearest ground water intake for domestic water.

(II) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from the nearest ground water intake for domestic water.

(E) Special protection areas. Land-based facilities must not be located within ground water special protection areas designated by ecology under the authority of chapter 90.48 RCW.

(d) Plants and animals: Intent. To reduce the potential for dangerous waste contaminating plant and animal habitat in the event of a release of dangerous wastes.

(i) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the following areas:

(A) Wetlands;

(B) Designated critical habitat, for federally listed threatened or endangered species, as defined by the Endangered Species Act of 1973 (P.L. 93-205);

(C) Habitat designated by the Washington department of wildlife as habitat essential to the maintenance or recovery of any state listed threatened or endangered wildlife species;

(D) Natural areas which are acquired or voluntarily registered or dedicated by the owner under chapter 79.70 RCW, Natural area preserves; and

(E) State or federally designated wildlife refuge, preserve, or bald eagle protection area.

(ii) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from those areas specified in item (i) above.

(e) Precipitation. The intent of this subsection is to reduce the potential for contaminating waters and soils of the state in the event of a release of dangerous wastes.

Land-based facilities must not be located in areas having a mean annual precipitation level of greater than one hundred inches. The mean annual precipitation map in the U.S. Geological Survey Water-Resources Investigations Report 84-4279 must be used to determine whether a land-based facility is proposed to be located in such an area.

(7) **Criteria for elements of the built environment.** The following siting criteria establish locations from which facilities are excluded or which require separation from identified land uses. Unless otherwise stated, setback distances are measured horizontally from the dangerous waste management unit boundary to the identified land use.

These criteria must be used as an initial screening tool in the selection of sites which may be considered by the department for the purpose of managing dangerous waste. A more comprehensive evaluation of locational factors will occur during the department's review of a permit application. The department may deny a permit or impose additional setback distances or other permit requirements if necessary to protect human health and the environment.

(a) Adjacent land use.

(i) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least two hundred feet from the nearest point of the facility property line.

(ii) Land-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the nearest point of the facility property line.

(b) Special land uses.

(i) Wild and scenic rivers. Dangerous waste management facilities must not be located within the viewshed of users on wild and scenic rivers designated by the state or federal government.

(ii) Nonland-based facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from the following:

(A) State or federally designated park, recreation area, or national monument;

(B) Wilderness area as defined by the Wilderness Act of 1964 (P.L. 88-577); and

(C) Land identified as prime farmland at the time a notice of intent is submitted to the department.

(iii) Land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from those land uses specified in item (ii) above.

(c) Residences and public gathering places.

(i) Nonland-based facilities with the exception of incineration facilities must be located such that the dangerous waste management unit boundary is at least five hundred feet from residences or public gathering places.

(ii) Incineration and land-based facilities must be located such that the dangerous waste management unit boundary is at least one-quarter mile from residences or public gathering places.

(d) Land use compatibility. Owners/operators of nonpreempted facilities must conform with local land use zoning designation requirements, as approved by the department under chapter 70.105 RCW.

(e) Archeological sites and historic sites. No dangerous waste management facility must be located in an archeological site or historic site designated by the state or federal government.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-282, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-282, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-282, filed 12/8/93, effective 1/8/94. Statutory Authority: RCW 43.21A.080 and 70.105.210, et seq. 90-20-016, § 173-303-282, filed 9/21/90, effective 10/22/90.]

WAC 173-303-283 Performance standards. (1) Purpose. This section provides general performance standards for designing, constructing, operating, and maintaining dangerous waste facilities.

(2) Applicability. This section applies to all dangerous waste facilities permitted under WAC 173-303-800 through 173-303-840. These general performance standards must be used to determine whether more stringent facility standards should be applied than those spelled out in WAC 173-303-280, 173-303-290 through 173-303-400 and 173-303-600 through 173-303-692.

(3) Performance standards. Unless authorized by state, local, or federal laws, or unless otherwise authorized in this regulation, the owner/operator must design, construct, operate, or maintain a dangerous waste facility that to the maximum extent practical given the limits of technology prevents:

(a) Degradation of ground water quality;

(b) Degradation of air quality by open burning or other activities;

(c) Degradation of surface water quality;

(d) Destruction or impairment of flora and fauna outside the active portion of the facility;

(e) Excessive noise;

(f) Conditions that constitute a negative aesthetic impact for the public using rights of ways, or public lands, or for landowners of adjacent properties;

(g) Unstable hillsides or soils as a result of trenches, impoundments, excavations, etc.;

(h) The use of processes that do not treat, detoxify, recycle, reclaim, and recover waste material to the extent economically feasible; and

(i) Endangerment of the health of employees, or the public near the facility.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-283, filed 3/13/03, effective 4/13/03; 95-22-008 (Order 94-30), § 173-303-283, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-283, filed 9/6/88.]

WAC 173-303-290 Required notices. (1)(a) The facility owner or operator who is receiving dangerous waste from sources outside the United States must notify the appropriate regional office of the department annually, and in writing at least four weeks in advance of the date the first shipment of waste is expected to arrive at the facility. The notification must be in writing, signed by the importer and operator of the receiving facility, and include the following information:

(i) Name, street address, mailing address, and telephone number of the exporter.

(ii) Name, street address, mailing address, telephone number, and EPA/state ID number of the importer and receiving facility.

(iii) A description of the dangerous waste and the EPA/state waste numbers, U.S. DOT proper shipping name, hazard class and ID number (UN\NA) for each hazardous waste as identified in 49 CFR Parts 171 through 177.

(iv) The estimated frequency or rate at which such waste is to be imported and the period of time over which such waste is to be imported.

(v) The estimated total quantity of the dangerous waste in units as specified in the instructions to the Uniform Hazardous Waste Manifest Form (8700-22).

(vi) A description of the manner by which the dangerous waste will be treated, stored, disposed of, or recycled by the receiving facility.

Upon request by the department, the importer and/or receiving facility must furnish to the department any additional information regarding the importation of dangerous waste.

(b) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to 40 CFR part 262, subpart H (incorporated by reference at WAC 173-303-230(1)) must provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460; and to the competent authorities of all other concerned countries within three working days of receipt of the shipment. The original of the signed tracking document must be maintained at the facility for at least three years.

(2) Before transferring ownership or operation of a facility during its active life or post-closure care period, the owner or operator must notify the new owner or operator in writing of the requirements of this chapter 173-303 WAC.

(3) The owner or operator of a facility that receives dangerous waste from an off-site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator must keep a copy of this written notice as part of the operating record required under WAC 173-303-380(1).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-290, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-290, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-290, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-290, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-290, filed 2/10/82.]

WAC 173-303-300 General waste analysis. (1) Purpose. This section requires the facility owner or operator to confirm his knowledge about a dangerous waste before he stores, treats, or disposes of it. The purpose for the analysis is to insure that a dangerous waste is managed properly.

(2) The owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), before they store, treat, or dispose of it. This analysis must contain the information necessary to manage the waste in accordance with the requirements of this chapter. The analysis must include or consist of existing published or documented data on the dangerous waste, or on waste generated from similar processes, or data obtained by testing, or a combination of these.

(a) When an owner or operator relies on knowledge from the generator for waste designation or for this detailed analysis (commonly known as a waste profile) instead of analytical testing of a sample, that information must be documented and must meet the definition of "knowledge" as defined in WAC 173-303-040. To confirm the sufficiency and reliability of the "knowledge" used for the waste profile, the facility must do one or more of the following:

(i) Be familiar with the generator's processes by conducting site visits, and reviewing sampling data and other information provided by the generator to ensure they are adequate for safe management of the waste;

(ii) Ensure waste analysis contained in documented studies on the generator's waste is based on representative and appropriate sampling and test methods;

(iii) Compare the generator's waste generating process to documented studies of similar waste generating processes to ensure the waste profile is accurate and current;

(iv) Obtain other information as predetermined by the department on a case-by-case basis to be equivalent.

(b) As required in WAC 173-303-380 (1)(c), records must be retained containing specific information that show compliance with this subsection for sufficient and reliable information on the waste whether the owner or operator relies on analytical testing of the waste or knowledge from the generator, or a combination of these.

(3) The owner or operator of an off-site facility must confirm, by analysis if necessary, that each dangerous waste received at the facility matches the identity of the waste specified on the accompanying manifest or shipping paper.

(4) Analysis must be repeated as necessary to ensure that it is accurate and current. At a minimum, analysis must be repeated:

(a) When the owner or operator has been notified, or has reason to believe, that the process or operation generating the dangerous waste, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), has significantly changed; and

(b) When a dangerous waste received at an off-site facility does not match the identity of the waste specified on the manifest or the shipping paper.

(5) Waste analysis plan. The owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section. He must keep this plan at the facility, and the plan must contain at least:

(a) The parameters for which each dangerous waste, or nondangerous waste if applicable under WAC 173-303-610 (4)(d), will be analyzed, and the rationale for selecting these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsections (1) through (4) of this section);

(b) The methods of obtaining or testing for these parameters;

(c) The methods for obtaining representative samples of wastes for analysis (representative sampling methods are discussed in WAC 173-303-110(2));

(d) The frequency with which analysis of a waste will be reviewed or repeated to ensure that the analysis is accurate and current;

(e) The waste analyses which generators have agreed to supply;

(f) Where applicable, the methods for meeting the additional waste analysis requirements for specific waste management methods as specified in WAC 173-303-400(3) which incorporates by reference the regulations in 40 CFR Part 265 Subparts F through R 265.1034, 265.1063(d), 265.-1084, 268.4(a) and 268.7 for interim status facilities and in WAC 173-303-140 (4)(b), 173-303-395(1), 173-303-630 through 173-303-670, and 40 CFR 264.1034, 264.1063(d), 264.1083, 268.4(a) and 268.7 for final status facilities;

(g) For off-site facilities, the waste analysis that dangerous waste generators have agreed to supply;

(h) For surface impoundments exempted from land disposal restrictions under 40 CFR 268.4(a), incorporated by reference in WAC 173-303-140(2), the procedures and schedules for:

(i) The sampling of impoundment contents;

(ii) The analysis of test data; and

(iii) The annual removal of residues that are not delisted under 40 CFR 260.22 or which exhibit a characteristic of hazardous waste and either:

(A) Do not meet applicable treatment standards of 40 CFR Part 268, Subpart D; or

(B) Where no treatment standards have been established;

(I) Such residues are prohibited from land disposal under 40 CFR 268.32 or RCRA section 3004(d); or

(II) Such residues are prohibited from land disposal under 40 CFR 268.33(f).

(i) For owners and operators seeking an exemption to the air emission standards of subpart CC in accordance with Sec. 264.1082, incorporated by reference at WAC 173-303-692, or with 265.1083, incorporated by reference at WAC 173-303-400 (3)(a):

(A) If direct measurement is used for the waste determination, the procedures and schedules for waste sampling and analysis, and the results of the analysis of test data to verify the exemption.

(B) If knowledge of the waste is used for the waste determination, any information prepared by the facility owner or operator or by the generator of the hazardous waste, if the waste is received from off-site, that is used as the basis for knowledge of the waste.

(6) For off-site facilities, the waste analysis plan required in subsection (5) of this section must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

(a) The procedures which will be used to determine the identity of each movement of waste managed at the facility;

(b) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling; and

(c) The procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.

Comment: WAC 173-303-806 requires that the waste analysis plan be submitted with Part B of the permit application.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-300, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-300, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-300, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-300, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-300, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-300, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-300, filed 2/10/82.]

WAC 173-303-310 Security. (1) The owner or operator must comply with the requirements of this section, unless he can demonstrate to the department that:

(a) Physical contact with wastes or equipment within the active portion of the facility will not injure persons or livestock; and

(b) Disturbance of the wastes or equipment within the active portion of the facility by persons or livestock will not result in violations of this chapter 173-303 WAC.

(2) A facility must have:

(a) Signs posted at each entrance to the active portion, and at other locations, in sufficient numbers to be seen from any approach to the active portion. Signs must bear the legend, "Danger-unauthorized personnel keep out," or an equivalent legend, written in English, and must be legible from a distance of twenty-five feet or more; and either

(b) A 24-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility; or

(c) An artificial or natural barrier, or a combination of both, which completely surrounds the active portion of the facility, with a means to control access through gates or other entrances to the active portion of the facility at all times.

(3) In lieu of WAC 173-303-310(2), above, the owner or operator of a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit (as defined in WAC 173-303-040) must prevent the unknowing entry, and

minimize the possibility for the unauthorized entry, of persons or livestock into or onto the totally enclosed treatment facility or the elementary neutralization or wastewater treatment unit.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-310, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-310, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-310, filed 2/10/82. Formerly WAC 173-302-290.]

WAC 173-303-320 General inspection. (1) The owner or operator must inspect his facility to prevent malfunctions and deterioration, operator errors, and discharges which may cause or lead to the release of dangerous waste constituents to the environment, or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

(2) The owner or operator must develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that help prevent, detect, or respond to hazards to the public health or the environment. In addition:

(a) The schedule must be kept at the facility;

(b) The schedule must identify the types of problems which are to be looked for during inspections;

(c) The schedule must indicate the frequency of inspection for specific items. The frequency should be based on the rate of possible deterioration of equipment, and the probability of an environmental or human health incident. Areas subject to spills must be inspected daily when in use. At a minimum the inspection schedule must also include the applicable items and frequencies required for the specific waste management methods described in 40 CFR Part 265 Subparts F through R, 265.1033, 265.1052, 265.1053, 265.1058 and 265.1084 through 265.1090, for interim status facilities and in WAC 173-303-630 through 173-303-680, and 40 CFR 264.1033, 264.1052, 264.1053, 264.1058 and 264.1083 through 264.1089 for final status facilities; and

(d) The owner or operator must keep an inspection log or summary, including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made, an account of spills or discharges in accordance with WAC 173-303-145, and the date and nature of any repairs or remedial actions taken. The log or summary must be kept at the facility for at least five years from the date of inspection.

(3) The owner or operator must remedy any problems revealed by the inspection, on a schedule which prevents hazards to the public health and environment. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-320, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-320, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-320, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-320, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-320, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-320, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-320, filed 2/10/82.]

WAC 173-303-330 Personnel training. (1) Training program. The facility owner or operator must provide a program of classroom instruction or on-the-job training for facility personnel. This program must teach personnel to perform their duties in a way that ensures the facility's compliance with this chapter 173-303 WAC, must teach facility personnel dangerous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed, must ensure that facility personnel are able to respond effectively to emergencies, and must include those elements set forth in the training plan required in subsection (2) of this section. In addition:

(a) The training program must be directed by a person knowledgeable in dangerous waste management procedures, and must include training relevant to the positions in which the facility personnel are employed;

(b) Facility personnel must participate in an annual review of the training provided in the training program;

(c) This program must be successfully completed by the facility personnel:

(i) Within six months after these regulations become effective; or

(ii) Within six months after their employment at or assignment to the facility, or to a new position at the facility, whichever is later.

Employees hired after the effective date of these regulations must be supervised until they complete the training program; and

(d) At a minimum, the training program must familiarize facility personnel with emergency equipment and systems, and emergency procedures. The program must include other parameters as set forth by the department, but at a minimum must include, where applicable:

(i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

(ii) Key parameters for automatic waste feed cut-off systems;

(iii) Communications or alarm systems;

(iv) Response to fires or explosions;

(v) Response to ground-water contamination incidents; and

(vi) Shutdown of operations.

(2) Written training plan. The owner or operator must develop a written training plan which must be kept at the facility and which must include the following documents and records:

(a) For each position related to dangerous waste management at the facility, the job title, the job description, and the name of the employee filling each job. The job description must include the requisite skills, education, other qualifications, and duties for each position;

(b) A written description of the type and amount of both introductory and continuing training required for each position; and

(c) Records documenting that facility personnel have received and completed the training required by this section. The department may require, on a case-by-case basis, that

training records include employee initials or signature to verify that training was received.

(3) Training records. Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-330, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-330, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-330, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-330, filed 2/10/82. Formerly WAC 173-302-320.]

WAC 173-303-335 Construction quality assurance program. (1) CQA program.

(a) A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with WAC 173-303-650 (2)(j) and (k), 173-303-660 (2)(j) and (k), and 173-303-665 (2)(h) and (j). The program must ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program must be developed and implemented under the direction of a CQA officer who is a registered professional engineer.

(b) The CQA program must address the following physical components, where applicable:

(i) Foundations;

(ii) Dikes;

(iii) Low-permeability soil liners;

(iv) Geomembranes (flexible membrane liners);

(v) Leachate collection and removal systems and leak detection systems; and

(vi) Final cover systems.

(2) Written CQA plan. The owner or operator of units subject to the CQA program under (a) of this subsection must develop and implement a written CQA plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan must include:

(a) Identification of applicable units, and a description of how they will be constructed.

(b) Identification of key personnel in the development and implementation of the CQA plan, and CQA officer qualifications.

(c) A description of inspection and sampling activities for all unit components identified in subsection (1)(b) of this section, including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description must cover: Sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under WAC 173-303-380.

(3) Contents of program.

(a) The CQA program must include observations, inspections, tests, and measurements sufficient to ensure:

(i) Structural stability and integrity of all components of the unit identified in subsection (1)(b) of this section;

(ii) Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e.g., pipes) according to design specifications;

(iii) Conformity of all materials used with design and other material specifications under WAC 173-303-650, 173-303-660, and 173-303-665.

(b) The CQA program will include test fills for compacted soil liners, using the same compaction methods as in the full scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of WAC 173-303-650 (2)(j)(i)(B), 173-303-660 (2)(j)(i)(B), and 173-303-665 (2)(h)(i)(B) in the field. Compliance with the hydraulic conductivity requirements must be verified by using in situ testing on the constructed test fill. The department may accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of WAC 173-303-650 (2)(j)(i)(B), 173-303-660 (2)(j)(i)(B), and 173-303-665 (2)(h)(i)(B) in the field.

(4) Certification. Waste will not be received in a unit subject to this section until the owner or operator has submitted to the department by certified mail or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out and that the unit meets the requirements of WAC 173-303-650 (2)(j) or (k), 173-303-660 (2)(j) or (k), or 173-303-665 (2)(h) or (j); and the procedure in WAC 173-303-810 (14)(a) has been completed. Documentation supporting the CQA officer's certification must be furnished to the department upon request.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-335, filed 10/19/95, effective 11/19/95.]

WAC 173-303-340 Preparedness and prevention. Facilities must be designed, constructed, maintained and operated to minimize the possibility of fire, explosion, or any unplanned sudden or nonsudden release of dangerous waste or dangerous waste constituents to air, soil, or surface or ground water which could threaten the public health or the environment. This section describes preparations and preventive measures which help avoid or mitigate such situations.

(1) Required equipment. All facilities must be equipped with the following, unless it can be demonstrated to the department that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

(a) An internal communications or alarm system capable of providing immediate emergency instruction to facility personnel;

(b) A device, such as a telephone or a hand-held, two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

(d) Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

(2) Access to communications or alarms. Personnel must have immediate access to the signalling devices described in the situations below:

(a) Whenever dangerous waste is being poured, mixed, spread, or otherwise handled, all personnel involved must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required in subsection (1) of this section;

(b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone or a hand-held, two-way radio, capable of summoning external emergency assistance, unless such a device is not required in subsection (1) of this section.

(3) Aisle space. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the department that aisle space is not needed for any of these purposes.

(4) Arrangements with local authorities. The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations, unless the hazards posed by wastes handled at the facility would not require these arrangements:

(a) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of dangerous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes;

(b) Arrangements to familiarize local hospitals with the properties of dangerous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility;

(c) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

(d) Where more than one party might respond to an emergency, agreements designating primary emergency authority and agreements with any others to provide support to the primary emergency authority.

(5) Where state or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-340, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-340, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-340, filed 2/10/82.]

WAC 173-303-350 Contingency plan and emergency procedures. (1) Purpose. The purpose of this section and WAC 173-303-360 is to lessen the potential impact on the public health and the environment in the event of an emergency circumstance, including a fire, explosion, or unplanned sudden or nonsudden release of dangerous waste or dangerous waste constituents to air, soil, surface water, or ground water by a facility. A contingency plan must be developed to lessen the potential impacts of such emergency circumstances, and the plan must be implemented immediately in such emergency circumstances.

(2) Contingency plan. Each owner or operator must have a contingency plan at his facility for use in emergencies or sudden or nonsudden releases which threaten human health and the environment. If the owner or operator has already prepared a spill prevention control and countermeasures (SPCC) plan in accordance with Part 112 of Title 40 CFR or Part 1510 of chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate dangerous waste management provisions that are sufficient to comply with the requirements of this section and WAC 173-303-360.

(3) The contingency plan must contain the following:

(a) A description of the actions which facility personnel must take to comply with this section and WAC 173-303-360;

(b) A description of the actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported, pursuant to the requirements of WAC 173-303-370(5), Manifest system, reasons for not accepting dangerous waste shipments;

(c) A description of the arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services as required in WAC 173-303-340(4);

(d) A current list of names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator required under WAC 173-303-360(1). Where more than one person is listed, one must be named as primary emergency coordinator, and others must be listed in the order in which they will assume responsibility as alternates. For new facilities only, this list may be provided to the department at the time of facility certification (as required by WAC 173-303-810 (14)(a)(i)), rather than as part of the permit application;

(e) A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities; and

(f) An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe the signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

(4) Copies of contingency plan. A copy of the contingency plan and all revisions to the plan must be:

(a) Maintained at the facility; and

(b) Submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.

(5) Amendments. The owner or operator must review and immediately amend the contingency plan, if necessary, whenever:

(a) Applicable regulations or the facility permit are revised;

(b) The plan fails in an emergency;

(c) The facility changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of dangerous waste or dangerous waste constituents, or in a way that changes the response necessary in an emergency;

(d) The list of emergency coordinators changes; or

(e) The list of emergency equipment changes.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-350, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-350, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-350, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-350, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-350, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-355 Superfund Amendments and Reauthorization Act Title III coordination. (1) Owners or operators must coordinate preparedness and prevention planning and contingency planning efforts, conducted under WAC 173-303-340 and 173-303-350, with local emergency planning committees established pursuant to Title III of the 1986 Superfund Amendments and Reauthorization Act.

(2) Appropriate and generally accepted computer models should be utilized to determine the impacts of a potential catastrophic air release due to fire, explosion, or other accidental releases of hazardous constituents. Evacuation plans prepared pursuant to WAC 173-303-350 (3)(d) must include those effected persons and areas identified through these modelling efforts.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-355, filed 10/19/95, effective 11/19/95. Statutory Authority: RCW 43.21A.080 and 70.105.210, et seq. 90-20-016, § 173-303-355, filed 9/21/90, effective 10/22/90.]

WAC 173-303-360 Emergencies. (1) Emergency coordinator. At all times, there must be at least one employee either on the facility premises or on call (that is, available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, required by WAC 173-303-350(2), all operations and activities at the facility, the location and properties of all wastes handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

(2) Emergency procedures. The following procedures must be implemented in the event of an emergency.

(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(ii) Notify appropriate state or local agencies with designated response roles if their help is needed.

(b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials.

(c) Concurrently, the emergency coordinator must assess possible hazards to human health and the environment (considering direct, indirect, immediate, and long-term effects) that may result from the release, fire, or explosion.

(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment, he must report his findings as follows:

(i) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(ii) He must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their 24-hour toll free number (800) 424-8802).

(e) His assessment report must include:

(i) Name and telephone number of reporter;

(ii) Name and address of facility;

(iii) Time and type of incident (e.g., release, fire);

(iv) Name and quantity of material(s) involved, to the extent known;

(v) The extent of injuries, if any; and

(vi) The possible hazards to human health or the environment outside the facility.

(f) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other dangerous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

(g) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(h) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

(i) The emergency coordinator must ensure that, in the affected area(s) of the facility:

(i) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(j) The owner or operator must notify the department, and appropriate local authorities, that the facility is in compliance with (i) of this subsection before operations are resumed in the affected area(s) of the facility.

(k) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within fifteen days after the incident, he must submit a written report on the incident to the department. The report must include:

(i) Name, address, and telephone number of the owner or operator;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time, and type of incident (e.g., fire, explosion);

(iv) Name and quantity of material(s) involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable;

(vii) Estimated quantity and disposition of recovered material that resulted from the incident;

(viii) Cause of incident; and

(ix) Description of corrective action taken to prevent reoccurrence of the incident.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-360, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-360, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-360, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-360, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-360, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-360, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-360, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-370 Manifest system. (1) Applicability. The requirements of this section apply to owners and operators who receive dangerous waste from off-site sources.

(2) If a facility receives dangerous waste accompanied by a manifest, the owner or operator, or his agent, must:

(a) Sign and date each copy of the manifest to certify that the dangerous waste covered by the manifest was received;

(b) Note any significant discrepancies in the manifest, as described in subsection (4) of this section, on each copy of the manifest;

(c) Immediately give the transporter at least one copy of the signed manifest;

(d) Within thirty days after the delivery, send a copy of the manifest to the generator; and

(e) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

(3) If a facility receives, from a rail or water (bulk shipment) transporter, dangerous waste which is accompanied by a manifest or shipping paper containing all the information required on the manifest (excluding the EPA/state identification numbers, generator's certification, and signatures), the owner or operator, or his agent, must:

(a) Sign and date each copy of the manifest or shipping paper to certify that the dangerous waste covered by the manifest or shipping paper was received;

(b) Note any significant discrepancies in the manifest or shipping paper, as described in subsection (4) of this section, on each copy of the manifest or shipping paper;

(c) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper;

(d) Within thirty days after the delivery, send a copy of the signed and dated manifest or shipping paper to the generator. However, if the manifest is not received within thirty days after the delivery, the owner or operator, or his agent, must send a copy of the signed and dated shipping paper to the generator; and

(e) Retain at the facility a copy of each shipping paper and manifest for at least three years from the date of delivery.

(4) Manifest discrepancies.

(a) Manifest discrepancies are significant discrepancies between the quantity or type of dangerous waste designated on the manifest or shipping paper and the quantity or type of dangerous waste a facility actually receives. Significant discrepancies in quantity are variations greater than ten percent in weight for bulk quantities (e.g., tanker trucks, railroad tank cars, etc.), or any variations in piece count for nonbulk quantities (i.e., any missing container or package would be a significant discrepancy). Significant discrepancies in type are obvious physical or chemical differences which can be discovered by inspection or waste analysis (e.g., waste solvent substituted for waste acid).

(b) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator and transporter. If the discrepancy is not resolved within fifteen days after receiving the waste, the owner or operator must immediately submit to the department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

(5) Reasons for not accepting dangerous waste shipments. The owner or operator may decide that a dangerous shipment should not be accepted by his facility.

(a) The following are acceptable reasons for denying receipt of a dangerous waste shipment:

(i) The facility is not capable of properly managing the type(s) of dangerous waste in the shipment;

(ii) There is a significant discrepancy (as described in subsection (4) of this section) between the shipment and the wastes listed on the manifest or shipping paper; or

(iii) The shipment has arrived in a condition which the owner or operator believes would present an unreasonable hazard to facility operations, or to facility personnel handling the dangerous waste(s) (including, but not limited to, leaking or damaged containers, and improperly labeled containers).

(b) The owner or operator may send the shipment on to the alternate facility designated on the manifest or shipping paper, or contact the generator to identify another facility capable of handling the waste and provide for its delivery to that other facility, unless, the containers are damaged to such an extent, or the dangerous waste is in such a condition as to present a hazard to the public health or the environment in the process of further transportation.

(c) If the dangerous waste shipment cannot leave the facility for the reasons described in (b) of this subsection, then the owner or operator must take those actions described in the contingency plan, WAC 173-303-350 (3)(b).

(6) Within three working days of the receipt of a shipment subject to 40 CFR part 262, subpart H (which is incorporated by reference at WAC 173-303-230(1)), the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460, and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-370, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-370, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-370, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-370, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-370, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-380 Facility recordkeeping. (1) Operating record. The owner or operator of a facility must keep a written operating record at their facility. The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(a) A description of and the quantity of each dangerous waste received or managed on-site, and the method(s) and date(s) of its treatment, storage, or disposal at the facility as required by subsection (2) of this section, recordkeeping instructions;

(b) The location of each dangerous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each dangerous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest;

(c) Records and results of waste analyses, waste determinations (as required by Subpart CC), and trial tests required by WAC 173-303-300, General waste analysis, and by 40 CFR sections 264.1034, 264.1063, 264.1083, 265.1034, 265.1063, 265.1084, 268.4(a), and 268.7;

(d) Summary reports and details of all incidents that require implementing the contingency plan, as specified in WAC 173-303-360 (2)(k);

(e) Records and results of inspections as required by WAC 173-303-320 (2)(d), General inspection (except such information need be kept only for five years);

(f) Monitoring, testing, or analytical data, and corrective action where required by 40 CFR Part 265 Subparts F through R and sections 265.1034 (c) through (f), 265.1035, 265.1063 (d) through (i), 265.1064, and 265.1083 through 265.1090 for interim status facilities, and by WAC 173-303-630 through 173-303-695 and 40 CFR sections 264.1034 (c) through (f), 264.1035, 264.1063 (d) through (i), 264.1064, and 264.1082 through 264.1090 for final status facilities;

(g) All closure and post-closure cost estimates required for the facility;

(h) For off-site facilities, copies of notices to generators informing them that the facility has all appropriate permits, as required by WAC 173-303-290, Required notices;

(i) Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted pursuant to 40 CFR 268.5, a petition pursuant to 40 CFR 268.6, and the applicable notice required by a generator under 40 CFR 268.7(a);

(j) For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required by the generator or the owner or operator under 40 CFR 268.7;

(k) For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required by the generator or the owner or operator under 40 CFR 268.7;

(l) For an off-site land disposal facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator of a treatment facility under 40 CFR 268.7;

(m) For an on-site land disposal facility, the information contained in the notice required by the generator or owner or operator of a treatment facility under 40 CFR 268.7, except for the manifest number;

(n) For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required by the generator or the owner or operator under 40 CFR 268.7;

(o) For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required by the generator or the owner or operator under 40 CFR 268.7;

(p) Any records required under WAC 173-303-280(6); and

(q) A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that they generate to the degree determined by the permittee to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

(2) Recordkeeping instructions. This paragraph provides instructions for recording the portions of the operating record which are related to describing the types, quantities, and management of dangerous wastes at the facility. This information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility, as follows:

(a) Each dangerous waste received, treated, stored, or disposed of at the facility must be described by its common name and by its dangerous waste number(s) from WAC 173-303-080 through 173-303-104. Each listed, characteristic, and criteria waste has its own four-digit dangerous waste number. Where a dangerous waste contains more than one process waste or waste constituent the waste description must include all applicable dangerous waste numbers. If the dan-

gerous waste number is not listed, the waste description must include the process which generated the waste;

(b) The waste description must include the waste's physical form (i.e., liquid, solid, sludge, or contained gas);

(c) The estimated or manifest-reported weight, or volume and density, where applicable, of the dangerous waste must be recorded, using one of the units of measure specified in Table 1, below; and

TABLE 1

Unit of Measure	Code[1]
Gallons	G
Gallons per Hour	E
Gallons per Day	U
Liters	L
Liters per Hour	H
Liters per Day	V
Short tons (2000 lbs)	T
Short Tons per Hour	D
Metric Tons per Hour	W
Short Tons per Day	N
Metric Tons per Day	S
Pounds	P
Pounds per Hour	J
Kilograms	K
Kilograms per Hour	R
Cubic yards	Y
Cubic meters	C
Acres	B
Acres-feet	A
Hectares	Q
Hectare-meter	F
Btu's per Hour	I

Footnote: [1]Single-digit symbols are used here for data processing purposes.

(d) The method(s) (by handling code(s)) of management for each dangerous waste received or managed, and the date(s) of treatment, recycling, storage, or disposal must be recorded, using the handling code(s) specified in Table 2, below.

TABLE 2 - Handling Codes for Treatment, Storage, and Disposal Methods

Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store, or dispose of each quantity of dangerous waste received.

1. Storage
   - S01 Container (barrel, drum, etc.)
   - S02 Tank
   - S03 Waste pile
   - S04 Surface impoundment
   - S05 Drip Pad
   - S06 Containment Building (Storage)
   - S99 Other storage (specify)

2. Treatment
   - (a) Thermal Treatment
   - T06 Liquid injection incinerator
   - T07 Rotary kiln incinerator
   - T08 Fluidized bed incinerator
   - T09 Multiple hearth incinerator
   - T10 Infrared furnace incinerator
   - T11 Molten salt destructor
   - T12 Pyrolysis
   - T13 Wet air oxidation
   - T14 Calcination
   - T15 Microwave discharge
   - T18 Other (specify)
   - (b) Chemical treatment
   - T19 Absorption mound
   - T20 Absorption field
   - T21 Chemical fixation
   - T22 Chemical oxidation
   - T23 Chemical precipitation
   - T24 Chemical reduction
   - T25 Chlorination
   - T26 Chlorinolysis
   - T27 Cyanide destruction
   - T28 Degradation
   - T29 Detoxification
   - T30 Ion exchange
   - T31 Neutralization
   - T32 Ozonation
   - T33 Photolysis
   - T34 Other (specify)
   - (c) Physical treatment
   - (i) Separation of components
   - T35 Centrifugation
   - T36 Clarification
   - T37 Coagulation
   - T38 Decanting
   - T39 Encapsulation
   - T40 Filtration
   - T41 Flocculation
   - T42 Flotation
   - T43 Foaming
   - T44 Sedimentation
   - T45 Thickening
   - T46 Ultrafiltration
   - T47 Other (specify)
   - (ii) Removal of specific components
   - T48 Absorption-molecular sieve
   - T49 Activated carbon
   - T50 Blending
   - T51 Catalysis
   - T52 Crystallization
   - T53 Dialysis
   - T54 Distillation
   - T55 Electrodialysis
   - T56 Electrolysis
   - T57 Evaporation
   - T58 High gradient magnetic separation
   - T59 Leaching
   - T60 Liquid ion exchange
   - T61 Liquid-liquid extraction
   - T62 Reverse osmosis
   - T63 Solvent recovery
   - T64 Stripping
   - T65 Sand filter
   - T66 Other (specify)
   - (d) Biological treatment
   - T67 Activated sludge

T68 Aerobic lagoon
T69 Aerobic tank
T70 Anaerobic tank
T71 Composting
T72 Septic tank
T73 Spray irrigation
T74 Thickening filter
T75 Trickling filter
T76 Waste stabilization pond
T77 Other (specify)
T78-79 (Reserved)
(e) Boilers and industrial furnaces
T80 Boiler
T81 Cement kiln
T82 Lime kiln
T83 Aggregate kiln
T84 Phosphate kiln
T85 Coke oven
T86 Blast furnace
T87 Smelting, melting, or refining furnace
T88 Titanium dioxide chloride process oxidation reactor
T89 Methane reforming furnace
T90 Pulping liquor recovery furnace
T91 Combustion device used in the recovery of sulfur values from spent sulfuric acid
T92 Halogen acid furnaces
T93 Other industrial furnaces listed in WAC 173-303-040 (specify)
(f) Other treatment
T94 Containment building (treatment)

3. Disposal
D79 Underground injection
D80 Landfill
D81 Land treatment
D82 Ocean disposal
D83 Surface impoundment (to be closed as a landfill)
D99 Other disposal (specify)

4. Miscellaneous (Subpart X)
X01 Open burning/open detonation
X02 Mechanical processing
X03 Thermal unit
X04 Geologic repository
X99 Other Subpart X (specify)

(3) Availability, retention and disposition of records.

(a) All facility records, including plans, required by this chapter must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of the department who is designated by the director.

(b) The retention period for all facility records required under this chapter is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the director.

(c) A copy of records of waste disposal locations and quantities under this section must be submitted to the United States EPA regional administrator, the department, and the local land use and planning authority upon closure of the facility.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-380, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-380, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-380, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-380, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-380, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-380, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-380, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-380, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-380, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-390 Facility reporting. The owner or operator of a facility is responsible for preparing and submitting the reports described in this section.

(1) Unmanifested waste reports. If a facility accepts any dangerous waste from an off-site source without an accompanying manifest or shipping paper, and if the waste is not excluded from the manifest requirements of this chapter 173-303 WAC, then the owner or operator must prepare and submit a single copy of a report to the department within fifteen days after receiving the waste. The report form and instructions in the Unmanifested Dangerous Waste Report must be used for this report. The report must include at least the following information:

(a) The EPA/state identification number, name, and address of the facility;

(b) The date the facility received the waste;

(c) The EPA/state identification number, name, and address of the generator and the transporter, if available;

(d) A description and the quantity of each unmanifested dangerous waste the facility received;

(e) The method of management for each dangerous waste;

(f) The certification signed by the owner or operator of the facility or his authorized representative; and

(g) A brief explanation of why the waste was unmanifested, if known.

(2) Annual reports. The owner or operator of a facility that holds an active EPA/state identification number must prepare and submit a single copy of an annual report to the department by March 1 of each year. The report form and instructions in the Dangerous Waste Annual Report (which may be obtained from the department) must be used for this report. In addition, any facility which ships dangerous waste off-site must comply with the annual reporting requirements of WAC 173-303-220. The annual report must cover facility activities during the previous calendar year and must include, but is not limited to the following information:

(a) The EPA/state identification number, name, and address of the facility;

(b) The calendar year covered by the report;

(c) For off-site facilities, the EPA/state identification number of each dangerous waste generator from which the facility received a dangerous waste during the year. For

imported shipments, the report must give the name and address of the foreign generator;

(d) A description and the quantity of each dangerous waste the facility received during the year. For off-site facilities, this information must be listed by EPA/state identification number of each generator;

(e) The method of treatment, storage, or disposal for each dangerous waste;

(f) The most recent closure cost estimate under WAC 173-303-620(3) (or 40 CFR 265.142 for interim status facilities), and for disposal facilities, the most recent post-closure cost estimate under WAC 173-303-620(5) (or 40 CFR 265.144 for interim status facilities);

(g) For generators who treat, store, or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;

(h) For generators who treat, store, or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984; and

(i) The certification signed in accordance with the requirements of WAC 173-303-810(12).

(3) Additional reports. The owner or operator must report to the department:

(a) Releases of dangerous wastes, fires, and explosions as specified in WAC 173-303-360 (2)(k);

(b) Interim status ground water monitoring data, as specified in 40 CFR 265.94 (a)(2) and (b)(2);

(c) Facility closures specified in WAC 173-303-610(6); and

(d) As otherwise required by WAC 173-303-645 through 173-303-665, WAC 173-303-690 through 173-303-692, and WAC 173-303-400.

The owner or operator must also submit any other reports (including engineering reports, plans, and specifications) required by the department.

(4) Recordkeeping. The owner/operator of a facility must keep a copy of all unmanifested waste reports, annual reports, and any other reports submitted to the department according to the requirements of this section for a period of three years from the date the report was submitted. Note that some records must be kept until closure of the facility as otherwise required under WAC 173-303-380.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-390, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-390, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-390, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-390, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-390, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-390, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-390, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-390, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-390, filed 2/10/82.]

WAC 173-303-395 Other general requirements. (1) Precautions for ignitable, reactive, or incompatible wastes.

(a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including, but not limited to, open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to specially designated locations. "No smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(b) Where specifically required by other sections of this chapter 173-303 WAC, the treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

(i) Generate extreme heat or pressure, fire or explosion, or violent reaction;

(ii) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;

(iii) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(iv) Damage the structural integrity of the facility or device containing the waste; or

(v) Through other like means, threaten human health or the environment.

(c) When required to comply with (a) and (b) of this subsection, the owner or operator must document that compliance in the operating record required under WAC 173-303-380(1). This documentation may be based on references to published scientific or engineering literature, data from trial tests, waste analyses, or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

(d) At least yearly, the owner or operator must inspect those areas of his facility where ignitable or reactive wastes are stored. This inspection must be performed in the presence of a professional person who is familiar with the International Fire Code, or in the presence of the local, state, or federal fire marshal. The owner or operator must enter the following information in his inspection log or operating record as a result of this inspection:

(i) The date and time of the inspection;

(ii) The name of the professional inspector or fire marshal;

(iii) A notation of the observations made; and

(iv) Any remedial actions which were taken as a result of the inspection.

(2) Compliance with other environmental protection laws and regulations. In receiving, storing, handling, treating, processing, or disposing of dangerous wastes, the owner/operator must design, maintain and operate his dangerous waste facility in compliance with all applicable federal, state and local laws and regulations (e.g., control of stormwater or sanitary water discharge, control of volatile air emissions, etc.).

(3) Reserve.

(4) Loading and unloading areas. TSD facilities which receive or ship manifested shipments of liquid dangerous waste for treatment, storage or disposal must provide for and use an area (or areas) for loading and unloading waste shipments. The loading and unloading area(s) must be designed, constructed, operated and maintained to:

(a) Contain spills and leaks that might occur during loading or unloading;

(b) Prevent release of dangerous waste or dangerous waste constituents to ground or surface waters;

(c) Contain wash waters (if any) resulting from the cleaning of contaminated transport vehicles and load/unload equipment; and

(d) Allow for removal, as soon as possible, of collected wastes resulting from spills, leaks and equipment cleaning (if any) in a manner which assures compliance with (b) of this subsection.

(5) Storage time limit for impoundments and piles.

(a) Except as provided in (b) or (c) of this subsection, dangerous waste may not be stored in a surface impoundment or waste pile for more than five years after the waste was first placed in the impoundment or pile. For the purposes of this requirement, the five-year limit, for waste regulated under this chapter and being stored in impoundments or piles on the effective date of this requirement, will begin on August 1, 1984. The age of stored wastes must be determined on a monthly basis.

The owner/operator of a surface impoundment or waste pile used for storing dangerous waste must develop a written plan, to be kept at the facility, for complying with the five-year storage limit. The plan must describe the operating conditions, waste identification procedures (for keeping track of the age of the wastes), and a waste removal schedule, and at a minimum the plan must include the following elements:

(i) Methods for identifying the age of dangerous wastes placed in the impoundment or pile;

(ii) Where practical, procedures for segregating wastes of different ages. If the wastes cannot be practically segregated, then the age of all wastes placed in the impoundment or pile must be deemed the same age as the oldest waste in the impoundment or pile;

(iii) A schedule for removing dangerous waste from the impoundment or pile, or for disposing of them in a timely manner to assure compliance with the five-year limit;

(iv) A description of the actions to be taken according to the schedule required by (a)(iii) of this subsection;

(v) Procedures for noting in the operating record required by WAC 173-303-380(1) that the requirements of this subsection have been satisfied; and

(vi) Such other requirements as the department specifies.

(b) If the owner/operator of a surface impoundment or waste pile can develop a written plan and schedule for developing and implementing a recycling or treatment process for the wastes stored in his impoundment or pile, then the department may grant an extension to the storage time limit required in (a) of this subsection. Such extension will be granted only once, will only apply to those dangerous wastes covered by the recycling or treatment plan and which are less than five years old on the date that the plan is approved by the department, and will not exceed five years: Provided, That on a case-by-case basis the department may grant an extension of longer than five years, but in no case will any extension be granted for longer than ten years, if the owner/operator of the impoundment or pile can demonstrate to the department's satisfaction that an extension of more than five years will not pose a threat to public health or the environment, and is necessary because: Other treatment or recycling options of shorter durations are not available; the treatment or recycling plan developed by the owner/operator cannot be implemented within five years due to technological circumstances; or, such other reasons as are determined acceptable by the department. Until the department grants the extension by approving the recycling or treatment plan, the owner/operator must continue to comply with the requirements of (a) of this subsection. The recycling or treatment plan and schedule, at a minimum, must:

(i) Specify the wastes which will be recycled or treated in accordance with the plan;

(ii) Describe in detail the recycling or treatment which the owner/operator intends to perform. If the recycling or treatment will involve physical changes to the owner's/operator's facility, the plan must include descriptions of all necessary equipment, processes to be used, site plans, and maps to show any new structures, pipes, channels, waste handling areas, roads, etc.;

(iii) Discuss any permit actions (including issuance or modification) necessary under this chapter, and any other permits which will be required under other federal, state or local laws;

(iv) Establish a schedule for complying with the plan. The schedule must, at a minimum, cover:

(A) The rate at which wastes will be recycled or treated in order to comply with the extension granted by the department;

(B) Construction and equipment installation times as appropriate;

(C) Timing for complying with all required permit actions; and

(D) Such other elements as the department might require;

(v) Describe how the owner/operator will continue to comply with the requirements of (a) of this subsection for all wastes not specified in (b)(i) of this subsection;

(vi) Identify any future occurrences or situations which the owner/operator could reasonably expect to occur and which might cause him to fail to comply with his recycling or treatment plan. The owner/operator must also describe what actions he would take in the event that such occurrences or situations happen;

(vii) Be approved by the department. The plan may not be implemented until it is approved by the department including, if necessary, issuance or modification of a facility permit as required by this chapter. Any extension granted by the department will begin on the date that the plan is approved, or the date five years after the effective date of this subsection, whichever is later; and

(viii) Include any other elements that the department might require.

(c) The owner/operator of a surface impoundment or waste pile is exempted from the requirements of (a) and (b) of this subsection if:

(i) The owner/operator of a surface impoundment or waste pile can demonstrate to the department's satisfaction that the impoundment or pile is not used primarily for storage, but that it is primarily used to actively and effectively neutralize, detoxify, or other wise treat dangerous waste; or

(ii) The owner/operator of a surface impoundment or waste pile can demonstrate to the department's satisfaction that dangerous waste is removed on a frequent basis (at least four times a year) for treatment, recycling or disposal, provided that the amount of waste removed during any five-year period must equal or exceed the amount of waste placed in the impoundment or pile during that five-year period. However, this exemption does not apply to waste removal which is being performed pursuant to a recycling or treatment plan developed and approved under (b) of this subsection; or

(iii) The owner/operator of a surface impoundment or waste pile has demonstrated, through his permit, closure plan or other instrument, that the impoundment or pile is being operated as a land disposal unit and that it will be closed as a landfill.

(6) Labeling for containers and tanks. The owner or operator must label containers and tanks in a manner which adequately identifies the major risk(s) associated with the contents for employees, emergency response personnel and the public (Note—If there is already a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate). The owner or operator must ensure that labels are not obscured, removed, or otherwise unreadable in the course of inspection required under WAC 173-303-320. For tanks, the label or sign must be legible at a distance of at least fifty feet. For containers, the owner or operator must affix labels upon transfer of dangerous waste from one container to another. The owner or operator must destroy or otherwise remove labels from the emptied container, unless the container will continue to be used for storing dangerous waste at the facility.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-395, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-395, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-395, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-395, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-395, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.-260. 82-05-023 (Order DE 81-33), § 173-303-395, filed 2/10/82.]

WAC 173-303-400 Interim status facility standards. (1) Purpose. The purpose of WAC 173-303-400 is to establish standards which define the acceptable management of dangerous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.

(2) Applicability.

(a) Except as provided in 40 CFR 265.1080(b), the interim status standards apply to owners and operators of facilities that treat, store, transfer, and/or dispose of dangerous waste. For purposes of this section, interim status applies to all facilities that comply fully with the requirements for interim status under Section 3005(e) of the Federal Resource Conservation and Recovery Act or WAC 173-303-805. The interim status standards also apply to those owners and operators of facilities in existence on November 19, 1980, for RCRA wastes and those facilities in existence on August 9, 1982, for state only wastes who have failed to provide the required notification pursuant to WAC 173-303-060 or failed to file Part A of the permit application pursuant to WAC 173-303-805 (4) and (5). Interim status will end after final administrative disposition of the Part B permit application is completed, or may be terminated for the causes described in WAC 173-303-805(8).

(b) Interim status facilities must meet the interim status standards by November 19, 1980, except that:

(i) Interim status facilities which handle only state designated wastes (i.e., not designated by 40 CFR Part 261) must meet the interim status standards by August 9, 1982; and

(ii) Interim status facilities must comply with the additional state interim status requirements specified in subsection (3)(c)(ii), (iii) and (v), of this section, by August 9, 1982.

(c) The requirements of the interim status standards do not apply to:

(i) Persons disposing of dangerous waste subject to a permit issued under the Marine Protection, Research and Sanctuaries Act;

(ii) Reserved;

(iii) The owner or operator of a POTW who treats, stores, or disposes of dangerous wastes, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(4);

(iv) The owner or operator of a totally enclosed treatment facility or elementary neutralization or wastewater treatment units as defined in WAC 173-303-040, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(5);

(v) Generators accumulating waste for less than ninety days except to the extent WAC 173-303-200 provides otherwise;

(vi) The addition, by a generator, of absorbent material to waste in a container, or of waste to absorbent material in a container, provided that these actions occur at the time the waste is first placed in containers or, in the case of repackaging of previously containerized waste into new containers, at the time the waste is first placed into the new containers and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(vii) The compaction or sorting, by a generator, of miscellaneous waste forms such as cans, rags, and bottles in a container, so long as the activity is solely for the purpose of reducing waste void space, and so long as these activities are conducted in a manner that protects human health and prevents any release to the environment and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(viii) Generators treating dangerous waste on-site in tanks, containers, or containment buildings that are used for accumulation of such wastes provided the generator complies with the WAC 173-303-170(3);

(ix) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in WAC 173-303-040, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in 40 CFR section 268.40, Table Treatment Standards for Hazardous Wastes), or reac-

tive (D003) waste, to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in WAC 173-303-395 (1)(a); and

(x) Any person, other than an owner or operator who is already subject to the final facility standards, who is carrying out an immediate or emergency response to contain or treat a discharge or potential discharge of a dangerous waste or hazardous substance.

(xi) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) handling the wastes listed below. These handlers are subject to regulation under WAC 173-303-573, when handling the below listed universal wastes.

(A) Batteries as described in WAC 173-303-573(2);

(B) Thermostats as described in WAC 173-303-573(3);

(C) Mercury-containing equipment as described in WAC 173-303-573(4); and

(D) Lamps as described in WAC 173-303-573(5).

(xii) WAC 173-303-578 identifies when the requirements of this section apply to the storage of military munitions classified as solid waste under WAC 173-303-578(2). The treatment and disposal of dangerous waste military munitions are subject to the applicable permitting, procedural, and technical standards in this chapter.

(xiii)(A) Except as provided in (c)(xiii)(B) of this subsection, a person engaged in treatment or containment activities during immediate response to any of the following situations:

(I) A discharge of a dangerous waste;

(II) An imminent and substantial threat of a discharge of dangerous waste;

(III) A discharge of a material that, when discharged, becomes a dangerous waste;

(IV) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in WAC 173-303-040.

(B) An owner or operator of a facility otherwise regulated by WAC 173-303-600 must comply with all applicable requirements of WAC 173-303-340 and 173-303-350.

(C) Any person who is covered by (c)(xiii)(A) of this section and who continues or initiates dangerous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(D) In the case of an explosives or munitions emergency response, if a federal, state, tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA/state identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

(3) Standards.

(a) Interim status standards are the standards set forth by the Environmental Protection Agency in 40 CFR Part 265 Section 265.19 of Subpart B, Subparts F through R, Subpart W, Subparts AA, BB, CC (including references to 40 CFR Parts 60, 61, and 63), DD, EE, and Appendix VI, which are incorporated by reference into this regulation (including, by reference, any EPA requirements specified in those subparts which are not otherwise explicitly described in this chapter), and:

(i) The land disposal restrictions of WAC 173-303-140; the facility requirements of WAC 173-303-280 through 173-303-440 except WAC 173-303-335; and the corrective action requirements of WAC 173-303-646;

(ii) WAC 173-303-630(3), for containers. In addition, for container storage, the department may require that the storage area include secondary containment in accordance with WAC 173-303-630(7), if the department determines that there is a potential threat to public health or the environment due to the nature of the wastes being stored, or due to a history of spills or releases from stored containers. Any new container storage areas constructed or installed after September 30, 1986, must comply with the provisions of WAC 173-303-630(7).

(iii) WAC 173-303-640 (5)(d), for tanks; and

(iv) WAC 173-303-805.

(b) For purposes of applying the interim status standards of 40 CFR Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, CC, DD, and EE to the state of Washington facilities, the federal terms have (and in the case of the wording used in the financial instruments referenced in Subpart H of Part 265, must be replaced with) the following state of Washington meanings:

(i) "Regional administrator" means the "department" except for 40 CFR Parts 270.2; 270.3; 270.5; 270.10 (e)(1), (2) and (4); 270.10 (f) and (g); 270.11 (a)(3); 270.14 (b)(20); 270.32 (b)(2); and 270.51;

(ii) "Hazardous" means "dangerous" except for Subparts AA, BB, CC, and DD. These subparts apply only to hazardous waste as defined in WAC 173-303-040;

(iii) "Compliance procedure" has the meaning set forth in WAC 173-303-040, Definitions;

(iv) "EPA hazardous waste numbers" mean "dangerous waste numbers."

(c) In addition to the changes described in (b) of this subsection, the following modifications are made to interim status standards of 40 CFR Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, CC, DD, and EE:

(i) The words "the effective date of these regulations" means:

(A) November 19, 1980, for facilities which manage any wastes designated by 40 CFR Part 261;

(B) For wastes which become designated by 40 CFR Part 261 subsequent to November 19, 1980, the effective date is the date on which the wastes become regulated;

(C) March 12, 1982, for facilities which manage wastes designated only by WAC 173-303-080 through 173-303-100 and not designated by 40 CFR Part 261;

(D) For wastes which become designated only by WAC 173-303-080 through 173-303-100 and not designated by 40 CFR Part 261 subsequent to March 12, 1982, the effective date is the date on which the wastes become regulated.

(ii) "Subpart N - landfills" has an additional section added which reads: "An owner/operator must not landfill an organic carcinogen or an EHW, as defined by WAC 173-303-080 through 173-303-100, except at the EHW facility at Hanford";

(iii) "Subpart R - underground injection" has an additional section which reads: "Owners and operators of wells are prohibited from disposing of EHW or an organic carcinogen designated under WAC 173-303-080 through 173-303-100";

(iv) "Subpart M - land treatment," section 265.273(b) is modified to replace the words "Part 261, Subpart D of this chapter" with "WAC 173-303-080";

(v) "Subpart F - ground water monitoring," section 265.91(c) includes the requirement that: "Ground water monitoring wells must be designed, constructed, and operated so as to prevent ground water contamination. Chapter 173-160 WAC may be used as guidance in the installation of wells";

(vi) "Subpart H - financial requirements" has an additional section which reads: "Any owner or operator who can provide financial assurances and instruments which satisfy the requirements of WAC 173-303-620 will be deemed to be in compliance with 40 CFR Part 265 Subpart H." In 40 CFR Parts 265.143(g) and 265.145(g) the following sentence does not apply to the state: "If the facilities covered by the mechanisms are in more than one Region, identical evidence of financial assurance must be submitted to, and maintained with the Regional Administrators of all such Regions." Instead, the following sentence applies: "If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state." In addition, the following sections and any cross-reference to these sections are not incorporated by reference: 40 CFR Parts 265.149 and 265.150; and

(vii) "Subpart J - tank systems" section 265.193(a) is modified so that the dates by which secondary containment (which meets the requirements of that section) must be provided are the same as the dates in WAC 173-303-640 (4)(a).

(viii) "Subpart J - tank systems" section 265.191(a) is modified so that the date by which an assessment of a tank system's integrity must be completed is January 12, 1990.

(ix) "Subpart G - closure and post-closure." The third sentence in section 265.112 (d)(1) is modified to read "The owner or operator must submit the closure plan to the department at least 45 days prior to the date on which they expect to begin closure of a tank, container storage, or incinerator unit, or final closure of a facility with only such units." In addition, the sixth sentence of section 265.112 (d)(1) is modified to read "Owners or operators with approved closure plans must notify the department in writing at least 45 days prior to the date on which they expect to begin closure of a tank, container storage, or incinerator unit, or final closure of a facility with only such units." The first sentence of section 265.115 is modified to read "Within 60 days of completion of closure of each dangerous waste management unit (including tank systems and container storage areas) and within 60 days of completion of final closure, the owner or operator must submit to the department, by registered mail, a certification that the dangerous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan." In addition, the clean-up levels for removal or decontamination set forth at WAC 173-303-610 (2)(b) apply.

(x) "Subpart B - general facility standards. References to "EPA" (etc.), means the "department" except at 40 CFR 265.11. Additionally, references to "administrator" (etc.), means the "director" except at 40 CFR 265.12(a)."

(xi) The following sections and any cross-reference to these sections are not incorporated or adopted by reference:

(A) 40 CFR Parts 260.1 (b)(4)-(6) and 260.20-22.

(B) 40 CFR Parts 264.1 (d) and (f); 265.1 (c)(4); 264.149-150 and 265.149-150; 264.301(k); and 265.430.

(C) 40 CFR Parts 268.5 and 6; 268 Subpart B; 268.42(b); and 268.44 (a) through (g).

(D) 40 CFR Parts 270.1 (c)(1)(i); 270.60(b); and 270.64.

(E) 40 CFR Parts 124.1 (b)-(e); 124.4; 124.5(e); 124.9; 124.10 (a)(1)(iv); 124.12(e); 124.14(d); 124.15 (b)(2); 124.16; 124.17(b); 124.18; 124.19; and 124.21.

(F) 40 CFR Parts 2.106(b); 2.202(b); 2.205(i); 2.209 (b)-(c); 2.212-213; and 2.301-311.

(G) 40 CFR 265.110(c), 40 CFR 265.118 (c)(4), 40 CFR 265.121 and 40 CFR 265.1080 (e) and (f).

(xii) "Subpart EE - Hazardous waste munitions and explosives storage." The first sentence at 40 CFR 265.1202 is modified to exclude the exception for hazardous wastes managed under 261.3(d).

(4) The requirements of this section apply to owners or operators of all facilities that treat, store or dispose of hazardous waste referred to in 40 CFR Part 268, and the 40 CFR Part 268 standards are considered material conditions or requirements of the interim status standards incorporated by reference in subsection (3) of this section.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-400, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-400, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-400, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-400, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-400, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-400, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-400, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-400, filed 1/4/89; 88-02-057 (Order DE 83-36), § 173-303-400, filed 1/5/88, effective 2/5/88; 87-14-029 (Order DE-87-4), § 173-303-400, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-400, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-400, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-400, filed 2/10/82.]

WAC 173-303-430 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-430, filed 3/11/88; 84-09-088 (Order DE 83-36), § 173-303-430, filed 4/18/84.]

WAC 173-303-440 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 88-07-039 (Order 87-37), § 173-303-440, filed 3/11/88; 84-09-088 (Order DE 83-36), § 173-303-440, filed 4/18/84.]

WAC 173-303-500 Recycling requirements for state-only dangerous waste. (1) Applicability. This section applies to the recycling of state-only dangerous waste that are not regulated as hazardous wastes (defined in WAC 173-303-040) by EPA. (Also, see WAC 173-303-120 (3) and (5).)

(2) Standards.

(a) If state-only dangerous wastes are recycled in any of the ways described in WAC 173-303-505 through 173-303-525, then such recycling is subject to the respective requirements of WAC 173-303-505 through 173-303-525, except as provided in (c) of this subsection.

(b) If state-only dangerous wastes are recycled in any way not specifically described in WAC 173-303-505 through 173-303-525, then such recycling is subject to the requirements of WAC 173-303-120(4), except as provided in (c) of this subsection.

(c) Recyclers who receive state-only dangerous wastes from off-site and who store the wastes in containers or tanks may, in lieu of the provisions for storing dangerous wastes prior to recycling, comply with:

(i) WAC 173-303-060;

(ii) WAC 173-303-370 (if the dangerous waste received must be accompanied by a manifest); and

(iii) The following requirements, provided that the dangerous waste is recycled within ninety days of the date it is received by the recycler:

(A) WAC 173-303-330 through 173-303-360;

(B) WAC 173-303-630 (2), (3), (4), (5), (6), (8) and (9), for containers;

(C) WAC 173-303-640 (3), (4), (5), (6) and (7), for tanks; and

(D) WAC 173-303-630(7) for new container areas installed after September 30, 1986, and WAC 173-303-640(2) for new tanks installed after September 30, 1986.

(d) The department may require a recycler who is storing his waste under the provisions of (c) of this subsection to comply with the provisions for storing dangerous waste prior to recycling specified in WAC 173-303-505 through 173-303-525 and 173-303-120(4) if:

(i) The recycler fails to comply with the requirements of (c) of this subsection; or

(ii) The department determines, on a case-by-case basis, that the requirements of (c) of this subsection do not adequately protect public health or the environment.

(3) Relief from standards. The owner/operator of a facility recycling dangerous wastes under the provisions of this section may ask the department to provide relief from any of the applicable requirements of this section. Requests for relief must be submitted as described in (a) of this subsection. Requests for relief will be approved or denied as described in (b) of this subsection.

(a) A request for relief must be submitted by the recycler to the department in writing and must describe the standards from which the recycler is seeking relief. The request must include:

(i) The facility name, EPA/state identification number, address, telephone number, and a contact person at the facility;

(ii) The waste(s) managed at the facility and the type(s) recycling;

(iii) The specific standards from which the owner/operator seeks relief;

(iv) A description, for each standard, demonstrating:

(A) Why the owner/operator believes the standard to be unnecessary;

(B) How public health and the environment will continue to be protected if the standard is not applied to the facility; and

(C) Any evidence supporting the contention that public health and the environment will be adequately protected if the standard is not applied (e.g., test data, diagrams, experiences at similar facilities, records, reports, etc.); and

(v) The following certification, signed and dated by a person who would be authorized to sign a report under WAC 173-303-810 (12)(b):

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this request and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The department may ask for any additional information it deems necessary, and will not consider approval of the owner's/operator's request until all necessary information has been submitted. Failure to provide any of the information required may result in the department's denying the owner's/operator's request.

(b) The department will review any requests submitted pursuant to (a) of this subsection, and based on the adequacy of the information provided in the request will approve or deny all or any part of the request. The department will notify the recycler of its decision in writing. If the department decides to approve all or part of the request and the recycler agrees with the department's decision, then the department will proceed to grant the approval as described below. No approval will be effective until the procedures described below have been completed.

(i) For facilities which are required to have a final facility permit, the department will follow the procedures for issuing (or, for facilities which already have a final facility permit, the procedures for modifying) a final facility permit, as described in WAC 173-303-806. The new or modified final facility permit will include the standards the owner/operator must meet.

(ii) For all other types of recycling facilities, the department will issue a notice of modification stating what standards will be applied. Before issuing the notice of modification, the department will provide public notice of its intent, will allow thirty days for public comment, and will hold a public hearing if there is a significant degree of public interest or there is written notice of opposition and the department receives a request for a hearing during the comment period. Notice of a public hearing will be provided at least fifteen days in advance, and the public comment period will be

extended to include the date of the hearing if it will occur after the initial thirty-day comment period. Within fifteen days of the end of the public comment period the department will, based on comments received, issue, modify and issue, or deny the notice of modification.

(c) Failure to comply with the conditions and standards as stated in the permit or notice of modification issued under (b) of this subsection will form a basis for modifying or revoking the permit or notice of modification.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-500, filed 3/13/03, effective 4/13/03; 95-22-008 (Order 94-30), § 173-303-500, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-500, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-500, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-500, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-500, filed 2/10/82.]

WAC 173-303-505 Special requirements for recyclable materials used in a manner constituting disposal. (1) Applicability. (Also, see WAC 173-303-120(3).)

(a) This section applies to recyclable materials that are applied to or placed on the land:

(i) Without mixing with any other substance(s); or

(ii) After mixing or combining with any other substance(s). These materials will be referred to as "materials used in a manner that constitutes disposal."

(b)(i) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if the recyclable materials have undergone a chemical reaction in the course of producing the product so as to become inseparable by physical means and if such products meet the applicable treatment standards in 40 CFR Part 268 Subpart D (or applicable prohibition levels in 268.32 or RCRA section 3004(d), where no treatment standards have been established) for each recyclable material (i.e., hazardous waste) that they contain.

(ii) Antiskid/deicing uses of slags, which are generated from high temperature metals recovery (HTMR) processing of dangerous waste K061, K062, and F006, in a manner constituting disposal are not covered by the exemption in (b)(i) of this subsection and remain subject to regulation.

(iii) Fertilizers that contain recyclable materials are not subject to regulation provided that:

(A) They are zinc fertilizers excluded according to WAC 173-303-071 (3)(pp); or

(B) They meet the applicable treatment standards in subpart D of Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a) for each hazardous waste that they contain.

(Note: Fertilizers that contain recyclable material derived from state-only waste must also meet the treatment standards in WAC 173-303-140 (2)(a) that apply to the characteristics of dangerous waste that the state-only waste exhibits.)

(iv) The department may recommend registration under chapter 15.54 RCW for a waste-derived fertilizer (including fertilizers that contain recyclable material) or micronutrient fertilizer: Provided, That the registrant submits the information described in (b)(v)(A) or (B) of this subsection. However, the information requirements in (b)(v)(A) of this subsection may not be required if: The registrant provides documentation that the fertilizer has been previously registered in Washington state two or more times using the information in (b)(v)(A) of this subsection, and the source materials used to manufacture the product have not changed.

(A) Initial criteria.

(I) The applicable Land Disposal Restriction (LDR) Certification as described in 40 CFR Part 268, or toxicity characteristic leaching procedure (TCLP) data that indicate the product contains less than the maximum concentrations for TCLP metals described in WAC 173-303-090(8); and

(II) Total Halogenated Organic Compounds (HOC) test data that indicate the product contains less than 1% total HOC.

(B) Secondary criteria.

(I) A complete description of the fertilizer manufacturing process, including the location of the manufacturing facility; and

(II) A complete list of all ingredients used in manufacturing the fertilizer and a complete description of the sources of those ingredients, including a description of the original process and location for each of those ingredients; and

(III) Evidence that any waste(s) used in manufacturing the product does not designate as dangerous waste according to procedures described in WAC 173-303-070; and

(IV) Other information as required by the department.

(2) Recyclable materials used in a manner that constitutes disposal are dangerous wastes and are subject to the following requirements:

(a) For generators, WAC 173-303-170 through 173-303-230;

(b) For transporters, WAC 173-303-240 through 173-303-270; and

(c) For facilities that store or use dangerous wastes in a manner constituting disposal, the applicable requirements of 40 CFR Part 268 (incorporated by reference in WAC 173-303-140 (2)(a)) and 173-303-280 through 173-303-840 (except that users of such products are not subject to these standards if the products meet the requirements of subsection (1)(b) of this section).

(d) The use of waste oil, used oil, or other material that is contaminated with dioxin or any other dangerous waste for dust suppression or road treatment is prohibited.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-505, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-505, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-505, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-505, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-505, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-505, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-505, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-505, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-505, filed 4/18/84.]

WAC 173-303-506 Special requirements for the recycling of spent CFC or HCFC refrigerants. (1) Applicability. (Also, see WAC 173-303-120(3).)

(a) This section applies to spent chlorofluorocarbon (CFC) and hydrochlorofluorocarbon (HCFC) refrigerants that are reclaimed or recycled. Refrigerants eligible for these special requirements are those CFCs and HCFCs that were used as heat transfer material in a refrigeration cycle in totally enclosed heat transfer equipment and are subsequently reclaimed or recycled.

(b) Persons who generate, transport, or store spent CFC or HCFC refrigerants prior to reclamation or recycling and facilities that reclaim or recycle spent CFC or HCFC refrigerants are subject to the requirements of this section, and WAC 173-303-050, 173-303-145, and 173-303-960. Spent CFC or HCFC refrigerants that are not reclaimed or recycled are subject to all the applicable requirements of chapter 173-303 WAC. Any discharge of spent CFCs or HCFCs to the environment constitutes disposal and is subject to full regulation under chapter 173-303 WAC.

(2) Generator requirements.

(a) Persons who reclaim or recycle their spent CFC or HCFC refrigerants, either on-site or send their wastes off-site to be reclaimed or recycled, must keep records for a period of at least five years from the date of reclamation/recycling to document:

(i) The date of shipment (if sent off-site);

(ii) The quantity (by weight) reclaimed/recycled per shipment (when sent off-site) or batch (when recycled on-site);

(iii) The percentage of the total amount of CFC or HCFC wastes reclaimed/recycled per shipment or batch (and the manner of disposal for the remaining CFCs or HCFCs); and

(iv) The dates of reclamation/recycling.

(b) For CFCs or HCFCs sent off-site, the generator must obtain a signed document from the reclamation facility certifying the information in (a) of this subsection.

(3) Reclamation facility requirements.

(a) Facilities that reclaim or recycle CFC or HCFC refrigerants must comply with all the requirements of WAC 173-303-500 (except for WAC 173-303-500 (2)(c)(ii)). The applicable provisions of the following sections will also apply:

(i) WAC 173-303-280(2), General requirements for dangerous waste management facilities, imminent hazard;

(ii) WAC 173-303-283, Performance standards;

(iii) WAC 173-303-290 (1) and (2), Required notices;

(iv) WAC 173-303-380, Facility recordkeeping; except for WAC 173-303-380 (1)(c), (e), and (h);

(v) WAC 173-303-390(3), Facility reporting;

(vi) WAC 173-303-630(10), Use and management of containers;

(vii) WAC 173-303-640 (1), (2), (8), and (10), Tank systems, except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a) (i.e., a recycler, unless otherwise required to do so, does not have to prepare a closure plan, a cost estimate for closure, or provide financial responsibility for his tank system to satisfy the requirements of this section).

(b) The reclamation facility must supply generators with a signed document certifying the information in subsection (2)(a) of this section.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-506, filed 3/13/03, effective 4/13/03; 95-22-008 (Order 94-30), § 173-303-506, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 93-02-050 (Order 92-32), § 173-303-506, filed 1/5/93, effective 2/5/93.]

WAC 173-303-510 Special requirements for dangerous wastes burned for energy recovery. (1) Applicability. (Also, see WAC 173-303-120(3).)

(a) This section applies to generators, marketers, transporters, blenders, and burners of dangerous waste fuels that are to be burned for energy recovery in any boiler or industrial furnace that is not regulated under Subpart O of 40 CFR Part 265 or WAC 173-303-670, except as provided by (b) of this subsection. These regulations do not apply to gas recovered from dangerous waste management activities when such gas is burned for energy recovery. Note: (This note is a reminder that all generators, transporters, and burners of federally regulated hazardous waste fuels that are to be burned for energy recovery, and all storage facility owners and operators of facilities that store dangerous waste that is burned in a boiler or industrial furnace must comply with the requirements of 40 CFR Part 266 Subpart H.) In addition, the following are incorporated by reference for boilers and industrial furnaces that burn hazardous waste: 40 CFR 266.100 (b)(1), 266.100 (d)(1), 266.100 (d)(3) intro, and 266.100(h)).

(b) The following dangerous wastes are not subject to regulation under this section:

(i) Used oil burned for energy recovery if it is a dangerous waste because it:

(A) Exhibits a characteristic of dangerous waste identified in WAC 173-303-090; or

(B) Is designated as DW only (and not EHW) through the criteria of WAC 173-303-100.

Such used oil is subject to regulation under WAC 173-303-515 rather than this section.

Note: Used oil burned for energy recovery containing a listed waste or a waste designated as EHW through the criteria of WAC 173-303-100 (a) and (b) is subject to this section.

(ii) (Reserved.)

(2) Definitions. Any terms used in this section that are not defined below have the meanings provided in WAC 173-303-040. For the purposes of this section, the following terms have the described meanings:

(a) "Dangerous waste fuel" means dangerous waste burned or to be burned for energy recovery. Fuel produced from dangerous waste by processing, blending, or other treatment is also dangerous waste fuel.

(b) "Distributor" means persons who distribute but do not process or blend dangerous waste fuel. Distributors may broker fuel by arranging for the final disposition of the fuel. Distributors are regulated under subsection (6) of this section.

(c) "Blender" means persons who produce, process, or blend fuel from dangerous wastes. Blenders are regulated under subsection (7) of this section.

(d) "Marketer" means persons who are:

(i) Generators who market dangerous waste fuel directly to a burner. Generators are regulated under subsection (4) of this section;

(ii) Distributors, regulated under subsection (6) of this section;

(iii) Blenders, regulated under subsection (7) of this section.

(3) Prohibitions.

(a) A person may market dangerous waste fuel only:

(i) To persons, in state, who have notified the department of their dangerous waste fuel activities under WAC 173-303-060 and have an EPA/state identification number or to out-of-state marketers or burners who have notified the EPA or authorized state agency and who have an EPA/state identification number; and

(ii) When marketed to a burner, to persons who burn the fuel in boilers or industrial furnaces identified in (b) of this subsection.

(b) Dangerous waste fuel may be burned for energy recovery in the following devices only;

(i) Industrial furnaces identified in WAC 173-303-040;

(ii) Boilers, as defined in WAC 173-303-040, that are identified as follows:

(A) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or

(B) Utility boilers used to produce electric power, steam, or heated or cooled air or other gases or fluids for sale.

(c) No fuel which contains any dangerous waste may be burned in any cement kiln which is located within the boundaries of any incorporated municipality with a population greater than five hundred thousand (based on the most recent census statistics) unless such kiln fully complies with regulations under this chapter that are applicable to incinerators.

(4) Standards applicable to generators of dangerous waste fuel.

(a) All generators of dangerous waste that is used as a fuel or used to produce a fuel are subject to WAC 173-303-170 through 173-303-230.

(b) Generators who are marketers. Generators are marketers if they send their waste fuel directly to a burner. Generators who are marketers must:

(i) Prohibitions. Comply with the prohibitions under subsection (3) of this subsection.

(ii) Notification. Comply with the notification requirements under WAC 173-303-060 for dangerous waste fuel activities. Generators who have previously notified the department of their dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify their dangerous waste fuel activities.

(iii) Accumulation. Comply with accumulation requirements of WAC 173-303-200 or 173-303-201.

(iv) Storage. For generators who have interim or final status and exceed the accumulation time frames referenced in (b)(iii) of this subsection, comply with the storage provisions of:

(A) WAC 173-303-280 through 173-303-395; and

(B) WAC 173-303-800 through 173-303-840; and

(C) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-692 for final status facilities.

(v) Required notice. Obtain, prior to initiating the first shipment of dangerous waste fuel, a one time written and signed certification notice from the burner certifying that:

(A) The burner has notified as described under subsection (3) of this subsection; and

(B) The burner will burn the dangerous waste fuel only in an industrial furnace or boiler identified in subsection (3)(b) of this subsection.

(vi) Recordkeeping. Keep a copy of each certification notice received for at least five years from the date of the last dangerous waste fuel shipment to the burner who sent such notice.

(c) Generators who are burners also are subject to subsection (8) of this section.

(5) Standards applicable to transporters of dangerous waste fuel. Transporters of dangerous waste fuel (and dangerous waste that is used to produce a fuel) are subject to the requirements of WAC 173-303-240 through 173-303-270.

(6) Standards applicable to distributors of dangerous waste fuel.

(a) Prohibitions. The prohibitions under subsection (3) of this section;

(b) Notification. Notification requirements under WAC 173-303-060 for dangerous waste fuel activities. Distributors who have previously notified the department of their dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify their dangerous waste fuel activities.

(c) Storage. Distributors who store dangerous waste fuels must comply with the applicable storage provisions of:

(i) WAC 173-303-280 through 173-303-395; and

(ii) WAC 173-303-800 through 173-303-840; and

(iii) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-692 for final status facilities;

(iv) The standards for generators in WAC 173-303-170 through 173-303-230.

(d) Off-site shipment. A distributor must meet the standards for generators in WAC 173-303-170 through 173-303-230 when the distributor initiates a shipment of dangerous waste fuel. Except that a distributor may not accumulate dangerous waste fuels under the accumulation provisions of WAC 173-303-200 or 173-303-201;

(e) Required notices.

(i) Before initiating the first shipment of dangerous waste fuel to another distributor, a blender, or a burner, a distributor must obtain a one-time written and signed certification notice from the distributor, blender, or burner certifying that:

(A) The burner, distributor, or blender has notified as described under subsection (3) of this section; and

(B) If the recipient is a burner, the burner will burn the dangerous waste fuel only in an industrial furnace or boiler identified in subsection (3)(b) of this section.

(ii) Before accepting the first shipment of dangerous waste fuel from another distributor or blender, the distributor must provide the other distributor or blender with a one-time written and signed certification that the distributor has complied with the notification requirements described in subsection (3) of this section; and

(f) Recordkeeping. A distributor must keep a copy of each certification notice received or sent for at least five years from the date the distributor last engaged in a dangerous waste fuel marketing transaction with the person who sent or received the certification notice.

(7) Standards applicable to blenders of dangerous waste fuels.

(a) Prohibitions. The prohibitions under subsection (3) of this section.

(b) Notification. Notification requirements under WAC 173-303-060 for dangerous waste fuel activities. Blenders who have previously notified the department of their dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify their dangerous waste fuel activities.

(c) Facility. For tanks, containers, or other units used to hold dangerous waste prior to blending or processing; for blending or processing tanks, containers, or other units; and for tanks, containers, or other units, used to hold blended or processed fuel, blenders must comply with the applicable provisions of:

(i) WAC 173-303-280 through 173-303-395; and

(ii) WAC 173-303-800 through 173-303-840; and

(iii) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-692 for final status facilities;

(d) Off-site shipment. The standards for generators in WAC 173-303-170 through 173-303-230 when a blender initiates a shipment of dangerous waste fuel, except that a blender may not accumulate dangerous waste fuels under the accumulation provisions of WAC 173-303-200 or 173-303-201;

(e) Required notices.

(i) Before initiating the first shipment of dangerous waste fuel to another blender, a distributor, or a burner, a blender must obtain a one-time written and signed certification notice from the blender, distributor, or burner certifying that:

(A) The burner, distributor, or blender has notified as described under subsection (3) of this section; and

(B) If the recipient is a burner, the burner will burn the dangerous waste fuel only in an industrial furnace or boiler identified in subsection (3)(b) of this section.

(ii) Before accepting the first shipment of dangerous waste fuel from another blender or distributor, the blender must provide the other blender or distributor with a one-time written and signed certification that the blender has complied with the notification requirements described in subsection (3) of this section; and

(f) Recordkeeping. A blender must keep a copy of each certification notice received or sent for at least five years from the date the blender last engaged in a dangerous waste fuel marketing transaction with the person who sent or received the certification notice.

(8) Standards applicable to burners of dangerous waste fuel.

Owners and operators of industrial furnaces and boilers identified in subsection (3)(b) of this section must comply with:

(a) Prohibitions. The prohibitions under subsection (3) of this section;

(b) Notification. Notification requirements under WAC 173-303-060 for dangerous waste fuel activities. A burner who has previously notified the department of dangerous waste management activities and obtained an EPA/state identification number, must renotify to identify the dangerous waste fuel activities;

(c) Storage.

(i) For short term accumulation by generators who burn their dangerous waste fuel on-site, the applicable provisions of WAC 173-303-200 or 173-303-201.

(ii) For all burners who store dangerous waste fuel, the applicable storage provisions of:

(A) WAC 173-303-280 through 173-303-395;

(B) WAC 173-303-800 through 173-303-840; and

(C) WAC 173-303-400 for interim status facilities or WAC 173-303-600 through 173-303-692 for final status facilities (the air emission requirements do not apply to burners that meet the small quantity burner exemption at 40 CFR 266.101);

(d) Required notices. Before a burner accepts the first shipment of dangerous waste fuel from a distributor, or a blender, or a generator the burner must provide the distributor, or the blender, or the generator a one-time written and signed notice certifying that:

(i) The burner has notified as described under subsection (3) of this section; and

(ii) The dangerous waste fuel will only be burned in an industrial furnace or boiler identified in subsection (3)(b) of this section.

(e) Recordkeeping. In addition to the applicable recordkeeping requirements of WAC 173-303-380, a burner must keep a copy of each certification notice sent for at least five years from the date the burner last receives dangerous waste fuel from the person who received the certification notice.

(f) Local requirements. Any person who burns dangerous waste for energy recovery must comply with air emission requirements of the local air pollution control authority (or department of ecology if no local authority with jurisdiction exists).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-510, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-510, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.-007. 00-11-040 (Order 99-01), § 173-303-510, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-510, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-510, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-510, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-510, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-510, filed 3/11/88; 86-12-057 (Order DE-85-10), § 173-303-510, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-510, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-510, filed 2/10/82.]

WAC 173-303-515 Standards for the management of used oil. (1) **Purpose.** The purpose of this section is to provide used oil management standards for generators, transporters, collection centers, aggregation points, transfer facilities, processors, and re-refiners, burners, and marketers of used oil.

(2) **Definitions.** In addition to the terms used in this chapter, the definitions of 40 CFR Part 279 are incorporated by reference when managing used oil under this section. The term "hazardous waste" used in 40 CFR Part 279 means "dangerous waste" as defined in WAC 173-303-040.

(3) **Applicability.** This section identifies those materials subject to regulation as used oil. For the purpose of this section, the applicability statements of 40 CFR Part 279.10 are incorporated by reference, except 40 CFR Part 279.10 (b)(2) and (3), and as modified below.

Materials containing or otherwise contaminated with or derived from used oil: The term "materials" used in 40 CFR Part 279.10 does not include dangerous waste.

(4) **Used oil specifications.** For the purpose of managing materials under this section, 40 CFR Part 279.11 and 40 CFR Part 261.3 (a)(2)(v) (rebuttable presumption) are incorporated by reference.

The table is included below for the reader's convenience.

Table 1—Used Oil Exceeding any Specification Level is Subject to this Section When Burned for Energy Recovery

Constituent/property	Allowable level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100° F minimum
Total halogens	4,000 ppm maximum\1\

Note: Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR 761.20(e).

\1\ Used oil containing more than 1,000 ppm total halogens is presumed to be a dangerous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such used oil is subject to 40 CFR Subpart H of Part 266 rather than this section when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

(5) **Prohibitions.** The prohibitions of 40 CFR Part 279.12 are incorporated by reference. The prohibitions for managing materials under this section include those listed in 40 CFR Part 279.12 and the following:

(a) Materials designating as EHW or WPCB cannot be managed under this section when burned for energy recovery. Note: Materials managed under this section containing 2 ppm or greater PCBs are subject to applicable requirements of 40 CFR Part 761.20(e).

(b) Metal working fluids that are formulated with chlorinated compounds such as chlorinated paraffins or chlorinated alkene polymers cannot be managed under this section when burned for energy recovery.

(c) Ethylene glycol based fluids cannot be managed under this section. These fluids are subject to section WAC 173-303-522 when recycled.

(d) The use of used oil or other materials managed under this section as a dust suppressant is prohibited.

(e) Materials to be managed under this section are prohibited from being mixed with any dangerous waste. If any material managed under this section is mixed with dangerous waste, the resultant mixture is dangerous waste and must be managed as such.

(6) **Standards for used oil generators.** This subsection applies to all used oil generators and persons managing materials under this section. The standards for used oil generators of 40 CFR Parts 279.20 through 279.24 are incorporated by reference except 40 CFR Part 279.21. Used oil generators and persons managing materials under this subsection are subject to the federal regulations listed above and the following:

(a) Storage requirements for containers and tanks.

(i) Containers must be closed at all times, except when adding or removing materials managed under this section.

(ii) Containers and tanks must not be opened, handled, managed or stored in a manner that may cause the container or tank to leak or rupture.

(b) Secondary containment requirements for storage of material managed under this section in tanks and containers.

The department may require secondary containment, on a case-by-case basis, in accordance with some or all of the requirements in WAC 173-303-630(7) and 173-303-640(4) if the department determines that a potential for spills and discharges, mismanagement, or other factors pose a threat to human health or the environment.

(c) Self-transport to approved collection centers. In addition to 40 CFR Part 279.24(a), generators may self-transport quantities greater than 55 gallons to a used oil collection center: Provided, That the owner/operator of the center records the name, address, telephone number, date of delivery and quantity of used oil being delivered to the site by the generator.

(7) **Standards for used oil collection centers and aggregation points.** For the purpose of managing materials under this section, 40 CFR Parts 279.30 through 279.32 are incorporated by reference. The standards for used oil collection centers under this subsection are those federal regulations listed above and the following modifications:

In addition to the requirements of 40 CFR Part 279.31, the owner or operator of a used oil collection center may accept greater than 55 gallons of used oil from generators: Provided, That:

(a) The requirements for a used oil transfer facility (40 CFR Parts 279.40 through 279.47) are complied with while that used oil is on site; and

(b) The owner/operator of the collection center records the name, address, telephone number, date of delivery and quantity of used oil being delivered to the site by the generator of the used oil; and

(c) Such records are kept on site for a period of three years.

(8) **Standards for used oil transporters and transfer facilities.** For the purpose of managing materials under this section, 40 CFR Parts 279.40 through 279.47 are incorporated by reference. The standards for used oil transfer facilities under this subsection are those federal regulations listed above and the following modifications:

Additional reports. Upon determination by the department that the storage of used oil in tanks and/or containers poses a threat to public health or the environment, the department may require the owner/operator to provide additional information regarding the integrity of structures and equipment used to store used oil. This authority applies to tanks and secondary containment systems used to store used oil in tanks and containers. The department's determination of a threat to public health or the environment may be based upon observations of factors that would contribute to spills or releases of used oil or the generation of hazardous by-products (e.g., hydrogen sulfide gas). Those observations may

include, but are not limited to, leaks, severe corrosion, structural defects or deterioration (cracks, gaps, separation of joints), inability to completely inspect tanks or structures, or concerns about the age or design specification of tanks.

(a) When required by the department, a qualified, independent professional engineer registered to practice in Washington state must perform the assessment of the integrity of tanks or secondary containment systems.

(b) Requirement for facility repairs and improvements. If, upon evaluation of information obtained by the department under (a) of this subsection, it is determined that repairs or structural improvements are necessary in order to eliminate threats, the department may require the owner/operator to discontinue the use of the tank system or container storage unit and remove the used oil until the repairs or improvements are completed and approved by the department.

(9) **Standards for used oil processors and rerefiners.** For the purpose of managing materials under this section, 40 CFR Parts 279.50 through 279.59 are incorporated by reference. The standards for used oil processors and rerefiners under this subsection are those federal regulations listed above and the following:

(a) In addition to the general facility standards of 40 CFR Part 279.52, owners and operators of used oil processing and/or rerefining facilities regulated under this subsection are subject to the following:

(i) Used oil and other materials managed under the standards for management of used oil may be stored on-site without a permit for ninety days prior to entering an active recycling process. An active recycling process refers to a dynamic recycling operation that occurs within the recycling unit such as a distillation or centrifuge unit. The phrase does not refer to passive storage-like activities that occur, for example, when tanks or containers are used for phase separation or for settling impurities;

(ii) Facility closure standards of WAC 173-303-610 (2) and (12); and

(iii) Financial requirements of WAC 173-303-620 (1)(e).

(b) Additional reports. Upon determination by the department that the storage of used oil in tanks and/or containers poses a threat to public health or the environment, the department may require the owner/operator to provide additional information regarding the integrity of structures and equipment used to store used oil. This authority applies to tanks and secondary containment systems used to store used oil in tanks and containers. The department's determination of a threat to public health or the environment may be based upon observations of factors that would contribute to spills or releases of used oil or the generation of hazardous by-products (for example, hydrogen sulfide gas). Those observations may include, but are not limited to, leaks, severe corrosion, structural defects or deterioration (cracks, gaps, separation of joints), inability to completely inspect tanks or structures, or concerns about the age or design specification of tanks.

(i) When required by the department, a qualified, independent professional engineer registered to practice in Washington state must perform the assessment of the integrity of tanks or secondary containment systems.

(ii) Requirement for facility repairs and improvements. If, upon evaluation of information obtained by the department under (b) of this subsection, it is determined that repairs or structural improvements are necessary in order to eliminate threats, the department may require the owner/operator to discontinue the use of the tank system or container storage unit and remove the used oil until such repairs or improvements are completed and approved by the department.

(10) **Standards for used oil burners who burn off-specification.** For the purpose of managing materials under this subsection, 40 CFR Parts 279.60 through 279.67 are incorporated by reference.

(11) **Standards for used oil fuel marketers.** For the purpose of managing materials under this subsection, 40 CFR Parts 279.70 through 279.75 are incorporated by reference.

(12) **Standards for disposal of used oil.** For the purpose of managing materials under this subsection, 40 CFR Parts 279.80 through 279.82(a) are incorporated by reference.

(13) **Testing required.** Notwithstanding any other provisions of this section, the department may require any person to test their used oil according to the methods set forth in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication, SW-846* to either determine if the used oil is on-specification as described in WAC 173-303-515(4), determine whether the used oil contains a listed hazardous waste, or determine if the used oil is prohibited from being managed as used oil in WAC 173-303-515(5).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-515, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-515, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-515, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-515, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-515, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-515, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-515, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-515, filed 6/27/84.]

WAC 173-303-520 Special requirements for reclaiming spent lead acid battery wastes. This section applies to persons who reclaim (including regeneration) spent lead-acid batteries that are recyclable materials ("spent batteries"). (Also, see WAC 173-303-120(3).)

(1) Persons who generate, transport, or collect spent batteries, who regenerate spent batteries, or who store spent batteries but do not reclaim them (other than spent batteries that are to be regenerated) are subject only to the requirements of WAC 173-303-016 through 173-303-161 except for 173-303-060, and WAC 173-303-960 if such spent batteries are going to a battery reclaimer. Persons who reclaim spent batteries through regeneration (such as by electrolyte replacement) are not subject to 40 CFR Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a).

(2) Owners and operators of battery reclaiming facilities that store spent lead acid batteries prior to reclaiming (other than spent batteries that are to be regenerated) them are subject to the following requirements:

(a) For all reclaimers, the applicable storage provisions of:

(i) WAC 173-303-280 (2) and (3);

(ii) WAC 173-303-282;

(iii) WAC 173-303-283;

(iv) WAC 173-303-290;

(v) WAC 173-303-310 through 173-303-360;

(vi) WAC 173-303-380;

(vii) WAC 173-303-390 (2) and (3);

(viii) WAC 173-303-395; and

(ix) WAC 173-303-800 through 173-303-840.

(b) For reclaimers with interim status permits, the applicable storage provisions of WAC 173-303-400 including Subparts F through L of 40 CFR Part 265;

(c) For reclaimers with final facility permits, the applicable storage provisions of:

(i) WAC 173-303-600 through 173-303-650; and

(ii) WAC 173-303-660.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-520, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-520, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-520, filed 1/12/98, effective 2/12/98; 94-01-060 (Order 92-33), § 173-303-520, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-520, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-520, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-520, filed 3/11/88; 86-12-057 (Order DE-85-10), § 173-303-520, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-520, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-520, filed 2/10/82.]

WAC 173-303-522 Special requirements for recycling spent antifreeze. (1) Applicability. This section applies to the recycling of spent antifreeze. Antifreeze means ethylene glycol based coolant used as a heat exchange medium in motor vehicle radiators, motorized equipment, or in other industrial processes. For the purposes of this section recycling means reclamation and reuse, but not burning for energy recovery. (Also, see WAC 173-303-120(3).)

(2) Standards. Persons who generate, transport, or store spent antifreeze but do not reclaim or recycle it are subject to the requirements of WAC 173-303-050, 173-303-145, and 173-303-960 if their spent antifreeze is going to a recycler. Any discharge of spent antifreeze to the environment constitutes disposal and is subject to full regulation under this chapter.

(a) Generator requirements:

(i) Persons who reclaim or recycle their spent antifreeze on-site, or send their antifreeze off-site to be reclaimed or recycled, must keep records for a period of five years from the date of reclamation/recycling.

Proof of reclamation/recycling is either a log for on-site reclamation/recycling or an invoice or bill of lading for off-site reclamation/recycling.

(ii) Containers and tanks used to accumulate spent antifreeze must be labeled "spent antifreeze."

(iii) Spent antifreeze that is to be reclaimed can be accumulated on-site for any length of time, and in any amount.

(iv) During accumulation, spent antifreeze must be stored in a manner to prevent releases to the environment. This includes, but is not limited to, storing wastes in compatible containers, on impermeable surfaces, or in secondary containment structures.

(b) If spent antifreeze is mixed with another dangerous waste, generators are subject to the generator requirements, WAC 173-303-170 through 173-303-230.

(c) Persons who generate spent antifreeze that is not reclaimed/recycled, but is otherwise disposed, are subject to all applicable requirements of this chapter.

(3) Transporters and transfer facility requirements:

(a) Persons engaged in routine off-site transportation of spent antifreeze are required to obtain a state/EPA ID number, WAC 173-303-060, and to comply with the transporter requirements, WAC 173-303-240.

(b) If spent antifreeze is mixed with another dangerous waste, transporters are subject to the generator requirements, WAC 173-303-170 through 173-303-230.

(c) Transporters who store spent antifreeze at a transfer facility are allowed to use tanks or containers as defined in WAC 173-303-040, and store such waste for up to ten days, WAC 173-303-240(6).

Transporters may store spent antifreeze at a transfer facility for longer than ten days if they meet the requirements for tank and/or container management, including secondary containment in WAC 173-303-630 through 173-303-640.

(4) Reclamation/recycling facility requirements: Owners and operators of antifreeze reclaiming/recycling facilities are subject to the conditions of WAC 173-303-120 (4)(c). These conditions apply equally to facilities whether or not twenty-four-hour storage of spent antifreeze occurs prior to reclamation.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-522, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-522, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-522, filed 1/12/98, effective 2/12/98.]

WAC 173-303-525 Special requirements for recyclable material utilized for precious metal recovery. (1) Applicability and requirements. (Also, see WAC 173-303-120(3).)

(a) This section applies to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these.

(b) Persons who generate, transport, or store recyclable materials that are regulated under this section are subject to the following requirements:

(i) Notification requirements under WAC 173-303-060;

(ii) WAC 173-303-180 (for generators), 173-303-250 (for transporters), and 173-303-370 (for persons who store); and

(iii) For precious metals exported to or imported from designated OECD member countries for recovery, 40 CFR subpart H of part 262 (incorporated by reference at WAC 173-303-230(1)) and 173-303-290 (1)(b). For precious metals exported to or imported from non-OECD countries for recovery, 40 CFR subpart E (incorporated by reference at WAC 173-303-230(1)) and 173-303-230(2).

(c) Persons who store recycled materials that are regulated under this section must keep the following records to document that they are not accumulating these materials speculatively (as defined in WAC 173-303-016 (5)(d)(ii));

(i) Records showing the volume of these materials stored at the beginning of the calendar year;

(ii) The amount of these materials generated or received during the calendar year; and

(iii) The amount of materials remaining at the end of the calendar year.

(d) Recyclable materials that are regulated under this section that are accumulated speculatively (as defined in WAC 173-303-016 (5)(d)(ii)) are dangerous wastes and are subject to all applicable provisions of this chapter.

(2) Additional regulation of recyclable materials utilized for precious metal recovery on a case-by-case basis.

The department may decide on a case-by-case basis that persons accumulating or storing recyclable materials utilized for precious metal recovery should be regulated under WAC 173-303-120(4). The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained, or because the materials being accumulated or stored together are incompatible. In making this decision, the department will consider the following factors:

(a) The types of materials accumulated or stored and the amounts accumulated or stored;

(b) The method of accumulation or storage;

(c) The length of time the materials have been accumulated or stored before being reclaimed;

(d) Whether any contaminants are being released into the environment, or are likely to be so released; and

(e) Other relevant factors.

The procedures for this decision are set forth in subsection (3) of this section.

(3) Procedures for case-by-case regulation of recyclable materials utilized for precious metal recovery.

The department will use the following procedures when determining whether to regulate recyclable materials utilized for precious metal recovery under the provisions of WAC 173-303-120(4), rather than under the provisions of subsection (1) of this section.

(a) If a generator is accumulating the waste, the department will issue a notice setting forth the factual basis for the decision and stating that the person must comply with the applicable requirements of WAC 173-303-170 and 173-303-190 through 173-303-230. The notice will become final within thirty days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the department will hold a public hearing. The department will provide notice of the hearing to the public and allow public participation at the hearing. The department will issue a final order after the hearing stating whether or not compliance with WAC 173-303-170 and 173-303-190 through 173-303-230 is required. The order becomes effective thirty days after service of the decision unless the department specifies a later date or unless review by the department is requested. The order may be appealed to the pollution control hearings board, in accordance with WAC 173-303-845, by any person who participated in the public hearing.

(b) If the person is accumulating the recyclable material as a storage facility, the notice will state that the person must obtain a permit in accordance with all applicable provisions of WAC 173-303-800 through 173-303-840. The owner or operator of the facility must apply for a permit within no less than sixty days and no more than six months of notice, as specified in the notice. If the owner or operator of the facility wishes to challenge the department's decision he may do so in his permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit will specify the reasons for the department's determination. The question of whether the department's decision was proper will remain open for consideration during the public comment period discussed under WAC 173-303-840 (4)(d) and in any subsequent hearing.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-525, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-525, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-525, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-525, filed 6/3/86.]

WAC 173-303-550 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-550, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-550, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-550, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-550, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-550, filed 4/18/84.]

WAC 173-303-560 Reserved.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-560, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-560, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-560, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-560, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-560, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-560, filed 4/18/84.]

WAC 173-303-573 Standards for universal waste management. (1) Scope.

(a) This section establishes requirements for managing the following:

(i) Batteries as described in subsection (2) of this section;

(ii) Thermostats as described in subsection (3) of this section;

(iii) Mercury-containing equipment as described in subsection (4) of this section; and

(iv) Lamps as described in subsection (5) of this section.

(b) This section provides an alternative set of management standards in lieu of regulation under the rest of this chapter except for WAC 173-303-050, 173-303-145, and 173-303-960.

(2) **Applicability—Batteries.**

(a) Batteries covered under this section.

(i) The requirements of this section apply to persons managing batteries, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(ii) Spent lead-acid batteries which are not managed under WAC 173-303-120 (3)(f) and 173-303-520, are subject to management under this section.

(b) Batteries not covered under this section. The requirements of this section do not apply to persons managing the following batteries:

(i) Spent lead-acid batteries that are managed under WAC 173-303-120(3) and 173-303-520.

(ii) Batteries, as described in WAC 173-303-040, that are not yet wastes under WAC 173-303-016, 173-303-017, or 173-303-070, including those that do not meet the criteria for waste generation in (c) of this subsection.

(iii) Batteries, as described in WAC 173-303-040, that are not dangerous waste. A battery is a dangerous waste if it exhibits one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100.

(c) Generation of waste batteries.

(i) A used battery becomes a waste on the date it is discarded (e.g., when sent for reclamation).

(ii) An unused battery becomes a waste on the date the handler decides to discard it.

(3) **Applicability—Mercury thermostats.**

(a) Thermostats covered under this section. The requirements of this section apply to persons managing thermostats, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(b) Thermostats not covered under this section. The requirements of this section do not apply to persons managing the following thermostats:

(i) Thermostats that are not yet wastes under WAC 173-303-016, 173-303-017, or 173-303-070. Paragraph (c) of this subsection describes when thermostats become wastes.

(ii) Thermostats that are not dangerous waste. A thermostat is a dangerous waste if it exhibits one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100.

(c) Generation of waste thermostats.

(i) A used thermostat becomes a waste on the date it is discarded (e.g., sent for reclamation).

(ii) An unused thermostat becomes a waste on the date the handler decides to discard it.

(4) **Applicability—Mercury-containing equipment.**

(a) Mercury-containing equipment covered under this section. The requirements of this section apply to persons managing mercury-containing equipment, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(b) Mercury-containing equipment not covered under this section. The requirements of this section do not apply to persons managing the following mercury-containing equipment:

(i) Mercury-containing equipment that is not yet a waste under WAC 173-303-016, 173-303-017, or 173-303-070. Paragraph (c) of this subsection describes when mercury-containing equipment becomes a waste.

(ii) Mercury-containing equipment that is not a dangerous waste. Mercury-containing equipment that does not exhibit one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100 is not dangerous waste.

(c) Generation of waste mercury-containing equipment.

(i) Used mercury-containing equipment becomes a waste on the date it is discarded.

(ii) Unused mercury-containing equipment becomes a waste on the date the handler decides to discard it.

(d) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) are exempt from 40 CFR 268.7 and 268.50 (incorporated by reference at WAC 173-303-140 (2)(a)) for mercury-containing equipment covered under this subsection.

(5) **Applicability—Lamps.**

(a) Lamps covered under this section. The requirements of this section apply to persons managing lamps, as described in WAC 173-303-040, except those listed in (b) of this subsection.

(b) Lamps not covered under this section. The requirements of this section do not apply to persons managing the following lamps:

(i) Lamps that are not yet wastes under WAC 173-303-016, 173-303-017, or 173-303-070. Paragraph (c) of this subsection describes when lamps become wastes.

(ii) Lamps that are not dangerous waste. Lamps that do not exhibit one or more of the characteristics or criteria identified in WAC 173-303-090 or 173-303-100 are not dangerous waste.

(c) Generation of waste lamps.

(i) A used lamp becomes a waste on the date it is discarded.

(ii) An unused lamp becomes a waste on the date the handler decides to discard it.

(6) **Applicability—Small quantity handlers of universal waste.** Subsections (6) through (16) of this section apply to small quantity handlers of universal waste (as defined in WAC 173-303-040).

(7) **Prohibitions.**

A small quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (13) of this section; or by managing specific wastes as provided in subsection (9) of this section.

(8) **Notification.**

A small quantity handler of universal waste is not required to notify the department of universal waste handling activities.

(9) **Waste management.**

(a) Universal waste batteries. A small quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

(A) Sorting batteries by type;

(B) Mixing battery types in one container;

(C) Discharging batteries so as to remove the electric charge;

(D) Regenerating used batteries;

(E) Disassembling batteries or battery packs into individual batteries or cells;

(F) Removing batteries from consumer products; or

(G) Removing electrolyte from batteries.

(iii) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100.

(A) If the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it is subject to all applicable requirements of this chapter. The handler is considered the generator of the dangerous electrolyte and/or other waste and is subject to WAC 173-303-170 through 173-303-230.

(B) If the electrolyte or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Universal waste thermostats and mercury-containing equipment. A small quantity handler of universal waste must manage universal waste thermostats and mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A small quantity handler of universal waste must place in a container any universal waste thermostat or mercury-containing equipment that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the thermostat or device, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste thermostats or mercury-containing equipment provided the handler:

(A) Removes the ampules in a manner designed to prevent breakage of the ampules;

(B) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);

(C) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from the containment device to a container that meets the requirements of WAC 173-303-200;

(D) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of WAC 173-303-200;

(E) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(F) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(G) Stores removed ampules in closed, nonleaking containers that are in good condition;

(H) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and

(iii)(A) A small quantity handler of universal waste who removes mercury-containing ampules from thermostats or mercury-containing equipment must determine whether the following exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100:

(I) Mercury or clean-up residues resulting from spills or leaks; and/or

(II) Other solid waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units or mercury-containing equipment).

(B) If the mercury, residues, and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it must be managed in compliance with all applicable requirements of this chapter. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it subject to WAC 173-303-170 through 173-303-230.

(C) If the mercury, residues, and/or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(c) Universal waste lamps. A small quantity handler of universal waste must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A small quantity handler of universal waste must immediately clean up and place in a container any universal waste lamps that show evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the lamps, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(ii) A small quantity handler of universal waste must minimize lamp breakage by accumulating lamps in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. The containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(iii) A small quantity handler of universal waste must store lamps accumulated in cardboard or fiber containers indoors, meaning in a structure that prevents the container from being exposed to the elements.

(10) **Labeling/marking.**

A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries (i.e., each battery), or a container in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"

(b) Universal waste thermostats (i.e., each thermostat), or a container in which the thermostats are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste-Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

(c) Mercury-containing equipment, or a container in which the equipment is contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste Mercury-Containing Equipment," or "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

(d) Universal waste lamps (i.e., each lamp), or a container in which the lamps are accumulated, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

(11) **Accumulation time limits.**

(a) A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of (b) of this subsection are met.

(b) A small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

(c) A small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

(i) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(ii) Marking or labeling each individual item of universal waste (for example, each battery, thermostat, mercury-containing equipment, or lamp) with the date it became a waste or was received;

(iii) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;

(iv) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(v) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

(vi) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

(12) **Employee training.**

A small quantity handler of universal waste must inform all employees who handle or have responsibility for managing universal waste. The information must describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.

(13) **Response to releases.**

(a) A small quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A small quantity handler of universal waste must determine whether any material resulting from the release is dangerous waste, and if so, must manage the dangerous waste in compliance with all applicable requirements of this chapter. The handler is considered the generator of the material resulting from the release, and must manage it in compliance with WAC 173-303-170 through 173-303-230.

(14) **Off-site shipments.**

(a) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subsections (28) through (34) of this section while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR Parts 171 through 180, a small quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 172 through 180.

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.

(e) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:

(i) Receive the waste back when notified that the shipment has been rejected, or

(ii) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:

(i) Send the shipment back to the originating handler; or

(ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a small quantity handler of universal waste receives a shipment containing dangerous waste that is not a universal waste, the handler must immediately notify the

department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The department will provide instructions for managing the dangerous waste.

(h) If a small quantity handler of universal waste receives a shipment of nondangerous, nonuniversal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(15) **Tracking universal waste shipments.**

A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

(16) **Exports.**

A small quantity handler of universal waste who sends universal waste to a foreign destination other than to those OECD countries specified in 40 CFR 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 CFR part 262, subpart H which is incorporated by reference at WAC 173-303-230) must:

(a) Comply with the requirements applicable to a primary exporter in 40 CFR 262.53, 262.56 (a)(1) through (4), (6), and (b) and 262.57 which are incorporated by reference at WAC 173-303-230(1);

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in 40 CFR Subpart E of Part 262 which is incorporated by reference at WAC 173-303-230(1); and

(c) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

(17) **Applicability—Large quantity handlers of universal waste.**

Subsections (17) through (27) of this section apply to large quantity handlers of universal waste (as defined in WAC 173-303-040).

(18) **Prohibitions.**

A large quantity handler of universal waste is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (24) of this section; or by managing specific wastes as provided in subsection (20) of this section.

(19) **Notification.**

(a)(i) Except as provided in (a)(ii) of this subsection, a large quantity handler of universal waste must have sent written notification of universal waste management to the department, and received an EPA Identification Number, before meeting or exceeding the 11,000 pound storage limit and/or before meeting or exceeding the 2,200 pound storage limit for lamps.

(ii) A large quantity handler of universal waste who has already notified the department of their dangerous waste management activities and has received an EPA Identification Number is not required to renotify under this section.

(b) This notification must include:

(i) The universal waste handler's name and mailing address;

(ii) The name and business telephone number of the person at the universal waste handler's site who should be contacted regarding universal waste management activities;

(iii) The address or physical location of the universal waste management activities;

(iv) A list of all of the types of universal waste managed by the handler (e.g., batteries, thermostats, mercury-containing equipment, or lamps);

(v) A statement indicating that the handler is accumulating more than 11,000 pounds of universal waste at one time and the types of universal waste (e.g., batteries, thermostats, mercury-containing equipment, or lamps) the handler is accumulating above this quantity, and/or a statement indicating that the handler is accumulating more than 2,200 pounds of lamps at one time. (For example, if a handler is accumulating 4,000 pounds of batteries, 4,500 pounds of thermostats, 2,000 pounds of mercury-containing equipment and 600 pounds of universal waste lamps, they would notify for having 11,100 pounds of universal waste at one time - likewise, if a handler is accumulating 1,000 pounds of batteries, 4,000 pounds of thermostats, 2,000 pounds of mercury-containing equipment and 2,400 pounds of universal waste lamps, they would also need to notify for exceeding the 2,200 pound limit for universal waste lamps.)

(20) **Waste management.**

(a) Universal waste batteries. A large quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A large quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

(A) Sorting batteries by type;

(B) Mixing battery types in one container;

(C) Discharging batteries so as to remove the electric charge;

(D) Regenerating used batteries;

(E) Disassembling batteries or battery packs into individual batteries or cells;

(F) Removing batteries from consumer products; or

(G) Removing electrolyte from batteries.

(iii) A large quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100.

(A) If the electrolyte and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it must be managed in compliance with all applicable requirements of this chapter. The handler is considered the generator of the dangerous electrolyte and/or other waste and is subject to WAC 173-303-170 through 173-303-230.

(B) If the electrolyte or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(b) Universal waste thermostats and mercury-containing equipment. A large quantity handler of universal waste must manage universal waste thermostats and mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must place in a container any universal waste thermostat or mercury-containing equipment that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the thermostat or mercury-containing equipment, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(ii) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste thermostats or mercury-containing equipment provided the handler:

(A) Removes the ampules in a manner designed to prevent breakage of the ampules;

(B) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to contain any mercury released from an ampule in case of breakage);

(C) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from the containment device to a container that meets the requirements of WAC 173-303-200;

(D) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of WAC 173-303-200;

(E) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(F) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(G) Stores removed ampules in closed, nonleaking containers that are in good condition;

(H) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and

(iii)(A) A large quantity handler of universal waste who removes mercury-containing ampules from thermostats or mercury-containing equipment must determine whether the following exhibit a characteristic or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100:

(I) Mercury or clean-up residues resulting from spills or leaks; and/or

(II) Other solid waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units or equipment).

(B) If the mercury, residues, and/or other solid waste exhibit a characteristic or criteria of dangerous waste, it must be managed in compliance with all applicable requirements of this chapter. The handler is considered the generator of the mercury, residues, and/or other waste and is subject to WAC 173-303-170 through 173-303-230.

(C) If the mercury, residues, and/or other solid waste is not dangerous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(c) Universal waste lamps. A large quantity handler of universal waste must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(i) A large quantity handler of universal waste must immediately clean up and place in a container any universal waste lamps that show evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the lamps, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(ii) A large quantity handler of universal waste must minimize lamp breakage by accumulating lamps in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. The containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(iii) A large quantity handler of universal waste must store lamps accumulated in cardboard or fiber containers indoors, meaning in a structure that prevents a container from being exposed to the elements.

(21) **Labeling/marking.**

A large quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

(a) Universal waste batteries (i.e., each battery), or a container or tank in which the batteries are contained, must be labeled or marked clearly with the any one of the following phrases: "Universal Waste-Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"

(b) Universal waste thermostats (i.e., each thermostat), or a container or tank in which the thermostats are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste-Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

(c) Mercury-containing equipment, or a container in which the equipment is contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste Mercury-Containing Equipment," or "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

(d) Universal waste lamp (i.e., each lamp), or a container in which the lamps are accumulated, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

(22) **Accumulation time limits.**

(a) A large quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from

another handler, unless the requirements of (b) of this subsection are met.

(b) A large quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity was solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

(c) A large quantity handler of universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

(i) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(ii) Marking or labeling the individual item of universal waste (for example, each battery, thermostat, mercury-containing equipment, or lamp) with the date it became a waste or was received;

(iii) Maintaining an inventory system on site that identifies the date the universal waste being accumulated became a waste or was received;

(iv) Maintaining an inventory system on site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(v) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

(vi) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

(23) **Employee training.**

A large quantity handler of universal waste must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies.

(24) **Response to releases.**

(a) A large quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A large quantity handler of universal waste must determine whether any material resulting from the release is dangerous waste, and if so, must manage the dangerous waste in compliance with all applicable requirements of this chapter. The handler is considered the generator of the material resulting from the release, and is subject to WAC 173-303-145 and 173-303-170 through 173-303-230.

(25) **Off-site shipments.**

(a) A large quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a large quantity handler of universal waste self-transports universal waste offsite, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subsections (28) through (34) of this section while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR 171 through 180, a large quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 172 through 180;

(d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.

(e) If a large quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:

(i) Receive the waste back when notified that the shipment has been rejected; or

(ii) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A large quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:

(i) Send the shipment back to the originating handler; or

(ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

(g) If a large quantity handler of universal waste receives a shipment containing dangerous waste that is not a universal waste, the handler must immediately notify the department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The department will provide instructions for managing the dangerous waste.

(h) If a large quantity handler of universal waste receives a shipment of nondangerous, nonuniversal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(26) **Tracking universal waste shipments.**

(a) Receipt of shipments. A large quantity handler of universal waste must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:

(i) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;

(ii) The quantity of each type of universal waste received (for example, batteries, thermostats, mercury-containing equipment, or lamps);

(iii) The date of receipt of the shipment of universal waste.

(b) Shipments offsite. A large quantity handler of universal waste must keep a record of each shipment of universal waste sent from the handler to other facilities. The record

may take the form of a log, invoice, manifest, bill of lading or other shipping document. The record for each shipment of universal waste sent must include the following information:

(i) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;

(ii) The quantity of each type of universal waste sent (for example, batteries, thermostats, mercury-containing equipment, or lamps);

(iii) The date the shipment of universal waste left the facility.

(c) Record retention.

(i) A large quantity handler of universal waste must retain the records described in (a) of this subsection for at least three years from the date of receipt of a shipment of universal waste.

(ii) A large quantity handler of universal waste must retain the records described in (b) of this subsection for at least three years from the date a shipment of universal waste left the facility.

(27) **Exports.**

A large quantity handler of universal waste who sends universal waste to a foreign destination other than to those OECD countries specified in 40 CFR 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 CFR part 262, subpart H which is incorporated by reference at WAC 173-303-230) must:

(a) Comply with the requirements applicable to a primary exporter in 40 CFR 262.53, 262.56 (a)(1) through (4), (6), and (b) and 262.57 which are incorporated by reference at WAC 173-303-230(1);

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in 40 CFR 262 Subpart E which is incorporated by reference at WAC 173-303-230(1); and

(c) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

(28) **Applicability—Universal waste transporters.**

Subsections (28) through (34) of this section apply to universal waste transporters (as defined in WAC 173-303-040).

(29) **Prohibitions.**

A universal waste transporter is:

(a) Prohibited from disposing of universal waste; and

(b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (32) of this section.

(30) **Waste management.**

(a) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in 49 CFR Part 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 CFR 171.8. For purposes of the Department of Transportation regulations, a material is considered a dangerous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in WAC 173-303-180. Because universal waste does not require a dangerous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.

(b) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 CFR 173.2. As universal waste shipments do not require a manifest under WAC 173-303-180, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.," nor may the hazardous material's proper shipping name be modified by adding the word "waste."

(31) **Storage time limits.**

(a) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.

(b) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements for small or large quantity handlers (subsections (6) through (27) of this section) while storing the universal waste.

(32) **Response to releases.**

(a) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A universal waste transporter must determine whether any material resulting from the release is dangerous waste, and if so, it is subject to all applicable requirements of this chapter. If the waste is determined to be a dangerous waste, the transporter is subject to WAC 173-303-145 and 173-303-170 through 173-303-230.

(33) **Off-site shipments.**

(a) A universal waste transporter is prohibited from transporting the universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.

(b) If the universal waste being shipped offsite meets the Department of Transportation's definition of hazardous materials under 49 CFR 171.8, the shipment must be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under 49 CFR Part 172.

(34) **Exports.**

A universal waste transporter transporting a shipment of universal waste to a foreign destination other than to those OECD countries specified in 40 CFR 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 CFR part 262, subpart H which is incorporated by reference at WAC 173-303-230) may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter must ensure that:

(a) A copy of the EPA Acknowledgment of Consent accompanies the shipment; and

(b) The shipment is delivered to the facility designated by the person initiating the shipment.

(35) **Applicability—Destination facilities.** Subsections (35) through (37) of this section apply to destination facilities.

(a) The owner or operator of a destination facility (as defined in WAC 173-303-040) is subject to all applicable

requirements of WAC 173-303-140 and 173-303-141, 173-303-280 through 173-303-525, 173-303-600 through 173-303-695, 173-303-800 through 173-303-840, and the notification requirement at WAC 173-303-060:

(b) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled must comply with WAC 173-303-120 (4)(c).

(36) **Off-site shipments.**

(a) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or foreign destination.

(b) The owner or operator of a destination facility may reject a shipment containing universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, he must contact the shipper to notify him of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility must:

(i) Send the shipment back to the original shipper; or

(ii) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.

(c) If the owner or operator of a destination facility receives a shipment containing dangerous waste that is not a universal waste, the owner or operator of the destination facility must immediately notify the department of the illegal shipment, and provide the name, address, and phone number of the shipper. The department will provide instructions for managing the dangerous waste.

(d) If the owner or operator of a destination facility receives a shipment of nondangerous, nonuniversal waste, the owner or operator may manage the waste in any way that is in compliance with applicable federal or state solid waste regulations.

(37) **Tracking universal waste shipments.**

(a) The owner or operator of a destination facility must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:

(i) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;

(ii) The quantity of each type of universal waste received (for example, batteries, thermostats, mercury-containing equipment, or lamps);

(iii) The date of receipt of the shipment of universal waste.

(b) The owner or operator of a destination facility must retain the records described in (a) of this subsection for at least three years from the date of receipt of a shipment of universal waste.

(38) **Imports.**

Persons managing universal waste that is imported from a foreign country into the United States are subject to the applicable requirements of this section, immediately after the waste enters the United States, as indicated in (a) through (c) of this subsection:

(a) A universal waste transporter is subject to the universal waste transporter requirements of subsections (28) through (34) of this section.

(b) A universal waste handler is subject to the small or large quantity handler of universal waste requirements of subsections (6) through (27) of this section, as applicable.

(c) An owner or operator of a destination facility is subject to the destination facility requirements of subsections (35) through (37) of this section.

(d) Persons managing universal waste that is imported from an OECD country as specified at 40 CFR 262.58 (a)(1), which is incorporated by reference at WAC 173-303-230(1), are subject to (a) through (c) of this subsection, in addition to the requirements of 40 CFR part 262 subpart H, which is incorporated by reference at WAC 173-303-230(1).

(39) **General—Petitions.** Subsections (39) and (40) of this section address petitions to include other wastes under this section.

(a) Any person seeking to add a dangerous waste or a category of dangerous waste to this section may petition for a regulatory amendment under subsections (39) and (40) of this section and WAC 173-303-910 (1) and (7).

(b) To be successful, the petitioner must demonstrate to the satisfaction of the department that regulation under the universal waste regulations of this section is: Appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the dangerous waste program. The petition must include the information required by WAC 173-303-910 (1)(b). The petition should also address as many of the factors listed in subsection (40) of this section as are appropriate for the waste or waste category addressed in the petition.

(c) The department will evaluate petitions using the factors listed in subsection (40) of this section. The department will grant or deny a petition using the factors listed in subsection (40) of this section. The decision will be based on the weight of evidence showing that regulation under this section is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the dangerous waste program.

(40) **Factors for petitions to include other wastes under this section.**

(a) The waste or category of waste, as generated by a wide variety of generators, is listed in WAC 173-303-081 or 173-303-082, or (if not listed) a proportion of the waste stream exhibits one or more characteristics or criteria of dangerous waste identified in WAC 173-303-090 or 173-303-100. (When a characteristic waste is added to the universal waste regulations of this section by using a generic name to identify the waste category (e.g., batteries), the definition of universal waste in WAC 173-303-040 will be amended to include only the dangerous waste portion of the waste category (e.g., dangerous waste batteries).) Thus, only the portion of the waste stream that does exhibit one or more characteristics or criteria (i.e., is dangerous waste) is subject to the universal waste regulations of this section;

(b) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments (including,

for example, households, retail and commercial businesses, office complexes, conditionally exempt small quantity generators, small businesses, government organizations, as well as large industrial facilities);

(c) The waste or category of waste is generated by a large number of generators (e.g., more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;

(d) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;

(e) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other dangerous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to subsections (9), (20), and (30) of this section; and/or applicable Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;

(f) Regulation of the waste or category of waste under this section will increase the likelihood that the waste will be diverted from nondangerous waste management systems (e.g., the municipal waste stream, nondangerous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with the Hazardous Waste Management Act chapter 70.105 RCW, this chapter, and RCRA Subtitle C.

(g) Regulation of the waste or category of waste under this section will improve implementation of and compliance with the dangerous waste regulatory program; and/or

(h) Such other factors as may be appropriate.

(41) **Applicability—Household and conditionally exempt small quantity generator waste.**

(a) Persons managing the wastes listed below may, at their option, manage them under the requirements of this section:

(i) Household wastes that are exempt under WAC 173-303-071 (3)(c) and are also of the same type as the universal wastes defined at WAC 173-303-040; and/or

(ii) Small quantity generator wastes that are conditionally exempt under WAC 173-303-070(8) and are also of the same type as the universal wastes defined at WAC 173-303-040.

(b) Persons who commingle the wastes described in (a)(i) and (ii) of this subsection together with universal waste regulated under this section must manage the commingled waste under the requirements of this section.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-573, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-573, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-573, filed 1/12/98, effective 2/12/98.]

WAC 173-303-575 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-575, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-575, filed 2/10/82.]

WAC 173-303-578 Military munitions. (1) Applicability.

(a) The rules in this section identify when military munitions become a solid waste, and, if these wastes are also dangerous under this section or WAC 173-303-016 through 173-303-100, the management standards that apply to these wastes.

(b) Unless otherwise specified in this section, all applicable requirements in this chapter apply to waste military munitions.

(2) **Definition of solid waste.**

(a) A military munition is not a solid waste when:

(i) Used for its intended purpose, including:

(A) Use in training military personnel or explosives and munitions emergency response specialists (including training in proper destruction of unused propellant or other munitions); or

(B) Use in research, development, testing, and evaluation of military munitions, weapons, or weapon systems; or

(C) Recovery, collection, and on-range destruction of unexploded ordnance and munitions fragments during range clearance activities at active or inactive ranges. However, "use for intended purpose" does not include the on-range disposal or burial of unexploded ordnance and contaminants when the burial is not a result of product use.

(ii) An unused munition, or component thereof, is being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities, unless such activities involve use constituting disposal as defined in WAC 173-303-016 (5)(a), or burning for energy recovery as defined in WAC 173-303-016 (5)(b).

(b) An unused military munition is a solid waste when any of the following occurs:

(i) The munition is abandoned by being disposed of, burned, detonated (except during intended use as specified in (a) of this subsection), incinerated, or treated prior to disposal; or

(ii) The munition is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated prior to disposal; or

(iii) The munition is deteriorated or damaged (for example, the integrity of the munition is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or

(iv) The munition has been declared a solid waste by an authorized military official.

(c) A used or fired military munition is a solid waste:

(i) When transported off range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment prior to disposal; or

(ii) If recovered, collected, and then disposed of by burial, or landfilling either on or off a range.

(d) A used or fired military munition is a solid waste, and, therefore, is potentially subject to corrective action under WAC 173-303-646 or imminent and substantial endangerment authorities under WAC 173-303-960, if the munition lands off-range and is not promptly rendered safe and/or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is infeasible, the operator of the range must maintain a

record of the event for as long as any threat remains. The record must include the type of munition and its location (to the extent the location is known).

(e) Military munitions at closed or transferred ranges. Munitions discharged during military activities are discarded material (and therefore solid waste) for purposes of WAC 173-303-646 under the following circumstance:

The munition is left in place at the firing range at the time the range is closed or when the range is transferred from military control, whichever occurs first.

(3) **Standards applicable to emergency responses.**

Explosives and munitions emergencies involving military munitions or explosives are subject to WAC 173-303-170(5), 173-303-240(10), 173-303-400 (2)(c)(xiii), 173-303-600 (3)(p), and 173-303-800 (7)(c), or alternatively to WAC 173-303-804.

(4) **Standards applicable to the storage of solid waste military munitions.**

(a) Criteria for dangerous waste regulation of waste nonchemical military munitions in storage.

(i) Waste military munitions in storage that exhibit a dangerous waste characteristic, criteria, or are listed as dangerous waste under WAC 173-303-070 are listed or identified as a dangerous waste (and thus are subject to regulation under this chapter), unless all the following conditions are met:

(A) The waste military munitions are not chemical agents or chemical munitions.

(B) The waste military munitions must be subject to the jurisdiction of the Department of Defense Explosives Safety Board (DDESB).

(C) The waste military munitions must be stored in accordance with the DDESB storage standards applicable to waste military munitions.

(D) Within ninety days of August 12, 1997, or within ninety days of when a storage unit is first used to store waste military munitions, whichever is later, the owner or operator must notify the department of the location of any waste storage unit used to store waste military munitions for which the conditional exemption in (a)(i) of this subsection is claimed.

(E) The owner or operator must provide oral notice to the department within twenty-four hours from the time the owner or operator becomes aware of any loss or theft of the waste military munitions, or any failure to meet a condition of (a)(i) of this subsection that may endanger health or the environment. In addition, a written submission describing the circumstances must be provided within five days from the time the owner or operator becomes aware of any loss or theft of the waste military munitions or any failure to meet a condition of (a)(i) of this subsection.

(F) The owner or operator must inventory the waste military munitions at least annually, must inspect the waste military munitions at least quarterly for compliance with the conditions of (a)(i) of this subsection, and must maintain records of the findings of these inventories and inspections for at least three years.

(G) Access to the stored waste military munitions must be limited to appropriately trained and authorized personnel.

(ii) The conditional exemption in (a)(i) of this subsection from regulation as dangerous waste applies only to the storage of nonchemical waste military munitions. It does not affect the regulatory status of waste military munitions as dangerous wastes with regard to transportation, treatment or disposal.

(iii) The conditional exemption in (a)(i) of this subsection applies only so long as all of the conditions in (a)(i) of this subsection are met.

(b) Notice of termination of waste storage. The owner or operator must notify the department when a storage unit identified in (a)(i)(D) of this subsection will no longer be used to store waste military munitions.

(c) Reinstatement of conditional exemption. If any waste military munition loses its conditional exemption under (a)(i) of this subsection, an application may be filed with the department for reinstatement of the conditional exemption from dangerous waste storage regulation with respect to such munition as soon as the munition is returned to compliance with the conditions of (a)(i) of this subsection. If the department finds that reinstatement of the conditional exemption is appropriate based on factors such as the owner's or operator's provision of a satisfactory explanation of the circumstances of the violation, or a demonstration that the violations are not likely to recur, the department may reinstate the conditional exemption under (a)(i) of this subsection. If the director does not take action on the reinstatement application within sixty days after receipt of the application, then reinstatement will be deemed granted, retroactive to the date of the application. However, the department may terminate a conditional exemption reinstated by default in the preceding sentence if it finds that reinstatement is inappropriate based on factors such as the owner's or operator's failure to provide a satisfactory explanation of the circumstances of the violation, or failure to demonstrate that the violations are not likely to recur. In reinstating the conditional exemption under (a)(i) of this subsection, the department may specify additional conditions as are necessary to ensure and document proper storage to protect human health and the environment.

(d) Waste chemical munitions.

(i) Waste military munitions that are chemical agents or chemical munitions and that exhibit a hazardous waste characteristic or are listed as hazardous waste under WAC 173-303-070, are listed or identified as a hazardous waste and are subject to the applicable regulatory requirements of RCRA subtitle C and the Hazardous Waste Management Act.

(ii) Waste military munitions that are chemical agents or chemical munitions and that exhibit a hazardous waste characteristic or are listed as hazardous waste under WAC 173-303-070, are not subject to the storage prohibition in RCRA section 3004(j), codified at 40 CFR 268.50 (which is incorporated by reference at WAC 173-303-140 (2)(a)).

(e) Amendments to DDESB storage standards. The DDESB storage standards applicable to waste military munitions, referenced in subsection (4)(a)(i) of this section, are DOD 6055.9-STD ("DOD Ammunition and Explosive Safety Standards"), in effect on November 8, 1995, except as provided in the following sentence. Any amendments to the DDESB storage standards will become effective for purposes of subsection (4)(a)(i) of this section on the date the Department of Defense publishes notice in the Federal Register that the DDESB standards referenced in subsection (4)(a)(i) of this section have been amended.

(5) **Standards applicable to the treatment and disposal of waste military munitions.**

The treatment and disposal of dangerous waste military munitions are subject to the applicable permitting, procedural, and technical standards of this chapter.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-578, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-578, filed 5/10/00, effective 6/10/00.]

WAC 173-303-600 Final facility standards. Purpose, scope, and applicability.

(1) The purpose of WAC 173-303-600 through 173-303-695, is to establish minimum statewide standards which describe the acceptable management of dangerous waste. In addition to WAC 173-303-600 through 173-303-695, the final facility standards include WAC 173-303-280 through 173-303-395.

(2) The final facility standards apply to owners and operators of all facilities which treat, store or dispose of dangerous waste, and which are not exempted by subsection (3) of this section.

(3) The final facility standards do not apply to:

(a) Persons whose disposal activities are permitted under the Marine Protection, Research and Sanctuaries Act, except that storage, or treatment facilities where dangerous waste is loaded onto an ocean vessel for incineration or disposal at sea are subject to final facility standards;

(b) Persons whose disposal activities are permitted under the underground injection control program of the Safe Drinking Water Act, except that storage, or treatment facilities needed to handle dangerous wastes are subject to final facility standards;

(c) The owner or operator of a POTW which treats, stores, or disposes of dangerous waste provided he has a permit by rule pursuant to the requirements of WAC 173-303-802(4);

(d) A generator accumulating waste on site in compliance with WAC 173-303-200;

(e) The owner or operator of a facility which is permitted to manage solid waste pursuant to chapter 173-350 WAC, if the only dangerous waste the facility manages is excluded from regulation under this chapter by WAC 173-303-070(8);

(f) A farmer disposing of waste pesticides from his own use provided he complies with WAC 173-303-160 (2)(b);

(g) A transporter storing a manifested shipment of dangerous waste for ten days or less in accordance with WAC 173-303-240(6);

(h) Any person, other than an owner or operator who is already subject to the final facility standards, who is carrying out an immediate or emergency response to contain or treat a discharge or potential discharge of a dangerous waste or hazardous substance;

(i) The owner or operator of a facility which is in compliance with the interim status requirements of WAC 173-303-400 and 173-303-805, until final administrative disposition of his final facility permit;

(j) The owner or operator of a totally enclosed treatment facility or elementary neutralization or wastewater treatment unit as defined in WAC 173-303-040, provided that he has a permit by rule pursuant to the requirements of WAC 173-303-802(5);

(k) The addition, by a generator, of absorbent material to waste in a container, or of waste to absorbent material in a container, provided that these actions occur at the time the waste is first placed in containers or, in the case of repackaging of previously containerized waste into new containers, at the time the waste is first placed into the new containers and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(l) The compaction or sorting of miscellaneous waste forms such as cans, rags, and bottles in a container, so long as the activity is solely for the purpose of reducing waste void space, and so long as these activities are conducted in a manner that protects human health and prevents any release to the environment and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b);

(m) Generators treating dangerous waste on-site in tanks, containers, or containment buildings that are used for accumulation of such wastes provided the generator complies with the WAC 173-303-170(3);

(n) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in WAC 173-303-040, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in 40 CFR section 268.40, Table Treatment Standards for Hazardous Wastes), or reactive (D003) waste, to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in WAC 173-303-395 (1)(a);

(o) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) handling the wastes listed below. These handlers are subject to regulation under WAC 173-303-573, when handling the below listed universal wastes.

(i) Batteries as described in WAC 173-303-573(2);

(ii) Thermostats as described in WAC 173-303-573(3);

(iii) Mercury-containing equipment as described in WAC 173-303-573(4); and

(iv) Lamps as described in WAC 173-303-573(5);

(p)(i) Except as provided in (p)(ii) of this subsection, a person engaged in treatment or containment activities during immediate response to any of the following situations:

(A) A discharge of a dangerous waste;

(B) An imminent and substantial threat of a discharge of dangerous waste;

(C) A discharge of a material that, when discharged, becomes a dangerous waste;

(D) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in WAC 173-303-040.

(ii) An owner or operator of a facility otherwise regulated by WAC 173-303-600 must comply with all applicable requirements of WAC 173-303-340 and 173-303-350.

(iii) Any person who is covered by (p)(i) of this subsection and who continues or initiates dangerous waste treatment or containment activities after the immediate response is over

is subject to all applicable requirements of this chapter for those activities.

(iv) In the case of an explosives or munitions emergency response, if a federal, state, tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA/state identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition;

(q) WAC 173-303-578 identifies when the requirements of WAC 173-303-600 apply to the storage of military munitions classified as solid waste under WAC 173-303-578(2). The treatment and disposal of dangerous waste military munitions are subject to the applicable permitting, procedural, and technical standards in this chapter.

(4) Reserve.

(5) The owner or operator of a facility which recycles dangerous waste may, for such recycled wastes only, comply with the applicable recycling standards specified in WAC 173-303-120 and 173-303-500 through 173-303-525 in lieu of the final facility standards.

(6) The owner or operator must comply with the special land disposal restrictions for certain dangerous wastes in WAC 173-303-140.

(7) The final facility requirements apply to owners or operators of all facilities that treat, store, or dispose of hazardous wastes referred to in 40 CFR Part 268, which is incorporated by reference at WAC 173-303-140(2).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-600, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-600, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-600, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-600, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-600, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-600, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-600, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-600, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-600, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-600, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-600, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-600, filed 2/10/82.]

WAC 173-303-610 Closure and post-closure. (1) Applicability.

(a) Subsections (2) through (6) of this section, (which concern closure), apply to the owners and operators of all dangerous waste facilities.

(b) Subsections (7) through (11) of this section, (which concern post-closure care), apply to the owners and operators of all regulated units (as defined in WAC 173-303-040) at which dangerous waste will remain after closure, to tank systems that are required under WAC 173-303-640(8) to meet the requirements of landfills, to surface impoundments, waste piles, and miscellaneous units as specified in WAC 173-303-650(6), 173-303-660(9), and 173-303-680(4), respectively; to containment buildings that are required under 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695) to meet the requirements for landfills; and, unless otherwise authorized by the department, to the owners and operators of all facilities which, at closure, cannot meet the removal or decontamination limits specified in subsection (2)(b) of this section.

(c) Owners and operators of off-site recycling facilities subject to WAC 173-303-120 (3) or (4), and off-site used oil processors subject to regulation under WAC 173-303-515(9) are subject to:

(i) WAC 173-303-610(2) Closure performance standard; and

(ii) WAC 173-303-610(12) Off-site recycling and used oil processor closure plans.

(d) For the purposes of the closure and post-closure requirements, any portion of a facility which closes is subject to the applicable closure and post-closure standards even if the rest of the facility does not close and continues to operate.

(e) Except for subsection (2)(a) of this section, the director may, in an enforceable document, replace all or part of the requirements of this section and the unit-specific requirements referenced in subsection (2)(b) of this section with alternative requirements when he or she determines:

(i) A dangerous waste unit is situated among other solid waste management units or areas of concern, a release has occurred, and both the dangerous waste unit and one or more of the solid waste management units or areas of concern are likely to have contributed to the release; and

(ii) It is not necessary to apply the requirements of this section (or the unit-specific requirements referenced in subsection (2)(b) of this section) because the alternative requirements will protect human health and the environment.

(2) Closure performance standard. The owner or operator must close the facility in a manner that:

(a)(i) Minimizes the need for further maintenance;

(ii) Controls, minimizes or eliminates to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, surface water, ground water, or the atmosphere; and

(iii) Returns the land to the appearance and use of surrounding land areas to the degree possible given the nature of the previous dangerous waste activity.

(b) Where the closure requirements of this section, or of WAC 173-303-630(10), 173-303-640(8), 173-303-650(6), 173-303-655(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680 (2) through (4), or 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695) call for the removal or decontamination of dangerous wastes, waste residues, or equipment, bases, liners, soils or other materials containing or contaminated with dangerous wastes or waste residue, then such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed:

(i) For soils, ground water, surface water, and air, the numeric cleanup levels calculated using unrestricted use

exposure assumptions according to the Model Toxics Control Act Regulations, chapter 173-340 WAC as of the effective date or hereafter amended. Primarily, these will be numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate, see WAC 173-340-700 through 173-340-760, excluding WAC 173-340-745; and

(ii) For all structures, equipment, bases, liners, etc., clean closure standards will be set by the department on a case-by-case basis in accordance with the closure performance standards of WAC 173-303-610 (2)(a)(ii) and in a manner that minimizes or eliminates post-closure escape of dangerous waste constituents.

(3) Closure plan; amendment of plan.

(a) The owner or operator of a dangerous waste management facility must have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the dangerous waste at partial or final closure are required by WAC 173-303-650(6) and 173-303-660(9) to have contingent closure plans. The plan must be submitted with the permit application, in accordance with WAC 173-303-806(4), and approved by the department as part of the permit issuance procedures under WAC 173-303-840. The approved closure plan will become a condition of any permit. The department's decision must assure that the approved closure plan is consistent with subsections (2), (3), (4), (5), and (6) of this section, and the applicable requirements of WAC 173-303-630(10), 173-303-640(8), 173-303-645, 173-303-650(6), 173-303-655 (8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680(2), and 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695). A copy of the approved plan and all revisions to the plan must be furnished to the department upon request, including request by mail until final closure is completed and certified in accordance with subsection (6) of this section. The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include at least:

(i) A description of how each dangerous waste management unit at the facility will be closed in accordance with subsection (2) of this section;

(ii) A description of how final closure of the facility will be conducted in accordance with subsection (2) of this section. The description must identify the maximum extent of the operation which will be unclosed during the active life of the facility;

(iii) An estimate of the maximum inventory of dangerous wastes ever on-site over the active life of the facility. (Any change in this estimate is a Class 1 modification with prior approval under WAC 173-303-830(4));

(iv) A detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all dangerous wastes, and identification of the type(s) of the off-site dangerous waste management units to be used, if applicable;

(v) A detailed description of the steps needed to remove or decontaminate all dangerous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard;

(vi) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground water monitoring, leachate collection, and run-on and runoff control;

(vii) A schedule for closure of each dangerous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each dangerous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all dangerous waste inventory and of the time required to place a final cover must be included.); and

(viii) For facilities that use trust funds to establish financial assurance under WAC 173-303-620 (4) or (6) and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

(ix) For facilities where the director has applied alternative requirements under subsection (1)(d) of this section, WAC 173-303-645 (1)(e), or 173-303-620 (8)(d), the closure plan must include either the alternative requirements or a reference to the enforceable document that contains the alternative requirements.

(b) The owner or operator must submit a written notification of or request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the applicable procedures in WAC 173-303-800 through 173-303-840. The written notification or request must include a copy of the amended closure plan for review or approval by the department.

(i) The owner or operator may submit a written notification or request to the department for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.

(ii) The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved closure plan whenever:

(A) Changes in operating plans or facility design affect the closure plan; or

(B) There is a change in the expected year of closure, if applicable; or

(C) In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan; or

(D) The owner/operator requests the director apply alternative requirements under subsection (1)(d) of this section, WAC 173-303-645 (1)(e), or 173-303-620 (8)(d).

(iii) The owner or operator must submit a written request for a permit modification including a copy of the amended closure plan for approval at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must request a permit modification no later than thirty days

after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all dangerous waste at closure and is not otherwise required to prepare a contingent closure plan under WAC 173-303-650(6) or 173-303-660(9), must submit an amended closure plan to the department no later than sixty days from the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the requirements of WAC 173-303-665, or no later than thirty days from that date if the determination is made during partial or final closure. The department will approve, disapprove, or modify this amended plan in accordance with the procedures in WAC 173-303-800 through 173-303-840. The approved closure plan will become a condition of any permit issued.

(iv) The department may request modifications to the plan under the conditions described in (b)(ii) of this subsection. The owner or operator must submit the modified plan within sixty days of the department's request, or within thirty days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the department will be approved in accordance with the procedures in WAC 173-303-800 through 173-303-840.

(c) Notification of partial closure and final closure.

(i) The owner or operator must notify the department in writing at least sixty days prior to the date on which they expect to begin closure of a surface impoundment, waste pile, land treatment, or landfill unit, or final closure of a facility with such a unit. The owner or operator must notify the department in writing at least forty-five days prior to the date on which they expect to begin closure of a treatment or storage tank, container storage, or incinerator unit, or final closure of a facility with only such units.

(ii) The date when he "expects to begin closure" must be either:

(A) No later than thirty days after the date on which any dangerous waste management unit receives the known final volume of dangerous wastes or, if there is a reasonable possibility that the dangerous waste management unit will receive additional dangerous wastes, no later than one year after the date on which the unit received the most recent volume of dangerous waste. If the owner or operator of a dangerous waste management unit can demonstrate to the department that the dangerous waste management unit or facility has the capacity to receive additional dangerous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the department may approve an extension to this one-year limit; or

(B) For units meeting the requirements of subsection (4)(d) of this section, no later than thirty days after the date on which the dangerous waste management unit receives the known final volume of nondangerous wastes, or if there is a reasonable possibility that the dangerous waste management unit will receive additional nondangerous wastes, no later than one year after the date on which the unit received the most recent volume of nondangerous wastes. If the owner or operator can demonstrate to the department that the dangerous waste management unit has the capacity to receive additional nondangerous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the department may approve an extension to this one-year limit.

(iii) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order to cease receiving dangerous wastes or to close, then the requirements of (c) of this subsection do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in subsection (4) of this section.

(iv) Removal of wastes and decontamination or dismantling of equipment. Nothing in this subsection will preclude the owner or operator from removing dangerous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

(4) Closure; time allowed for closure.

(a) Within ninety days after receiving the final volume of dangerous wastes, or the final volume of nondangerous wastes if the owner or operator complies with all applicable requirements in (d) and (e) of this subsection, at a dangerous waste management unit or facility, the owner or operator must treat, remove from the unit or facility, or dispose of on site, all dangerous wastes in accordance with the approved closure plan. The department may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that he has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, and either:

(i) The activities required to comply with this paragraph will, of necessity, take longer than ninety days to complete; or

(ii)(A) The dangerous waste management unit or facility has the capacity to receive additional dangerous wastes, or has the capacity to receive nondangerous wastes if the owner or operator complies with (d) and (e) of this subsection;

(B) There is a reasonable likelihood that he or another person will recommence operation of the dangerous waste management unit or the facility within one year; and

(C) Closure of the dangerous waste management unit or facility would be incompatible with continued operation of the site.

(b) The owner or operator must complete partial and final closure activities in accordance with the approved closure plan and within one hundred eighty days after receiving the final volume of dangerous wastes, or the final volume of nondangerous wastes if the owner or operator complies with all applicable requirements in (d) and (e) of this subsection, at the dangerous waste management unit or facility. The department may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that he has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating dangerous waste management unit or facility, including compliance with all applicable permit requirements, and either:

(i) The partial or final closure activities will, of necessity, take longer than one hundred eighty days to complete; or

(ii)(A) The dangerous waste management unit or facility has the capacity to receive additional dangerous wastes, or has the capacity to receive nondangerous wastes if the owner or operator complies with (d) and (e) of this subsection;

(B) There is reasonable likelihood that he or another person will recommence operation of the dangerous waste management unit or the facility within one year; and

(C) Closure of the dangerous waste management unit or facility would be incompatible with continued operation of the site.

(c) The demonstrations referred to in (a)(i) and (b)(i) of this subsection must be made as follows: The demonstrations in (a)(i) of this subsection must be made at least thirty days prior to the expiration of the specified ninety-day period; and the demonstration in (b)(i) of this subsection must be made at least thirty days prior to the expiration of the specified one hundred eighty-day period unless the owner or operator is otherwise subject to the deadlines in (d) of this subsection.

(d) The department may allow an owner or operator to receive only nondangerous wastes in a landfill, land treatment, or surface impoundment unit after the final receipt of dangerous wastes at that unit if:

(i) The owner or operator requests a permit modification in compliance with all applicable requirements in WAC 173-303-830 and 40 CFR Part 124 and in the permit modification request demonstrates that:

(A) The unit has the existing design capacity as indicated on the part A application to receive nondangerous wastes; and

(B) There is a reasonable likelihood that the owner or operator or another person will receive nondangerous wastes in the unit within one year after the final receipt of dangerous wastes; and

(C) The nondangerous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under this part; and

(D) Closure of the dangerous waste management unit would be incompatible with continued operation of the unit or facility; and

(E) The owner or operator is operating and will continue to operate in compliance with all applicable permit requirements; and

(ii) The request to modify the permit includes an amended wastes analysis plan, ground water monitoring and response program, human exposure assessment required under RCRA section 3019, and closure and post-closure plan, and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate, to reflect any changes due to the presence of dangerous constituents in the nondangerous wastes, and changes in closure activities, including the expected year of closure if applicable under subsection (3)(a)(viii) of this section, as a result of the receipt of nondangerous wastes following the final receipt of dangerous wastes; and

(iii) The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of nondangerous wastes following receipt of the final volume of dangerous wastes; and

(iv) The request to modify the permit and the demonstration referred to in (d)(i) and (ii) of this subsection are submitted to the department no later than one hundred twenty days prior to the date on which the owner or operator of the facility receives the known final volume of dangerous wastes at the unit, or no later than ninety days after the effective date of this rule in the state in which the unit is located, whichever is later.

(e) In addition to the requirements in (d) of this subsection, an owner or operator of a dangerous wastes surface impoundment that is not in compliance with the liner and leachate collection system requirements in 42 U.S.C. 3004 (o)(1) and 3005 (j)(1) or 42 U.S.C. 3004 (o)(2) or (3) or 3005 (j)(2), (3), (4) or (13) must:

(i) Submit with the request to modify the permit:

(A) A contingent corrective measures plan, unless a corrective action plan has already been submitted under WAC 173-303-645(10); and

(B) A plan for removing dangerous wastes in compliance with (e)(ii) of this subsection; and

(ii) Remove all dangerous wastes from the unit by removing all dangerous liquids, and removing all dangerous sludges to the extent practicable without impairing the integrity of the liner(s), if any.

(iii) Removal of dangerous wastes must be completed no later than ninety days after the final receipt of dangerous wastes. The department may approve an extension to this deadline if the owner or operator demonstrates that the removal of dangerous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.

(iv) If a release that is a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters of constituents specified in the permit or that exceeds the facility's ground water protection standard at the point of compliance, if applicable, is detected in accordance with the requirements in WAC 173-303-645, the owner or operator of the unit:

(A) Must implement corrective measures in accordance with the approved contingent corrective measures plan required by (e)(i) of this subsection no later than one year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;

(B) May continue to receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and

(C) May be required by the department to implement corrective measures in less than one year or to cease the receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.

(v) During the period of corrective action, the owner or operator must provide semiannual reports to the department that describe the progress of the corrective action program, compile all ground water monitoring data, and evaluate the effect of the continued receipt of nondangerous wastes on the effectiveness of the corrective action.

(vi) The department may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one year as required in (e)(iv) of this subsection, or fails to make

substantial progress in implementing corrective action and achieving the facility's ground water protection standard or background levels if the facility has not yet established a ground water protection standard.

(vii) If the owner or operator fails to implement corrective measures as required in (e)(iv) of this subsection or if the department determines that substantial progress has not been made pursuant to (e)(vi) of this subsection the department will:

(A) Notify the owner or operator in writing that the owner or operator must begin closure in accordance with the deadline in (a) and (b) of this subsection and provide a detailed statement of reasons for this determination; and

(B) Provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than twenty days after the date of the notice.

(C) If the department receives no written comments, the decision will become final five days after the close of the comment period. The department will notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, must be submitted within fifteen days of the final notice and that closure must begin in accordance with the deadlines in (a) and (b) of this subsection.

(D) If the department receives written comments on the decision, it will make a final decision within thirty days after the end of the comment period, and provide the owner or operator in writing and the public through a newspaper notice, a detailed statement of reasons for the final decision. If the department determines that substantial progress has not been made, closure must be initiated in accordance with the deadlines in (a) and (b) of this subsection.

(E) The final determinations made by the department under (e)(vii)(C) and (D) of this subsection are not subject to administrative appeal.

(5) Disposal or decontamination of equipment, structures and soils. During the partial and final closure periods, all contaminated equipment, structures and soils must be properly disposed of or decontaminated unless otherwise specified in WAC 173-303-640(8), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), or under the authority of WAC 173-303-680 (2) and (4). By removing any dangerous wastes or dangerous constituents during partial and final closure, the owner or operator may become a generator of dangerous waste and must handle that waste in accordance with all applicable requirements of WAC 173-303-170 through 173-303-230.

(6) Certification of closure. Within sixty days of completion of closure of each dangerous waste management unit (including tank systems and container storage areas), and within sixty days of the completion of final closure, the owner or operator must submit to the department by registered mail, a certification that the dangerous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the department upon request until it releases the owner or operator from the financial assurance requirements for closure under WAC 173-303-620(4).

(7) Post-closure care and use of property.

(a) Post-closure care for each dangerous waste management unit subject to post-closure requirements must begin after completion of closure of the unit and continue for thirty years after that date and must consist of at least the following:

(i) Ground water monitoring and reporting as required by WAC 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680; and

(ii) Maintenance and monitoring of waste containment systems as applicable.

(b) Any time preceding partial closure of a dangerous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular unit, the department may, in accordance with the permit modification procedures in WAC 173-303-800 through 173-303-840:

(i) Shorten the post-closure care period applicable to the dangerous waste management unit, or facility, if all disposal units have been closed, if it finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or ground water monitoring results, characteristics of the dangerous waste, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the dangerous waste management unit or facility is secure); or

(ii) Extend the post-closure care period applicable to the dangerous waste management unit or facility if it finds that the extended period is necessary to protect human health and the environment (e.g., leachate or ground water monitoring results indicate a potential for migration of dangerous waste at levels which may be harmful to human health and the environment).

(c) The department may require, at partial or final closure, continuation of any of the security requirements of WAC 173-303-310 during part or all of the post-closure period when:

(i) Dangerous wastes may remain exposed after completion of partial or final closure; or

(ii) Access by the public or domestic livestock may pose a hazard to human health.

(d) Post-closure use of property on or in which dangerous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of any containment system, or the function of the facility's monitoring systems, unless the department finds that the disturbance:

(i) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(ii) Is necessary to reduce a threat to human health or the environment.

(e) All post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in subsection (8) of this section.

(8) Post-closure plan; amendment of plan.

(a) The owner or operator of a dangerous waste disposal unit must have a written post-closure plan. In addition, certain surface impoundments and certain piles from which the owner or operator intends to remove or decontaminate the

dangerous wastes at partial or final closure are required by WAC 173-303-650 and 173-303-660, respectively, to have written contingent post-closure plans. Owners or operators of surface impoundments and waste piles not otherwise required to prepare contingent post-closure plans under WAC 173-303-650 or 173-303-660 must submit a post-closure plan to the department within ninety days from the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the post-closure requirements. The plan must be submitted with the permit application, in accordance with WAC 173-303-806, and approved by the department as part of the permit issuance procedures under WAC 173-303-840. The approved post-closure plan will become a condition of any permit issued.

(b) For each dangerous waste management unit subject to the requirements of this subsection, the post-closure plan must identify the activities which will be carried on after closure and the frequency of these activities, and include at least:

(i) A description of the planned ground water monitoring activities and frequencies at which they will be performed;

(ii) A description of the planned maintenance activities, and frequencies at which they will be performed to comply with WAC 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680 during the post-closure care period, to ensure:

(A) The integrity of the cap and final cover or other containment structures in accordance with the requirements of 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680; and

(B) The function of the facility monitoring equipment;

(iii) The name, address, and phone number of the person or office to contact about the dangerous waste disposal unit or facility during the post-closure care period;

(iv) And, for facilities where the director has applied alternative requirements under subsection (1)(d) of this section, WAC 173-303-645 (1)(e) or 173-303-620 (8)(d), the post-closure plan must include either the alternative requirements or a reference to the enforceable document that contains the alternative requirements.

(c) Until final closure of the facility, a copy of the approved post-closure plan must be furnished to the department upon request, including request by mail. After final closure has been certified, the person or office specified in (b)(iii) of this subsection must keep the approved post-closure plan during the remainder of the post-closure period.

(d) Amendment of plan. The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements of WAC 173-303-800 through 173-303-840. The written notification or request must include a copy of the amended post-closure plan for review or approval by the department.

(i) The owner or operator may submit a written notification or request to the department for a permit modification to amend the post-closure plan at any time during the active life of the facility or during the post-closure care period.

(ii) The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan whenever:

(A) Changes in operating plans or facility design affect the approved post-closure plan; or

(B) There is a change in the expected year of final closure, if applicable; or

(C) Events which occur during the active life of the facility, including partial and final closures, affect the approved post-closure plan; or

(D) The owner/operator requests the director to apply alternative requirements under subsection (1)(d) of this section, WAC 173-303-645 (1)(e), or 173-303-620 (8)(d).

(iii) The owner or operator must submit a written request for a permit modification at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the post-closure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all dangerous waste at closure and is not otherwise required to submit a contingent post-closure plan under WAC 173-303-650 or 173-303-660 must submit a post-closure plan to the department no later than ninety days after the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the requirements of WAC 173-303-665. The department will approve, disapprove, or modify this plan in accordance with the procedures in WAC 173-303-800 through 173-303-840. The approved post-closure plan will become a permit condition.

(iv) The department may request modifications to the plan under the conditions described in (d)(ii) of this subsection. The owner or operator must submit the modified plan no later than sixty days after the department's request, or no later than ninety days if the unit is a surface impoundment or waste pile not previously required to prepare a contingent post-closure plan. Any modifications requested by the department will be approved, disapproved, or modified in accordance with the procedures in WAC 173-303-800 through 173-303-840.

(9) Notice to local land authority. No later than the submission of the certification of closure of each dangerous waste disposal unit, the owner or operator of a disposal facility must submit to the local zoning authority or the authority with jurisdiction over local land use and to the department a survey plat indicating the location and dimensions of landfill cells or other dangerous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or the authority with jurisdiction over local land use must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the dangerous waste disposal unit in accordance with the applicable requirements of this section. In addition, no later than sixty days after certification of closure of each dangerous waste disposal unit, the owner or operator must submit to the local zoning authority or the authority with jurisdiction over local land use and to the department, a record of the type, location, and quantity of dangerous wastes disposed of within each cell or other disposal unit of the facility. For wastes disposed of before November 19, 1980 (March 12, 1982, for facilities subject to this chapter but not subject to 40 CFR Part 264), the owner or operator must identify the type, location, and quantity of the

dangerous wastes to the best of his knowledge and in accordance with any records he has kept.

(10) Notice in deed to property.

(a) No later than sixty days after certification of closure of each dangerous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the department a record of the type, location, and quantity of dangerous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes (as defined in WAC 173-303-040) disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the dangerous wastes to the best of his knowledge and in accordance with any records he has kept.

(b) Within sixty days of certification of closure of the first dangerous waste disposal unit and within sixty days of certification of closure of the last dangerous waste disposal unit, the owner or operator must:

(i) Record, in accordance with state law, a notation on the deed to the facility property, or on some other instrument which is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that:

(A) The land has been used to manage dangerous wastes;

(B) Its use is restricted under this section; and

(C) The survey plat and record of the type, location, and quantity of dangerous wastes disposed of within each cell or other dangerous waste disposal unit of the facility required in subsection (9) of this section have been filed with the local zoning authority, or the authority with jurisdiction over local land use, and with the department; and

(ii) Submit a certification, signed by the owner or operator, that he has recorded the notation specified in (b)(i) of this subsection, including a copy of the document in which the notation has been placed, to the department.

(c) If the owner or operator or any subsequent owner of the land upon which a dangerous waste facility was located wishes to remove dangerous wastes and dangerous waste residues, the liner, if any, or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in WAC 173-303-800 through 173-303-840. The owner or operator must demonstrate that the removal of dangerous wastes will satisfy the criteria of subsection (7)(d) of this section. By removing dangerous waste, the owner or operator may become a generator of dangerous waste and must manage it in accordance with all applicable requirements of this chapter. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the department approve either:

(i) The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

(ii) The addition of a notation to the deed or instrument indicating the removal of the dangerous waste.

(11) Certification of completion of post-closure care. No later than sixty days after completion of the established post-closure care period for each dangerous waste disposal unit, the owner or operator must submit to the department, by registered mail, a certification that the post-closure care period for the dangerous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the department upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under WAC 173-303-620(6).

(12) Off-site recycling and used oil processor closure plans. The owner or operator of an off-site recycling facility subject to regulation under WAC 173-303-120 (3), (4), or used oil processor or rerefiner subject to WAC 173-303-515 (9) must have a written closure plan.

(a) Submittal. For new facilities, the closure plan must be submitted with the notification required under WAC 173-303-060. For existing facilities, the closure plan must be submitted within one hundred eighty days of the effective date of this regulation. For closure plans denied under (b) of this subsection that will be resubmitted, the amended plan must be resubmitted within ninety days after the owner or operator receives the denial.

(b) Review by department. Decision to approve or deny. Closure plans must be submitted to department for review, comment, approval or denial. The department decision to approve a closure plan must assure it is consistent with requirements in subsections (2) and (12) of this section. The department decision to deny a closure plan must be justified on the inability or unwillingness of the owner and operator to meet requirements in subsections (2) and (12) of this section or WAC 173-303-620 (1)(e). The department's decision may be appealed under the provisions of WAC 173-303-845.

(c) Availability. A copy of the approved closure plan and all updates to the plan must be maintained at the facility and furnished to the department upon request, including request by mail, until final closure is completed and certified in accordance with subsection (6) of this section.

(d) Contents of plan. The closure plan must identify steps necessary to perform final closure of recycling units at any point during its active life. The closure plan must include at least:

(i) An estimate of the maximum inventory of dangerous wastes or used oil ever on-site over the active life of the facility;

(ii) Descriptions, schedules, and disposal or decontamination procedures in subsections (3), (4), (5), (6) of this section, except any provisions dealing with permits, permit applications, modifications or approvals. The term "recycling unit" will replace the terms "dangerous waste management unit" or "regulated unit" in these subsections. Any references to permits or permit modifications in these subsections do not apply.

(e) Obligation to amend. At least sixty days prior to a major change at an off-site recycling or used oil processor/rerefining facility, the owners/operator of that facility must submit an amended closure plan. A major change may include the addition of a recycling or recovery process that is subject to WAC 173-303-120 (3) or (4), any increase in the maximum inventory of dangerous waste or used oil described in the previously approved closure plan, the closure of an existing resource reclamation unit, or a change in ownership or operational control. The department must approve or deny, with justification, the revised closure plan. Refer to (a) of this

subsection when a closure plan is denied if the closure plan needs to be resubmitted. Alternatively, the owner or operator may challenge the denial pursuant to WAC 173-303-845.

(f) Notification of closure. At least forty-five days prior to closure, an owner/operator must provide written notice to department of intent to close.

(g) Relationship to closure plans for permitted facilities. A facility owner/operator that is subject to permitting and closure planning requirements for storage, treatment or disposal that is also required to prepare a closure plan for off-site recycling or used oil processing/rerefining, may satisfy the requirements of this subsection by combining all closure requirements in a single closure plan.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-610, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-610, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-610, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-610, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-610, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-610, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-610, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-610, filed 6/26/87; 84-14-031 (Order DE 84-22), § 173-303-610, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-610, filed 2/10/82.]

WAC 173-303-620 Financial requirements. (1) Applicability.

(a) The requirements of subsections (3), (4), (7), (8), (9), and (10) of this section, apply to owners and operators of all dangerous waste facilities, except as provided otherwise in this section.

(b) The requirements of subsections (5) and (6) of this section apply to owners and operators of:

(i) Dangerous waste disposal facilities;

(ii) Tank systems that are required under WAC 173-303-640(8) to meet the requirements of landfills;

(iii) Miscellaneous units as specified in WAC 173-303-680(4);

(iv) Waste piles and surface impoundments to the extent that WAC 173-303-650 and 173-303-660, respectively, require that such facilities comply with this section; and

(v) Containment buildings that are required under WAC 173-303-695 to meet the requirements for landfills.

(c) States and the federal government are exempt from the requirements of this section. Operators of state or federally owned facilities are exempt from the requirements of this section, except subsections (3) and (5) of this section. Operators of facilities who are under contract with (but not owned by) the state or federal government must meet all of the requirements of this section.

(d) The director may, in an enforceable document, replace all or part of the requirements of this section with alternative requirements for financial assurance when he or she:

(i) Applies alternative requirements for ground water monitoring, closure or post-closure under WAC 173-303-610 (1)(d) or 173-303-645 (1)(e); and

(ii) Determines that it is not necessary to apply the requirements of this section because the alternative requirements will protect human health and the environment.

(e) Except as provided in (c) of this subsection, the requirements of subsections (3), (4), (8), (9) and (10) of this section, apply to owners and operators of off-site recycling facilities and processors/rerefiners of used oil, except the term "recycling unit" will replace the terms "dangerous waste management unit" or "regulated unit."

(i) If the closure plan for an off-site recycling or used oil processing/rerefining facility has not been approved by the department within one year of submittal to the department, the department may determine the closure cost estimate and direct the facility to establish financial assurance in that amount. Note that the schedule for partially funded trust funds for existing facilities of WAC 173-303-620 (4)(c)(i) may apply.

(ii) Relationship to closure cost estimates and financial responsibility for permitted facilities. A facility owner/operator that is subject to closure cost estimating and financial responsibility requirements for dangerous waste management units and resource reclamation unit may choose to consolidate those requirements into a single mechanism for submittal to the department.

(2) Definitions. As used in this section, the following listed or referenced terms have the meanings given below:

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of WAC 173-303-610(3), or for off-site recycling or used oil processing facilities prepared in accordance with WAC 173-303-610(12);

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with subsection (3) of this section;

(c) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with subsection (5) of this section;

(d) "Parent corporation" means a corporation which directly owns at least fifty percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation;

(e) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of WAC 173-303-610 (7), (8), (9), and (10);

(f) "Regional administrator" means the department;

(g) "Hazardous waste" means dangerous waste; and

(h) The additional terms listed and defined in 40 CFR 264.141 (f), (g), and (h) are incorporated by reference.

(3) Cost estimate for facility closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in WAC 173-303-610 (2) through (6), and applicable closure requirements in WAC 173-303-630(10), 173-303-640(5), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670 (8), 173-303-680 (2) through (4) and 173-303-695. The closure cost estimate:

(i) Must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see WAC 173-303-610 (3)(a));

(ii) Must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in subsection (2)(d) of this section.) The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility;

(iii) May not incorporate any salvage value that may be realized with the sale of dangerous wastes, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure;

Except that, off-site recyclers subject to WAC 173-303-120 (3) or (4), or off-site used oil processors subject to WAC 173-303-515(9) may exclude the estimated value for certain types of recyclable materials from the estimated cost of closing a recycling unit. This exclusion may include dangerous wastes or used oil held in tanks or containers that are dedicated solely to the management of recyclable materials that will require only incidental processing prior to producing a product that may be sold to the general public. Incidental processing may include simple screening or filtering to remove minor amounts of foreign material or removal of less than five percent water by volume; and

(iv) May not incorporate a zero cost for dangerous wastes, or nondangerous wastes if applicable under WAC 173-303-610 (4)(d), that might have economic value.

(b) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than thirty days after the department has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in (c)(i) and (ii) of this subsection.

(c) During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with this section. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before submission of updated information to the department as specified in subsection (4) of this section. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent *Implicit Price Deflator for Gross National Product or Gross Domestic Product* as published by the United States Department of Commerce in its survey of current business. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

(i) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(d) During the operating life of the facility, the owner or operator must keep at the facility the latest closure cost estimate prepared in accordance with (a) and (b) of this subsection, and, when this estimate has been adjusted in accordance with (c) of this subsection, the latest adjusted closure cost estimate.

(4) Financial assurance for facility closure.

(a) An owner or operator of a TSD, or off-site recycling or used oil processing/rerefining facility must establish financial assurance for closure of the facility. The owner or operator must choose from the following options or combination of options:

(i) Closure trust fund;

(ii) Surety bond guaranteeing payment into a closure trust fund;

(iii) Surety bond guaranteeing performance of closure;

(iv) Closure letter of credit;

(v) Closure insurance; or

(vi) Financial test and corporate guarantee for closure.

(b) In satisfying the requirements of financial assurance for facility closure in this subsection, the owner or operator must meet all the requirements for the mechanisms listed above as set forth in 40 CFR 264.143 which are incorporated by reference. If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state.

(c) 40 CFR 264.143 is modified by the following requirements:

(i) Partially funded trust funds of 264.143 (a)(3) may not be accepted as a mechanism for a closure trust fund for TSDs. Owners and operators of existing recycling units that become subject to this section may establish a partially funded closure trust fund with a pay-in period of five years. The fund must be fully funded no later than five years (and the first, second, third, fourth, and fifth payments due no later than one, two, three, four, and five year(s) respectively) after the date of the department's approval of the closure plan under WAC 173-303-610 (12)(b);

(ii) Insurance companies providing closure coverage must have a current rating of financial strength of:

(A) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;

(B) Aaa, Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or

(C) A++, A+, A, A-, B++, B+ as rated by A.M. Best;

(iii) Ecology must be named as secondary beneficiary on an insurance policy;

(iv) Facility owners/operators requesting the use of the financial test and corporate guarantee must meet a minimum tangible net worth criterion of twenty million dollars.

(d) Owners and operators of off-site recycling facilities regulated under WAC 173-303-120 (3) or (4), or used oil processing/rerefining facilities regulated under WAC 173-303-515(9), must demonstrate financial assurance for closure of the facility or recycling units. In addition to the requirements of 40 CFR 264.143, as amended by this subsection, the financial assurance must meet the following requirements:

(i) For existing facilities choosing a surety bond guaranteeing payment, surety bond guaranteeing performance, letter of credit, insurance, financial test or corporate guarantee, the mechanism must be established within thirty-six months of the effective date of this section;

(ii) Owners and operators of existing facilities choosing a partially funded trust fund mechanism must establish a fully funded trust fund within sixty months of approval of the closure plan by the department (see (c)(i) of this subsection);

(iii) For new facilities, financial assurance must be established and submitted to the department at least sixty days prior to the acceptance of the first shipment of wastes.

(e) Owners and operators of off-site recycling facilities regulated under WAC 173-303-120 (3) or (4), or used oil processing/rerefining facilities regulated under WAC 173-303-515(9) may request an alternative mechanism for financing the closure of recycling units that is determined by the department to be equivalent to one of the methods listed in (a) of this subsection. This may include any alternative mechanism as may be established through action by the Washington state legislature.

(5) Cost estimate for post-closure monitoring and maintenance.

(a) The owner or operator of a facility subject to post-closure monitoring or maintenance requirements must have a detailed written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in WAC 173-303-610 (7) through (10), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), and 173-303-680(4). The post-closure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct post-closure care activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in subsection (2)(d) of this section.) The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required by WAC 173-303-610.

(b) During the active life of the facility, the owner or operator must revise the post-closure cost estimate within thirty days after the department has approved the request to modify the post-closure plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in (c)(i) and (ii) of this subsection.

(c) During the active life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with subsection (6) of this section. For owners or operators using the financial test or corporate guarantee, the post-closure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before the submission of updated information to the department as specified in subsection (6) of this section. The adjustment may be made by recalculating the post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent *Implicit Price Deflator for Gross National Product* or *Gross Domestic Product* as published by the United States Department of Commerce in its Survey of Current Business. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

(i) The first adjustment is made by multiplying the post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

(d) During the operating life of the facility, the owner or operator must keep at the facility the latest postclosure cost estimate prepared in accordance with (a) and (b) of this subsection, and, when this estimate has been adjusted in accordance with (c) of this subsection, the latest adjusted post-closure cost estimate.

(6) Financial assurance for post-closure monitoring and maintenance.

(a) An owner or operator of a facility subject to post-closure monitoring or maintenance requirements must establish financial assurance for post-closure care in accordance with the approved post-closure care plan. He must choose from the following options or combination of options:

(i) Post-closure trust fund, except that the use of partially funded trust funds, as provided in 40 CFR 264.145(a), will not be allowed by the department;

(ii) Surety bond guaranteeing payment into a post-closure trust fund;

(iii) Surety bond guaranteeing performance of post-closure care;

(iv) Post-closure letter of credit;

(v) Post-closure insurance; however, financial or insurance institutions providing such insurance must have a current rating of financial strength of:

(A) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;

(B) Aaa, Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or

(C) A++, A+, A, A-, B++, B+ as rated by A.M. Best; or

(vi) Financial test and corporate guarantee for post-closure care, except that the criterion for minimum tangible net worth in 40 CFR 264.145(f) must be in an amount of at least twenty million dollars.

(b) In satisfying the requirements of financial assurance for facility post-closure care in this subsection, the owner or operator must meet all the requirements set forth in 40 CFR 264.145 which are incorporated by reference. If the facilities covered by the mechanism are in more than one state, identical evidence of financial assurance must be submitted to and maintained with the state agency regulating hazardous waste or with the appropriate regional administrator if the facility is located in an unauthorized state.

(7) Use of a mechanism for financial assurance of both closure and post-closure care. An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both 40 CFR 264.143 and 264.145 which are incorporated by reference. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of postclosure care.

(8) Liability requirements.

(a) An owner or operator of a TSD facility, off-site recycling or used oil processing/rerefining facility, or a group of such facilities must demonstrate financial responsibility for bodily injury and property damages to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must meet the requirements of 40 CFR 264.147(a), which is incorporated by reference, with the following additional requirements:

(i) Insurance companies providing liability coverage must have a current rating of financial strength of:

(A) AAA, AA+, AA, AA-, A+, A as rated by Standard and Poor's;

(B) Aaa, Aa1, Aa2, Aa3, A1, A2 as rated by Moody's; or

(C) A++, A+, A, A-, B++, B+ as rated by A.M. Best;

(ii) The department may file claims against liability insurance when contamination occurs as a result of releases or discharges of dangerous wastes or used oil from recycling units subject to regulation under this section to waters of the state as defined under chapter 90.48 RCW;

(iii) Facility owners/operators requesting the use of the financial test and corporate guarantee must meet a minimum tangible net worth criterion of twenty million dollars.

(b) An owner or operator of a facility with a regulated unit or units (as defined in WAC 173-303-040) or a disposal miscellaneous unit or units used to manage dangerous waste or a group of such facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must meet the requirements of 40 CFR 264.147(b), 264.147 (f), (g), (h), (i), and (j) which are incorporated by reference.

(c) Request for variance. If an owner or operator can demonstrate to the satisfaction of the department that the levels of financial responsibility required by (a) or (b) of this subsection are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the department. The request for a variance must be submitted to the department as part of the application under WAC 173-303-806(4) for a facility that does not have a permit, or pursuant to the procedures for permit modification under WAC 173-303-830 for a facility that has a permit. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the department's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The department may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the department to determine a level of financial responsibility other than that required by (a) or (b) of this subsection. Any request for a variance for a permitted facility will be treated as a request for a permit modification under WAC 173-303-830.

(d) Adjustments by the department. If the department determines that the levels of financial responsibility required by (a) or (b) of this subsection are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the department may adjust the level of financial responsibility required under (a) or (b) of this subsection as may be necessary to protect human health and the environment. This adjusted level will be based on the department's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the department determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that has no regulated units (as defined in WAC 173-303-040), it may require that the owner or operator of the facility comply with (b) of this subsection. An owner or operator must furnish to the department within a reasonable time, any information which the department requests to determine whether cause exists for such adjustments of level or type of coverage. Any adjustments of level or type of coverage for a facility that has a permit will be treated as a permit modification under WAC 173-303-830.

(e) Period of coverage. An owner or operator must continuously provide liability coverage for a facility as required by this subsection until certifications of closure of the facility, as specified in WAC 173-303-610(6), are received by the department.

(f) The following subsections are incorporated by reference: 40 CFR section 264.147(f), Financial test for liability coverage, (g) Guarantee for liability coverage, (h) Letter of credit for liability coverage, (i) Surety bond for liability coverage, and (j) Trust fund for liability coverage.

(9) Incapacity of owners or operators, guarantor or financial institutions.

(a) An owner or operator must notify the department by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), United States Code, naming the owner or operator as debtor, within ten days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in 40 CFR 264.143(f) and 264.145(f) must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (40 CFR 264.151(h)).

(b) An owner or operator who fulfills the requirements of 40 CFR 264.143, 264.145, or 264.147 (a) or (b) by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within sixty days after such an event.

(10) Wording of the instruments. The financial instruments required by this section must contain the wording specified by 40 CFR 264.151 which is incorporated by reference, except that:

(a) The words "regional administrator" and "environmental protection agency" must be replaced with the words Washington state department of ecology;

(b) The words "hazardous waste" must be replaced with the words "dangerous waste";

(c) Any other words specified by the department must be changed as necessary to assure financial responsibility of the facility in accordance with the requirements of this section; and

(d) Whenever 40 CFR 264.151 requires that owners and operators notify several regional administrators of their financial obligations, the owner or operator must notify both the department and all regional administrators of regions that are affected by the owner or operator's financial assurance mechanisms.

Copies of the financial instruments with the appropriate word changes will be available from the department by June 30, 1984.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-620, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-620, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.-007. 00-11-040 (Order 99-01), § 173-303-620, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-620, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-620, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-620, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-620, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-620, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-620, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-620, filed 2/10/82. Formerly WAC 173-302-340.]

WAC 173-303-630 Use and management of containers. (1) Applicability. The regulations in this section apply to owners and operators of all dangerous waste facilities that store containers of dangerous waste.

(2) Condition of containers. If a container holding dangerous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the dangerous waste from the container to a container that is in good condition or manage the waste in some other way that complies with the requirements of chapter 173-303 WAC. In addition, the owner or operator must address leaks and spills in accordance with the applicable provisions of WAC 173-303-145 and 173-303-360.

(3) Identification of containers. The owner or operator must label containers in a manner which adequately identifies the major risk(s) associated with the contents of the containers for employees, emergency response personnel and the public (Note—If there is already a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate). The owner or operator must affix labels upon transfer of dangerous wastes from one container to another. The owner or operator must destroy or otherwise remove labels from the emptied container, unless the container will continue to be used for storing dangerous waste at the facility. The owner or operator must ensure that labels are not obscured, removed, or otherwise unreadable in the course of inspection required under WAC 173-303-320.

(4) Compatibility of waste with containers. The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the dangerous waste to be stored, so that the ability of the container to contain the waste is not impaired.

(5) Management of containers.

(a) A container holding dangerous waste must always be closed, except when it is necessary to add or remove waste.

(b) A container holding dangerous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

(c) A minimum thirty-inch separation is required between aisles of containers holding dangerous waste(s). A row of drums must be no more than two drums wide.

(6) Inspections. At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion, deterioration, or other factors. The owner or operator must keep an inspection log including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made and the date and nature of any repairs or remedial actions taken. The log must be kept at the facility for at least five years from the date of inspection.

(7) Containment.

(a) Container storage areas must have a containment system that is capable of collecting and holding spills and leaks. In addition to the necessary leak containment capacity, uncovered storage areas must be capable of holding the additional volume that would result from the precipitation of a maximum twenty-five year storm of twenty-four hours duration. The containment system must:

(i) Have a base underlying the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated rainfall until the collected material is detected and removed. The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

(ii) Be designed for positive drainage control (such as a locked drainage valve) to prevent release of contaminated liquids and so that uncontaminated precipitation can be drained promptly for convenience of operation. Spilled or leaked waste and accumulated precipitation must be removed from the containment system in as timely a manner as is necessary to prevent overflow; and

(iii) Have sufficient capacity to contain ten percent of the volume of all containers or the volume of the largest container, whichever is greater. Only containers holding free liquids, or holding wastes designated as F020, F021, F022, F023, F026, or F027 need to be considered in this determination.

(b) Run-on into the containment system must be prevented, unless the department waives this requirement in the permit after determining that the collection system has sufficient excess capacity in addition to that required in (a)(iii) of this subsection to accommodate any run-on which might enter the system.

(c) Storage areas that store containers holding only wastes that do not contain free liquids, do not exhibit either the characteristic of ignitability or reactivity as described in WAC 173-303-090 (5) or (7), and are not designated as F020, F021, F022, F023, F026, or F027, need not have a containment system as described in this subsection: Provided, That:

(i) The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation; or

(ii) The containers are elevated or are otherwise protected from contact with accumulated liquids.

(d) The department may require generators to protect their containers from the elements by means of a building or other protective covering if the department determines that such protection is necessary to prevent a release of waste or waste constituents due to the nature of the waste or design of the container. The building or other protective covering must allow adequate inspection under subsection (6) of this section.

(8) Special requirements for ignitable or reactive waste.

(a) Containers holding reactive waste exhibiting a characteristic specified in WAC 173-303-090 (7)(a)(vi), (vii) or (viii) must be stored in a manner equivalent to the International Fire Code's "*American Table of Distances for Storage of Explosives*" Table 3304.5.2(2) or "*Table of Separation Distances for Low Explosives*" Table 3304.5.2(3), 2003 edition, or the version adopted by the local fire district.

(b) The owner or operator must design, operate, and maintain ignitable waste and reactive waste (other than a reactive waste which must meet (a) of this subsection) container storage in a manner equivalent with the International Fire Code. Where no specific standard or requirements are specified in the International Fire Code, or in existing state or local fire codes, applicable sections of the NFPA Pamphlet #30, "*Flammable and Combustible Liquids Code*," must be used. The owner/operator must also comply with the requirements of WAC 173-303-395 (1)(d).

(9) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials must not be placed in the same container, unless WAC 173-303-395 (1)(b) is complied with.

(b) Dangerous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

(c) A storage container holding a dangerous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device. Containment systems for incompatible wastes must be separate.

(10) Closure. At closure, all dangerous waste and dangerous waste residues must be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with dangerous waste or dangerous waste residues must be decontaminated or removed.

(11) Air emission standards. The owner or operator must manage all hazardous waste placed in a container in accordance with the applicable requirements of 40 CFR Subparts AA, BB, and CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-630, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-630, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-630, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-630, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-630, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-630, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-630, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-630, filed 2/10/82.]

WAC 173-303-640 Tank systems. (1) Applicability.

(a) The regulations in WAC 173-303-640 apply to owners and operators of facilities that use tank systems to treat or store dangerous waste, except as (b), (c), and (d) of this subsection provides otherwise.

(b) Tank systems that are used to store or treat dangerous waste which contain no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in subsection (4) of this section. To demonstrate the absence or presence of free liquids in the stored/treated waste, the test method described in WAC 173-303-110 (3)(a) must be used.

(c) Tank systems, including sumps, as defined in WAC 173-303-040, that serve as part of a secondary containment system to collect or contain releases of dangerous wastes are exempted from the requirements in subsection (4)(a) of this section.

(d) Tanks, sumps, and other such collection devices or systems used in conjunction with drip pads, as defined in WAC 173-303-040 and regulated under WAC 173-303-675, must meet the requirements of this section.

(2) Assessment of existing tank system's integrity.

(a) For each existing tank system, the owner or operator must determine that the tank system is not leaking or is unfit for use. Except as provided in (b) of this subsection, the owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified registered professional engineer, in accordance with WAC 173-303-810 (13)(a), that attests to the tank system's integrity by January 12, 1988, for underground tanks that do not meet the requirements of subsection (4) of this section and that cannot be entered for inspection, or by January 12, 1990, for all other tank systems.

(b) Tank systems that store or treat materials that become dangerous wastes subsequent to January 12, 1989, must conduct this assessment within twelve months after the date that the waste becomes a dangerous waste.

(c) This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

(i) Design standard(s), if available, according to which the tank system was constructed;

(ii) Dangerous characteristics of the waste(s) that have been and will be handled;

(iii) Existing corrosion protection measures;

(iv) Documented age of the tank system, if available (otherwise, an estimate of the age); and

(v) Results of a leak test, internal inspection, or other tank system integrity examination such that:

(A) For nonenterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects; and

(B) For other than nonenterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination, that is certified by an independent, qualified, registered professional engineer, in accordance with WAC 173-303-810 (13)(a), that addresses cracks, leaks, corrosion, and erosion.

Note: Three publications may be used, where applicable, as guidelines in conducting other than a leak test: *Tank Inspection, Repair, Alteration, and Reconstruction,* API Standard 653, Addendum 4 issued in December 1999; *Guidance for Assessing and Certifying Tank Systems that Store and Treat Dangerous Waste*, Ecology Publication No. 94-114; and *Steel Tank Institute* publication #SP001-00 *Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids* copyright 2000.

(d) If, as a result of the assessment conducted in accordance with (a) of this subsection, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of subsection (7) of this section.

(e) The owner or operator must develop a schedule for conducting integrity assessments over the life of the tank to ensure that the tank retains its structural integrity and will not collapse, rupture, or fail. The schedule must be based on the results of past integrity assessments, age of the tank system, materials of construction, characteristics of the waste, and any other relevant factors.

(3) Design and installation of new tank systems or components.

(a) Owners or operators of new tank systems or components must obtain (and for facilities that are pursuing or have obtained a final status permit, submit to the department, at time of submittal of Part B information) a written assessment, reviewed and certified by an independent, qualified registered professional engineer, in accordance with WAC 173-303-810 (13)(a), attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of dangerous waste. The assessment must show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection to ensure that it will not collapse, rupture, or fail. This assessment (which will be used by the department to review and approve or disapprove the acceptability of the tank system design at facilities which are pursuing or have obtained a final status permit) must include, at a minimum, the following information:

(i) Design standard(s) according to which tank system(s) are constructed;

(ii) Dangerous characteristics of the waste(s) to be handled;

(iii) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of:

(A) Factors affecting the potential for corrosion, including but not limited to:

(I) Soil moisture content;

(II) Soil pH;

(III) Soil sulfides level;

(IV) Soil resistivity;

(V) Structure to soil potential;

(VI) Influence of nearby underground metal structures (e.g., piping);

(VII) Existence of stray electric current;

(VIII) Existing corrosion-protection measures (e.g., coating, cathodic protection); and

(B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:

(I) Corrosion-resistant materials of construction such as special alloys, fiberglass reinforced plastic, etc.;

(II) Corrosion-resistant coating (such as epoxy, fiberglass, etc.,) with cathodic protection (e.g., impressed current or sacrificial anodes); and

(III) Electrical isolation devices such as insulating joints, flanges, etc.

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

(iv) For underground tank system components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and

(v) Design considerations to ensure that:

(A) Tank foundations will maintain the load of a full tank;

(B) Tank systems will be anchored to prevent flotation or dislodgment where the tank system is either placed in a saturated zone, or is located less than five hundred feet from a fault which has had displacement in Holocene times; and

(C) Tank systems will withstand the effects of frost heave.

(b) The owner or operator must develop a schedule for conducting integrity assessments over the life of the tank to ensure that the tank retains its structural integrity and will not collapse, rupture or fail. The schedule must be based on the results of past integrity assessments, age of the tank system, materials of construction, characteristics of the waste, and any other relevant factors.

(c) The owner or operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified installation inspector or an independent, qualified, registered professional engineer, either of whom is trained and experienced in the proper installation of tank systems or components, must inspect the system for the presence of any of the following items:

(i) Weld breaks;

(ii) Punctures;

(iii) Scrapes of protective coatings;

(iv) Cracks;

(v) Corrosion;

(vi) Other structural damage or inadequate construction/installation.

All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.

(d) New tank systems or components that are placed underground and that are backfilled must be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

(e) All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed, or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system must be performed prior to the tank system being covered, enclosed, or placed into use.

(f) Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

Note: The piping system installation procedures described in American Petroleum Institute (API) Publication 1615 (November 1979), "Installation of Underground Petroleum Storage Systems," or ANSI Standard B31.3, "Petroleum Refinery Piping," and ANSI Standard B31.4 "Liquid Petroleum Transportation Piping System," may be used, where applicable, as guidelines for proper installation of piping systems.

(g) The owner or operator must provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under (a)(iii) of this subsection, or other corrosion protection if the department believes other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.

(h) The owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of (b) through (g) of this subsection, that attest that the tank system was properly designed and installed and that repairs, pursuant to (c) and (e) of this subsection, were performed. These written statements must also include the certification statement as required in WAC 173-303-810 (13)(a).

(4) Containment and detection of releases.

(a) In order to prevent the release of dangerous waste or dangerous constituents to the environment, secondary containment that meets the requirements of this subsection must be provided (except as provided in (f) and (g) of this subsection):

(i) For all new tank systems or components, prior to their being put into service;

(ii) For all existing tank systems used to store or treat Dangerous Waste Nos. F020, F021, F022, F023, F026, and F027, within two years after January 12, 1989;

(iii) For those existing tank systems of known and documented age, within two years after January 12, 1989, or when the tank system has reached fifteen years of age, whichever comes later;

(iv) For those existing tank systems for which the age cannot be documented, within eight years of January 12, 1989; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches fifteen years of age, or within two years of January 12, 1989, whichever comes later; and

(v) For tank systems that store or treat materials that become dangerous wastes subsequent to January 12, 1989, within the time intervals required in (a)(i) through (iv) of this subsection, except that the date that a material becomes a dangerous waste must be used in place of January 12, 1989.

(b) Secondary containment systems must be:

(i) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and

(ii) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(c) To meet the requirements of (b) of this subsection, secondary containment systems must be at a minimum:

(i) Constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operations (including stresses from nearby vehicular traffic);

(ii) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(iii) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of dangerous waste or accumulated liquid in the secondary containment system within twenty-four hours, or at the earliest practicable time if the owner or operator can demonstrate to the department that existing detection technologies or site conditions will not allow detection of a release within twenty-four hours; and

(iv) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within twenty-four hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the department that removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four hours.

Note: If the collected material is a dangerous waste under WAC 173-303-070, it is subject to management as a dangerous waste in accordance with all applicable requirements of WAC 173-303-170 through 173-303-400 and WAC 173-303-600 through 173-303-695. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water Act, as amended. If discharged to a publicly owned treatment works (POTW), it is subject to the requirements of section 307 of the Clean Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR Part 302.

(d) Secondary containment for tanks must include one or more of the following devices:

(i) A liner (external to the tank);

(ii) A vault;

(iii) A double-walled tank; or

(iv) An equivalent device as approved by the department.

(e) In addition to the requirements of (b), (c), and (d) of this subsection, secondary containment systems must satisfy the following requirements:

(i) External liner systems must be:

(A) Designed or operated to contain one hundred percent of the capacity of the largest tank within its boundary;

(B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a twenty-five-year, twenty-four-hour rainfall event.

(C) Free of cracks or gaps; and

(D) Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste).

(ii) Vault systems must be:

(A) Designed or operated to contain one hundred percent of the capacity of the largest tank within its boundary;

(B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a twenty-five-year, twenty-four-hour rainfall event;

(C) Constructed with chemical-resistant water stops in place at all joints (if any);

(D) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;

(E) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:

(I) Meets the definition of ignitable waste under WAC 173-303-090(5); or

(II) Meets the definition of reactive waste under WAC 173-303-090(7), and may form an ignitable or explosive vapor.

(F) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(iii) Double-walled tanks must be:

(A) Designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

(B) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(C) Provided with a built-in continuous leak detection system capable of detecting a release within twenty-four hours, or at the earliest practicable time, if the owner or operator can demonstrate to the department, and the department concludes, that the existing detection technology or site conditions would not allow detection of a release within twenty-four hours.

Note: The provisions outlined in the Steel Tank Institute's (STI) "Standard for Dual Wall Underground Steel Storage Tanks" may be used as guidelines for aspects of the design of underground steel double-walled tanks.

(f) Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of (b) and (c) of this subsection except for:

(i) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

(ii) Welded flanges, welded joints, and welded connections, that are visually inspected for leaks on a daily basis;

(iii) Sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and

(iv) Pressurized aboveground piping systems with automatic shutoff devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shutoff devices) that are visually inspected for leaks on a daily basis.

(g) The owner or operator may obtain a variance from the requirements of this subsection if the department finds, as a result of a demonstration by the owner or operator that alternative design and operating practices, together with location characteristics, will prevent the migration of any dangerous waste or dangerous constituents into the ground water, or surface water at least as effectively as secondary containment during the active life of the tank system or that in the event of a release that does migrate to ground water or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with (g)(ii) of this subsection, be exempted from the secondary containment requirements of this section.

(i) In deciding whether to grant a variance based on a demonstration of equivalent protection of ground water and surface water, the department will consider:

(A) The nature and quantity of the wastes;

(B) The proposed alternate design and operation;

(C) The hydrogeologic setting of the facility, including the thickness of soils present between the tank system and ground water; and

(D) All other factors that would influence the quality and mobility of the dangerous constituents and the potential for them to migrate to ground water or surface water.

(ii) In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the department will consider:

(A) The potential adverse effects on ground water, surface water, and land quality taking into account:

(I) The physical and chemical characteristics of the waste in the tank system, including its potential for migration;

(II) The hydrogeological characteristics of the facility and surrounding land;

(III) The potential for health risks caused by human exposure to waste constituents;

(IV) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(V) The persistence and permanence of the potential adverse effects.

(B) The potential adverse effects of a release on ground water quality, taking into account:

(I) The quantity and quality of ground water and the direction of ground water flow;

(II) The proximity and withdrawal rates of ground water users;

(III) The current and future uses of ground water in the area; and

(IV) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality.

(C) The potential adverse effects of a release on surface water quality, taking into account:

(I) The quantity and quality of ground water and the direction of ground water flow;

(II) The patterns of rainfall in the region;

(III) The proximity of the tank system to surface waters;

(IV) The current and future uses of surface waters in the area and any water quality standards established for those surface waters; and

(V) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality.

(D) The potential adverse effects of a release on the land surrounding the tank system, taking into account:

(I) The patterns of rainfall in the region; and

(II) The current and future uses of the surrounding land.

(iii) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of (g)(i) of this subsection, at which a release of dangerous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), must:

(A) Comply with the requirements of subsection (7) of this section, except subsection (7)(d) of this section; and

(B) Decontaminate or remove contaminated soil to the extent necessary to:

(I) Enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and

(II) Prevent the migration of dangerous waste or dangerous constituents to ground water or surface water.

(C) If contaminated soil cannot be removed or decontaminated in accordance with (g)(iii)(B) of this subsection, comply with the requirements of subsection (8) of this section.

(iv) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of (g)(i) of this subsection, at which a release of dangerous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), must:

(A) Comply with the requirements of subsection (7)(a), (b), (c), and (d) of this section; and

(B) Prevent the migration of dangerous waste or dangerous constituents to ground water or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if ground water has been contaminated, the owner or operator must comply with the requirements of subsection (8)(b) of this section; and

(C) If repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with the requirements of (a) through (f) of this subsection or reapply for a variance from secondary containment and meet the requirements for new tank systems in subsection (3) of this section if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil can be decontaminated or removed and ground water or surface water has not been contaminated.

(h) The following procedures must be followed in order to request a variance from secondary containment:

(i) The department must be notified in writing by the owner or operator that he intends to conduct and submit a demonstration for a variance from secondary containment as allowed in (g) of this subsection according to the following schedule:

(A) For existing tank systems, at least twenty-four months prior to the date that secondary containment must be provided in accordance with (a) of this subsection.

(B) For new tank systems, at least thirty days prior to entering into a contract for installation.

(ii) As part of the notification, the owner or operator must also submit to the department a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in (g)(i) or (ii) of this subsection;

(iii) The demonstration for a variance must be completed within one hundred eighty days after notifying the department of an intent to conduct the demonstration; and

(iv) If a variance is granted under this subsection, the department will require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

(i) All tank systems, until such time as secondary containment that meets the requirements of this section is provided, must comply with the following:

(i) For nonenterable underground tanks, a leak test that meets the requirements of subsection (2)(c)(v) of this section or other tank integrity method, as approved or required by the department, must be conducted at least annually.

(ii) For other than nonenterable underground tanks, the owner or operator must either conduct a leak test as in (i)(i) of this subsection or develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, qualified registered professional engineer. The schedule and procedure must be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments must be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection, and the characteristics of the waste being stored or treated.

(iii) For ancillary equipment, a leak test or other integrity assessment as approved by the department must be conducted at least annually.

Note: Three publications may be used, where applicable, as guidelines for assessing the overall condition of the tank system: *Tank Inspection, Repair, Alteration, and Reconstruction,* API Standard 653, Addendum 4 issued in December 1999; *Guidance for Assessing and Certifying Tank Systems that Store and Treat Dangerous Waste,* Ecology Publication No. 94-114; and *Steel Tank Institute* publication #SP001-00 *Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids* copyright 2000.

(iv) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with (i)(i) through (iii) of this subsection.

(v) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in (i)(i) through (iii) of this subsection, the owner or operator must comply with the requirements of subsection (7) of this section.

(5) General operating requirements.

(a) Dangerous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

(b) The owner or operator must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:

(i) Spill prevention controls (e.g., check valves, dry disconnect couplings);

(ii) Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

(iii) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

(c) The owner or operator must comply with the requirements of subsection (7) of this section if a leak or spill occurs in the tank system.

(d) All tank systems holding dangerous waste must be marked with labels or signs to identify the waste contained in the tank. The label or sign must be legible at a distance of at least fifty feet, and must bear a legend which identifies the waste in a manner which adequately warns employees, emergency response personnel, and the public of the major risk(s) associated with the waste being stored or treated in the tank system(s). (Note—If there already is a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate.)

(e) All tank systems holding dangerous wastes which are acutely or chronically toxic by inhalation must be designed to prevent escape of vapors, fumes, or other emissions into the air.

(6) Inspections.

(a) The owner or operator must develop and follow a schedule and procedure for inspecting overfill controls.

(b) The owner or operator must inspect at least once each operating day:

(i) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

(ii) Data gathered from monitoring any leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and

(iii) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of dangerous waste (e.g., wet spots, dead vegetation).

Note: WAC 173-303-320 requires the owner or operator to remedy any deterioration or malfunction he finds. Subsection (7) of this section requires the owner or operator to notify the department within twenty-four hours of confirming a leak. Also, 40 CFR Part 302 may require the owner or operator to notify the National Response Center of a release.

(c) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

(i) The proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and

(ii) All sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month).

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP-02-85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

(d) The owner or operator must document in the operating record of the facility an inspection of those items in (a) through (c) of this subsection. The owner or operator must keep an inspection log including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made and the date and nature of any repairs or remedial actions taken. The log must be kept at the facility for at least five years from the date of inspection.

(7) Response to leaks or spills and disposition of leaking or unfit-for-use tank systems.

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:

(a) Cessation of use; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of dangerous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(b) Removal of waste from tank system or secondary containment system.

(i) If the release was from the tank system, the owner/operator must, within twenty-four hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of dangerous waste to the environment and to allow inspection and repair of the tank system to be performed.

(ii) If the material released was to a secondary containment system, all released materials must be removed within twenty-four hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) Containment of visible releases to the environment. The owner/operator must immediately conduct a visual inspection of the release and, based upon that inspection:

(i) Prevent further migration of the leak or spill to soils or surface water; and

(ii) Remove, and properly dispose of, any visible contamination of the soil or surface water.

(d) Notifications, reports.

(i) Any release to the environment must be reported to the department and other authorities immediately in accordance with WAC 173-303-145. Any release above the "reportable quantity" must also be reported to the National Response Center pursuant to 40 CFR Part 302.

(ii) Within thirty days (or fifteen days if classified as an emergency) of detection of a release to the environment, a report containing the following information must be submitted to the department:

(A) Likely route of migration of the release;

(B) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

(C) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within thirty days, these data must be submitted to the department as soon as they become available;

(D) Proximity to downgradient drinking water, surface water, and populated areas; and

(E) Description of response actions taken or planned.

(F) In the event of an emergency, additional information as required by WAC 173-303-360.

(e) Provision of secondary containment, repair, or closure.

(i) Unless the owner/operator satisfies the requirements of (e)(ii) through (iv) of this subsection, the tank system must be closed in accordance with subsection (8) of this section.

(ii) If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

(iii) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

(iv) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of subsection (4) of this section before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of (f) of this subsection are satisfied. If a component is replaced to comply with the requirements of this subitem, that component must satisfy the requirements for new tank systems or components in subsections (3) and (4) of this section. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with subsection (4) of this section prior to being returned to use.

(f) Certification of major repairs. If the owner/operator has repaired a tank system in accordance with (e) of this subsection, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner/operator has obtained a certification by an independent, qualified, registered, professional engineer in accordance with WAC 173-303-810 (13)(a) that the repaired system is capable of handling dangerous wastes without release for the intended life of the system. This certification must be submitted to the department within seven days after returning the tank system to use.

Note: See WAC 173-303-320 for the requirements necessary to remedy a failure. Also, 40 CFR Part 302 may require the owner or operator to notify the National Response Center of certain releases.

(8) Closure and post-closure care.

(a) At closure of a tank system, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as dangerous waste, unless WAC 173-303-070 (2)(a) applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems must meet all of the requirements specified in WAC 173-303-610 and 173-303-620.

(b) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in (a) of this subsection, then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (see WAC 173-303-665(6)). In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in WAC 173-303-610 and 173-303-620.

(c) If an owner or operator has a tank system that does not have secondary containment that meets the requirements of subsection (4)(b) through (f) of this section and is not exempt from the secondary containment requirements in accordance with subsection (4)(g) of this section, then:

(i) The closure plan for the tank system must include both a plan for complying with (a) of this subsection and a contingent plan for complying with (b) of this subsection.

(ii) A contingent post-closure plan for complying with (b) of this subsection must be prepared and submitted as part of the permit application.

(iii) The cost estimates calculated for closure and post-closure care must reflect the costs of complying with the contingent closure plan and the contingent post-closure plan, if those costs are greater than the costs of complying with the closure plan prepared for the expected closure under (a) of this subsection.

(iv) Financial assurance must be based on the cost estimates in (c)(iii) of this subsection.

(v) For the purposes of the contingent closure and post-closure plans, such a tank system is considered to be a landfill, and the contingent plans must meet all of the closure, post-closure, and financial responsibility requirements for landfills under this chapter (WAC 173-303-610 and 173-303-620).

(9) Special requirements for ignitable or reactive wastes.

(a) Ignitable or reactive waste must not be placed in tank systems unless:

(i) The waste is treated, rendered, or mixed before or immediately after placement in the tank system so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090, and 173-303-395 (1)(b) is complied with; or

(ii) The waste is stored or treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react; or

(iii) The tank system is used solely for emergencies.

(b) The owner or operator of a facility which treats or stores ignitable or reactive waste in tanks must locate the tanks in a manner equivalent to the National Fire Protection Association's buffer zone requirements for tanks, contained in Tables 2-1 through 2-6 of the NFPA-30 *Flammable and Combustible Liquids Code* -1981, or as required by state and local fire codes when such codes are more stringent. The owner or operator must also comply with the requirements of WAC 173-303-395 (1)(d).

(10) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, must not be placed in the same tank system, unless WAC 173-303-395 (1)(b) is complied with.

(b) Dangerous waste must not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless WAC 173-303-395 (1)(b) is complied with.

(11) Air emission standards. The owner or operator must manage all hazardous waste placed in a tank in accordance with the applicable requirements of 40 CFR Subparts AA, BB, and CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-640, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-640, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-640, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-640, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-640, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-640, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-640, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-640, filed 2/10/82. Formerly chapter 173-302 WAC.]

WAC 173-303-645 Releases from regulated units. (1) Applicability.

(a)(i) Except as provided in (b) of this subsection, the regulations in this section apply to owners and operators of facilities that treat, store, or dispose of dangerous waste. The owner or operator must satisfy the requirements identified in (a)(ii) of this subsection for all wastes (or constituents thereof) contained in solid waste management units at the facility, regardless of the time at which waste was placed in such units.

(ii) All solid waste management units must comply with the requirements in WAC 173-303-64620. Regulated units (as defined in WAC 173-303-040) must comply with the requirements of subsections (2) through (12) of this section, in lieu of WAC 173-303-64620, for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The corrective action financial responsibility requirements of WAC 173-303-64620 apply to corrective action regulated units.

(b) The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under this section if:

(i) The owner or operator is exempted under WAC 173-303-600; or

(ii) He operates a unit which the department finds:

(A) Is an engineered structure;

(B) Does not receive or contain liquid waste or waste containing free liquids;

(C) Is designed and operated to exclude liquid, precipitation, and other run-on and runoff;

(D) Has both inner and outer layers of containment enclosing the waste;

(E) Has a leak detection system built into each containment layer;

(F) The owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods; and

(G) To a reasonable degree of certainty, will not allow dangerous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period.

(iii) The department finds, pursuant to WAC 173-303-655 (8)(d), that the treatment zone of a land treatment unit does not contain levels of dangerous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of WAC 173-303-655(6) has not shown a statistically significant increase in dangerous constituents below the treatment zone during the operating life of the unit. An exemption under this subsection can only relieve an owner or operator of responsibility to meet the requirements of this section during the post-closure care period; or

(iv) The department finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made under this subsection on assumptions that maximize the rate of liquid migration.

(c) The regulations under this section apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the regulations in this section:

(i) Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure in accordance with the removal or decontamination limits specified in WAC 173-303-610 (2)(b);

(ii) Apply during the post-closure care period if the owner or operator is conducting a detection monitoring program under subsection (9) of this section; and

(iii) Apply during the compliance period under subsection (7) of this section, if the owner or operator is conducting a compliance monitoring program under subsection (10) of this section, or a corrective action program under subsection (11) of this section.

(d) Regulations in this section may apply to miscellaneous units when necessary to comply with WAC 173-303-680 (2) through (4).

(e) The director may, in an enforceable document, replace all or part of the requirements of this section with alternative requirements for ground water monitoring and corrective action when he or she determines:

(i) A dangerous waste unit is situated among other solid waste management units or areas of concern, a release has occurred, and both the dangerous waste unit and one or more of the solid waste management units or areas of concern are likely to have contributed to the release; and

(ii) It is not necessary to apply the requirements of this section because the alternative requirements will protect human health and the environment.

(2) Required programs.

(a) Owners and operators subject to this section must conduct a monitoring and response program as follows:

(i) Whenever dangerous constituents under subsection (4) of this section, from a regulated unit are detected at the compliance point under subsection (6) of this section, the owner or operator must institute a compliance monitoring program under subsection (10) of this section. Detected is defined as statistically significant evidence of contamination as described in subsection (9)(f) of this section;

(ii) Whenever the ground water protection standard under subsection (3) of this section, is exceeded, the owner or operator must institute a corrective action program under subsection (11) of this section. Exceeded is defined as statistically significant evidence of increased contamination as described in subsection (10)(h) of this section. Exceeded is defined as statistically significant evidence of contamination as described in WAC 173-303-645 (10)(d);

(iii) Whenever dangerous constituents under subsection (4) of this section, from a regulated unit exceed concentration limits under subsection (5) of this section, in ground water between the compliance point under subsection (6) of this section and the downgradient facility property boundary, the owner or operator must institute a corrective action program under subsection (11) of this section; and

(iv) In all other cases, the owner or operator must institute a detection monitoring program under subsection (9) of this section.

(b) The department will specify in the facility permit the specific elements of the monitoring and response program. The department may include one or more of the programs identified in (a) of this subsection, in the facility permit as may be necessary to protect human health and the environment and will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the department will consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

(3) Ground water protection standard. The owner or operator must comply with conditions specified in the facility permit that are designed to ensure that dangerous constituents under subsection (4) of this section, detected in the ground water from a regulated unit do not exceed the concentration limits under subsection (5) of this section, in the uppermost aquifer underlying the waste management area beyond the point of compliance under subsection (6) of this section, during the compliance period under subsection (7) of this section. To the extent practical, the department will establish this ground water protection standard in the facility permit at the time the permit is issued. If the department determines that an established standard is not protective enough, or if the department decides that it is not practical to establish standards at the time of permit issuance, the department will establish the ground water protection standard in the facility permit when dangerous constituents have been detected in the ground water from a regulated unit.

(4) Dangerous constituents.

(a) The department will specify in the facility permit the dangerous constituents to which the ground water protection standard of subsection (3) of this section, applies. Dangerous constituents are constituents identified in 40 CFR Part 264 Appendix IX, which is adopted by reference (this list is available from the department), and any other constituents not listed there which have caused a waste to be regulated under this chapter, that may be or have been detected in ground water in the uppermost aquifer underlying a regulated unit and that are reasonably expected to be in or derived from waste contained in a regulated unit, unless the department has excluded them under (b) of this subsection.

The department may also specify in the permit indicator parameters (e.g., specific conductance, pH, total organic carbon (TOC), total organic halogen (TOX), or heavy metals), waste constituents or reaction products as identified in the detection monitoring program under subsection (9)(a) of this section, that provide a reliable indication of the presence of dangerous constituents in the ground water.

(b) The department will exclude a 40 CFR Part 264 Appendix IX, or other identified constituent from the list of dangerous constituents specified in the facility permit if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the department will consider the following:

(i) Potential adverse effects on ground water quality, considering:

(A) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity of ground water and the direction of ground water flow;

(D) The proximity and withdrawal rates of ground water users;

(E) The current and future uses of ground water in the area;

(F) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality;

(G) The potential for health risks caused by human exposure to waste constituents;

(H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(I) The persistence and permanence of the potential adverse effects;

(ii) Potential adverse effects on hydraulically-connected surface water quality, considering:

(A) The volume and physical and chemical characteristics of the waste in the regulated unit;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity and quality of ground water, and the direction of ground water flow;

(D) The patterns of rainfall in the region;

(E) The proximity of the regulated unit to surface waters;

(F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(G) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

(H) The potential for health risks caused by human exposure to waste constituents;

(I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(J) The persistence and permanence of the potential adverse effects; and

(iii) Any identification of underground sources of drinking water and exempted aquifers made pursuant to chapter 90.48 RCW, chapter 270, Laws of 1983, and other applicable state laws and regulations.

(5) Concentration limits.

(a) The department will specify in the facility permit concentration limits in the ground water for dangerous constituents established under subsection (4) of this section. The concentration of a dangerous constituent:

(i) Must not exceed the background level of that constituent in the ground water at the time that limit is specified in the permit; or

(ii) For any of the constituents listed in Table 1 of this subsection, must not exceed the respective value given in that table if the background level of the constituent is below the value given in Table 1; or

(iii) Must not exceed an alternate limit established by the department under (b) of this subsection.

Table 1.
Maximum Concentration of Constituents
for Ground Water Protection

Constituent	Maximum Concentration[1]
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin	0.0002
Lindane	0.004
Methoxychlor	0.1
Toxaphene	0.005
2,4-D	0.1m
2,4,5-TP Silvex	0.01

[1]Milligrams per liter.

(b) The department will establish an alternate concentration limit for a dangerous constituent if it finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In establishing alternate concentration limits, the department will consider the same factors listed in subsection (4)(b)(i) through (iii) of this section.

(6) Point of compliance.

(a) The department will specify in the facility permit the point of compliance at which the ground water protection standard of subsection (3) of this section, applies and at which monitoring must be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units. Alternatively, the point of compliance may be any closer points identified by the department at the time the permit is issued, considering the risks of the facility, the wastes and constituents managed there, the potential for waste constituents to have already migrated past the alternate compliance point, and the potential threats to ground and surface waters.

(b) The waste management area is the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit. The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit. If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

(7) Compliance period.

(a) The department will specify in the facility permit the compliance period during which the ground water protection standard of subsection (3) of this section applies. The compliance period is the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period).

(b) The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of subsection (10) of this section.

(c) If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in (a) of this subsection, the compliance period is extended until the owner or operator can demonstrate that the ground water protection standard of subsection (3) of this section, has not been exceeded for a period of three consecutive years.

(8) General ground water monitoring requirements.

The owner or operator must comply with the requirements of this subsection for any ground water monitoring program developed to satisfy subsections (9), (10), or (11) of this section.

(a) The ground water monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer that:

(i) Represent the quality of background water that has not been affected by leakage from a regulated unit;

(A) A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

(I) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and

(II) Sampling at other wells will provide an indication of background ground water quality that is representative or more representative than that provided by the upgradient wells; and

(ii) Represent the quality of ground water passing the point of compliance.

(iii) Allow for the detection of contamination when dangerous waste or dangerous constituents have migrated from the waste management area to the uppermost aquifer.

(b) If a facility contains more than one regulated unit, separate ground water monitoring systems are not required for each regulated unit, provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point of dangerous constituents from the regulated units that have entered the ground water in the uppermost aquifer.

(c) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must allow collection of representative ground water samples. Wells must be constructed in such a manner as to prevent contamination of the samples, the sampled strata, and between aquifers and water bearing strata. Wells must meet the requirements set forth in Parts 1 and 3 of chapter 173-160 WAC, "Minimum standards for construction and maintenance of wells."

(d) The ground water monitoring program must include at a minimum, procedures and techniques for:

(i) Decontamination of drilling and sampling equipment;

(ii) Sample collection;

(iii) Sample preservation and shipment;

(iv) Analytical procedures and quality assurance; and

(v) Chain of custody control.

(e) The ground water monitoring program must include consistent sampling and analytical methods that ensure reliable ground water sampling, accurately measure dangerous constituents and indicator parameters in ground water samples, and provide a reliable indication of ground water quality below the waste management area.

(f) The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

(g) In detection monitoring or where appropriate in compliance monitoring, data on each dangerous constituent specified in the permit will be collected from background wells and wells at the compliance point(s). The number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size must be as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected. The owner or operator will determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit which will be specified in the unit permit upon approval by the department. This sampling procedure will be:

(i) A sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity and hydraulic gradient, and the fate and transport characteristics of the potential contaminants; or

(ii) An alternate sampling procedure proposed by the owner or operator and approved by the department.

(h) The owner or operator will specify one of the following statistical methods to be used in evaluating ground water monitoring data for each hazardous constituent which, upon approval by the department, will be specified in the unit permit. The statistical test chosen must be conducted separately for each dangerous constituent in each well. Where practical quantification limits (pql's) are used in any of the following statistical procedures to comply with (i)(v) of this subsection, the pql must be proposed by the owner or operator and approved by the department. Use of any of the following statistical methods must be protective of human health and the environment and must comply with the performance standards outlined in (i) of this subsection.

(i) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

(ii) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

(iii) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(iv) A control chart approach that gives control limits for each constituent.

(v) Another statistical test method submitted by the owner or operator and approved by the department.

(i) Any statistical method chosen under (h) of this subsection for specification in the unit permit must comply with the following performance standards, as appropriate:

(i) The statistical method used to evaluate ground water monitoring data must be appropriate for the distribution of chemical parameters or dangerous constituents. If the distribution of the chemical parameters or dangerous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.

(ii) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground water protection standard, the test must be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experiment wise error rate for each testing period must be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(iii) If a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values must be proposed by the owner or operator and approved by the department if it finds it to be protective of human health and the environment.

(iv) If a tolerance interval or a prediction interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, must be proposed by the owner or operator and approved by the department if it finds these parameters to be protective of human health and the environment. These parameters will be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(v) The statistical method must account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantification limit (pql) approved by the department under (h) of this subsection that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

(vi) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(j) Ground water monitoring data collected in accordance with (g) of this subsection including actual levels of constituents must be maintained in the facility operating record. The department will specify in the permit when the data must be submitted for review.

(9) Detection monitoring program. An owner or operator required to establish a detection monitoring program under this subsection must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor for indicator parameters (e.g., pH, specific conductance, total organic carbon (TOC), total organic halogen (TOX), or heavy metals), waste constituents, or reaction products that provide a reliable indication of the presence of dangerous constituents in ground water. The department will specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:

(i) The types, quantities, and concentrations of constituents in wastes managed at the regulated unit;

(ii) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;

(iii) The detectability of indicator parameters, waste constituents, and reaction products in ground water; and

(iv) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the ground water background.

(b) The owner or operator must install a ground water monitoring system at the compliance point, as specified under subsection (6) of this section. The ground water monitoring system must comply with subsection (8)(a)(ii), (b), and (c) of this section.

(c) The owner or operator must conduct a ground water monitoring program for each chemical parameter and dangerous constituent specified in the permit pursuant to (a) of this subsection in accordance with subsection (8)(g) of this section. The owner or operator must maintain a record of ground water analytical data as measured and in a form necessary for the determination of statistical significance under subsection (8)(h) of this section.

(d) The department will specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or dangerous constituent specified in the permit under (a) of this subsection in accordance with subsection (8)(g) of this section. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semiannually during detection monitoring.

(e) The owner or operator must determine the ground water flow rate and direction in the uppermost aquifer at least annually.

(f) The owner or operator must determine whether there is statistically significant evidence of contamination for any chemical parameter of dangerous constituent specified in the permit pursuant to (a) of this subsection at a frequency specified under (d) of this subsection.

(i) In determining whether statistically significant evidence of contamination exists, the owner or operator must use the method(s) specified in the permit under subsection (8)(h) of this section. These method(s) must compare data collected at the compliance point(s) to the background ground water quality data.

(ii) The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well as the compliance point within a reasonable period of time after completion of sampling. The department will specify in the facility permit what period of time is reasonable after considering the complexity of the statistical test

and the availability of laboratory facilities to perform the analysis of ground water samples.

(g) If the owner or operator determines pursuant to (f) of this subsection that there is statistically significant evidence of contamination for chemical parameters or dangerous constituents specified pursuant to (a) of this subsection at any monitoring well at the compliance point, he or she must:

(i) Notify the department of this finding in writing within seven days. The notification must indicate what chemical parameters or dangerous constituents have shown statistically significant evidence of contamination:

(ii) Immediately sample the ground water in all monitoring wells and determine whether constituents in the list of Appendix IX of 40 CFR Part 264 (which is adopted by reference) are present, and if so, in what concentration.

(iii) For any Appendix IX compounds found in the analysis pursuant to (g)(ii) of this subsection, the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample for the compounds found pursuant to (g)(ii) of this subsection, the dangerous constituents found during this initial Appendix IX analysis will form the basis for compliance monitoring.

(iv) Within ninety days, submit to the department an application for a permit modification to establish a compliance monitoring program meeting the requirements of subsection (10) of this section. The application must include the following information:

(A) An identification of the concentration or any Appendix IX constituent detected in the ground water at each monitoring well at the compliance point;

(B) Any proposed changes to the ground water monitoring system at the facility necessary to meet the requirements of subsection (10) of this section;

(C) Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of subsection (10) of this section;

(D) For each dangerous constituent detected at the compliance point, a proposed concentration limit under subsection (5)(a)(i) or (ii) of this section, or a notice of intent to seek an alternate concentration limit under subsection (5)(b) of this section; and

(v) Within one hundred eighty days, submit to the department:

(A) All data necessary to justify an alternate concentration limit sought under subsection (5)(b) of this section; and

(B) An engineering feasibility plan for a corrective action program necessary to meet the requirement of subsection (11) of this section unless:

(I) All dangerous constituents identified under (g)(ii) of this subsection are listed in Table I of subsection (5) of this section and their concentrations do not exceed the respective values given in that Table; or

(II) The owner or operator has sought an alternate concentration limit under subsection (5)(b) of this section for every dangerous constituent identified under (g)(ii) of this subsection.

(vi) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant difference for chemical parameters or dangerous constituents specified pursuant to (a) of this subsection at any monitoring well at the compliance point, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. The owner operator may make a demonstration under this subsection in addition to, or in lieu of, submitting a permit modification application under (g)(iv) of this subsection; however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in (g)(iv) of this subsection unless the demonstration made under this subsection successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this subsection, the owner or operator must:

(A) Notify the department in writing within seven days of determining statistically significant evidence of contamination at the compliance point that he intends to make a demonstration under this subsection;

(B) Within ninety days, submit a report to the department which demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;

(C) Within ninety days, submit to the department an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and

(D) Continue to monitor in accordance with the detection monitoring program established under this section.

(h) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this section, he or she must, within ninety days, submit an application for a permit modification to make any appropriate changes to the program.

(10) Compliance monitoring program. An owner or operator required to establish a compliance monitoring program under this section must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor the ground water to determine whether regulated units are in compliance with the ground water protection standard under subsection (3) of this section. The department will specify the ground water protection standard in the facility permit, including:

(i) A list of the dangerous constituents and parameters identified under subsection (4) of this section;

(ii) Concentration limits under subsection (5) of this section for each of those dangerous constituents and parameters;

(iii) The compliance point under subsection (6) of this section; and

(iv) The compliance period under subsection (7) of this section.

(b) The owner or operator must install a ground water monitoring system at the compliance point as specified under subsection (6) of this section. The ground water monitoring system must comply with subsection (8)(a)(ii), (b), and (c) of this section.

(c) The department will specify the sampling procedures and statistical methods appropriate for the constituents and

the facility, consistent with subsection (8)(g) and (h) of this section.

(i) The owner or operator must conduct a sampling program for each chemical parameter or dangerous constituent in accordance with subsection (8)(g) of this section.

(ii) The owner or operator must record ground water analytical data as measured and in form necessary for the determination of statistical significance under subsection (8)(h) of this section for the compliance period of the facility.

(d) The owner or operator must determine whether there is statistically significant evidence of increased contamination for any chemical parameter or dangerous constituent specified in the permit, pursuant to (a) of this subsection, at a frequency specified under (f) of this subsection.

(i) In determining whether statistically significant evidence of increased contamination exists, the owner or operator must use the method(s) specified in the permit under subsection (8)(h) of this section. The method(s) must compare data collected at the compliance point(s) to a concentration limit developed in accordance with subsection (5) of this section.

(ii) The owner or operator must determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The department will specify that time period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.

(e) The owner or operator must determine the rate and direction of ground water flow in the uppermost aquifer at least annually.

(f) The department will specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with subsection (8)(g) of this section. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semiannually during the compliance period of the facility.

(g) The owner or operator must analyze samples from all monitoring wells at the compliance point for all constituents contained in Appendix IX of Part 264 at least annually to determine whether additional dangerous constituents are present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in (f) of this subsection. If the owner or operator finds Appendix IX constituents in the ground water that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month and repeat the Appendix IX analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentration of these additional constituents to the department within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then he or she must report the concentrations of these additional constituents to the department within seven days after completion of the initial analysis and add them to the monitoring list. If the owner or operator determines, pursuant to (d) of this subsection, that any concentration limits under subsection (5) of this section are being exceeded at any monitoring well at the point of compliance, he must:

(i) Notify the department of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded;

(ii) Submit to the department an application for a permit modification to establish a corrective action program meeting the requirements of subsection (11) of this section, within ninety days, or within sixty days if an engineering feasibility study has been previously submitted to the department under subsection (9)(h)(v) of this section. For regulated units managing EHW, time frames of sixty days and forty-five days, respectively will apply. However, if the department finds that the full extent of the ninety/sixty-day or the sixty/forty-five-day time periods will increase the likelihood to cause a threat to public health, or the environment, it can at its discretion reduce their duration. In specifying shorter limits, the department will consider the following factors:

(A) The physical and chemical characteristics of the dangerous constituents and parameters in the ground water;

(B) The hydrogeological characteristics of the facility and of the surrounding land;

(C) The rate of movement and direction of flow of the affected ground water;

(D) The proximity to and withdrawal rates of ground water users downgradient; and

(E) The current and future uses of ground water in the concerned area; and

(iii) The application must at a minimum include the following information:

(A) A detailed description of corrective actions that will achieve compliance with the ground water protection standard specified in the permit; and

(B) A plan for a ground water monitoring program that will demonstrate the effectiveness of the corrective action.

(h) Reserved.

(i) If the owner or operator determines, pursuant to (d) of this subsection, that the ground water concentration limits under this section are being exceeded at any monitoring well at the point of compliance, he may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. In making a demonstration under this subsection, the owner or operator must:

(i) Notify the department in writing within seven days that he intends to make a demonstration under this subsection;

(ii) Within forty-five days, submit a report to the department which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;

(iii) Within forty-five days, submit to the department an application for a permit modification to make appropriate changes to the compliance monitoring program at the facility; and

(iv) Continue to monitor in accord with the compliance monitoring program established under this section.

(j) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this section, he must, within forty-five days, submit an

application for a permit modification to make any appropriate changes to the program.

(11) Corrective action program. An owner or operator required to establish a corrective action program under this section must, at a minimum, discharge the responsibilities described in this subsection.

(a) The owner or operator must take corrective action to ensure that regulated units are in compliance with the ground water protection standard under subsection (3) of this section. The department will specify the ground water protection standard in the facility permit, including:

(i) A list of the dangerous constituents and parameters identified under subsection (4) of this section;

(ii) Concentration limits under subsection (5) of this section, for each of those dangerous constituents and parameters;

(iii) The compliance point under subsection (6) of this section; and

(iv) The compliance period under subsection (7) of this section.

(b) The owner or operator must implement a corrective action program that prevents dangerous constituents and parameters from exceeding their respective concentration limits at the compliance point by removing the dangerous waste constituents and parameters or treating them in place. The permit will specify the specific measures that will be taken.

(c) The owner or operator must begin corrective action within a reasonable time period after the ground water protection standard is exceeded. The department will specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action will begin and such a requirement will operate in lieu of subsection (10)(i)(ii) of this section.

(d) In conjunction with a corrective action program, the owner or operator must establish and implement a ground water monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under subsection (10) of this section, and must be as effective as that program in determining compliance with the ground water protection standard under subsection (3) of this section, and in determining the success of a corrective action program under (e) of this subsection, where appropriate.

(e) In addition to the other requirements of this section, the owner or operator must conduct a corrective action program to remove or treat in place any dangerous constituents or parameters under subsection (4) of this section, that exceed concentration limits under subsection (5) of this section, in ground water between the compliance point under subsection (6) of this section, and the downgradient facility property boundary; and beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the department that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. For a facility seeking or required to have a permit, the corrective action measures to be taken must be specified in the permit.

(i) Corrective action measures under this subsection must be initiated at the effective date of the modified permit and completed without time delays considering the extent of contamination.

(ii) Corrective action measures under this subsection may be terminated once the concentration of dangerous constituents and parameters under subsection (4) of this section, is reduced to levels below their respective concentration limits under subsection (5) of this section.

(f) The owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the ground water protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, he must continue that corrective action for as long as necessary to achieve compliance with the ground water protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if he can demonstrate, based on data from the ground water monitoring program under (d) of this subsection, that the ground water protection standard of subsection (3) of this section, has not been exceeded for a period of three consecutive years.

(g) The owner or operator must report in writing to the department on the effectiveness of the corrective action program. The owner or operator must submit these reports semiannually.

(h) If the owner or operator determines that the corrective action program no longer satisfies the requirements of this section, he must, within forty-five days, submit an application for a permit modification to make any appropriate changes to the program.

(12) Use of the Model Toxics Control Act.

(a) The department may require the owner/operator of a facility to fulfill his corrective action responsibilities under WAC 173-303-645 using an enforceable action issued pursuant to the Model Toxics Control Act, as amended, (chapter 70.105D RCW) and its implementing regulations.

(b) Corrective action requirements imposed by an action issued pursuant to the Model Toxics Control Act will be in compliance with the requirements of WAC 173-303-645 and the requirements of chapter 173-303 WAC to the extent required by RCW 70.105D.030 (2)(d) and WAC 173-340-710.

(c) In the case of facilities seeking or required to have a permit under the provisions of this chapter the department will incorporate corrective action requirements imposed pursuant to the Model Toxics Control Act into permits at the time of permit issuance. Such incorporation will in no way affect the timing or scope of review of the Model Toxics Control Act action.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-645, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-645, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.-007. 00-11-040 (Order 99-01), § 173-303-645, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-

008 (Order 94-30), § 173-303-645, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-645, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-645, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-645, filed 1/4/89; 84-09-088 (Order DE 83-36), § 173-303-645, filed 4/18/84.]

WAC 173-303-646 Corrective action. WAC 173-303-646 has been broken down into the following sections:

		Old citation
WAC 173-303-64610	Purpose and applicability	WAC 173-303-646(1)
WAC 173-303-64620	Requirements	WAC 173-303-646(2)
WAC 173-303-64630	Use of the Model Toxics Control Act	WAC 173-303-646(3)
WAC 173-303-64640	Grandfathered corrective action management units (CAMUs)	WAC 173-303-646 (4) through (6)
WAC 173-303-64650	Corrective action management unit (CAMU)	WAC 173-303-646(4)
WAC 173-303-64660	Designation of a corrective action management unit	WAC 173-303-646(5)
WAC 173-303-64670	Incorporation of a regulated unit within a CAMU	WAC 173-303-646(6)
WAC 173-303-64680	Temporary units (TUs)	WAC 173-303-646(7)
WAC 173-303-64690	Staging piles	WAC 173-303-646(8)
WAC 173-303-646910	Disposal of CAMU-eligible wastes into permitted hazardous waste landfills	
WAC 173-303-646920	Disposal of CAMU-eligible wastes into permitted hazardous waste landfills located outside Washington	

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-646, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-646, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.-007. 00-11-040 (Order 99-01), § 173-303-646, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-646, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-646, filed 12/8/93, effective 1/8/94.]

WAC 173-303-64610 Purpose and applicability. (1) The provisions of this section, and WAC 173-303-64620 and 173-303-64630, establish requirements for corrective action for releases of dangerous wastes and dangerous constituents including releases from solid waste management units.

(2) The provisions of this section apply to facilities seeking or required to have a permit to treat, store, recycle or dispose of dangerous waste.

(3) The provisions of this section do not apply to cleanup-only facilities.

(4) For purposes of this section, dangerous constituent means any constituent identified in WAC 173-303-9905 or 40 CFR Part 264 Appendix IX, any constituent that caused a waste to be listed as a dangerous waste or to exhibit a dangerous characteristic under this chapter or to meet a dangerous waste criteria under this chapter, and any constituent that is within the meaning of "hazardous substance" under RCW 70.105D.020(7).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64610, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64620 Requirements. (1) The owner or operator of a facility must institute corrective action as necessary to protect human health and the environment for all releases of dangerous wastes and dangerous constituents, including releases from all solid waste management units at the facility. Corrective action is required regardless of the time at which waste was managed at the facility or placed in such units and regardless of whether such facilities or units were intended for the management of solid or dangerous waste. Assurances of financial responsibility for such corrective action must be provided.

(2) The owner/operator must implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment. Additionally, as necessary to protect human health and the environment, the department may require the owner/operator to implement on site measures to address releases which have migrated beyond the facility boundary. Assurances of financial responsibility for such corrective action must be provided.

(3) In the case of a facility seeking or required to have a permit under the provisions of chapter 173-303 WAC, corrective action must be specified in the permit. The permit will contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completion of such corrective action.

(4) At a minimum, corrective actions must be consistent with the following requirements of chapter 173-340 WAC.

(a) As necessary to select a cleanup action consistent with WAC 173-340-360, 173-340-350, state remedial investigation and feasibility study. Information that is adequate to support selection of a cleanup action consistent with WAC 173-340-360 but was developed under a different authority (for example, as part of closure under WAC 173-303-610 or as part of a federally overseen cleanup) may be used.

(b) WAC 173-340-360, selection of cleanup actions.

(c) WAC 173-340-400, implementation of the cleanup action.

(d) WAC 173-340-410, compliance monitoring requirements.

(e) WAC 173-340-420, periodic review.

(f) WAC 173-340-440, institutional controls.

(g) WAC 173-340-700 through 173-340–760, cleanup standards.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64620, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64630 Use of the Model Toxics Control Act. (1) The department may require the owner/operator of a facility to fulfill his corrective action responsibilities under WAC 173-303-64620 using an enforceable action issued pursuant to the Model Toxics Control Act, as amended, (chapter 70.105D RCW) and its implementing regulations.

(2) Corrective action requirements imposed by the department in an action issued pursuant to the Model Toxics Control Act will be in compliance with the requirements of WAC 173-303-64620 and the requirements of chapter 173-

303 WAC to the extent required by RCW 70.105D.030 (2)(d) and WAC 173-340-710.

(3) In the case of facilities seeking or required to have a permit under the provisions of this chapter the department will incorporate corrective action requirements imposed pursuant to the Model Toxics Control Act into permits at the time of permit issuance. Such incorporation will in no way affect the timing or scope of review of the Model Toxics Control Act action.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64630, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64640 Grandfathered corrective action management units (CAMUs). (1)(a) In accordance with the requirements of this section and WAC 173-303-64610 through 173-303-64630, the department may designate an area at a facility as a corrective action management unit for the purpose of treating, storing or disposing of remediation waste that originates at the same facility in order to implement remedies under this section or to implement other cleanup actions. Corrective action management unit means an area within a facility that is used only for managing remediation wastes for implementing corrective action or cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

(b) Designation of a CAMU will not in any way affect the department's existing authorities, including authority under chapter 70.105D RCW, to address clean-up levels, media-specific points of compliance, or other remedy selection decisions.

(c) Designation of a CAMU will not in any way affect the timing or scope of review of any actions taken under the Model Toxics Control Act pursuant to WAC 173-303-64630 to fulfill the corrective action requirements of WAC 173-303-64620 or the corrective action requirements of WAC 173-303-645.

(2) Designation of a corrective action management unit.

(a) When designating a CAMU, the director will do so in accordance with the following:

(i) The CAMU will facilitate the implementation of reliable, effective, protective, and cost-effective remedies;

(ii) Waste management activities associated with the CAMU will not create unacceptable risks to humans or the environment resulting from exposure to dangerous wastes or dangerous constituents;

(iii) The CAMU will include uncontaminated areas of the facility only if including such areas for the purposes of managing remediation wastes is more protective than management of such wastes at contaminated areas of the facility;

(iv) Areas within the CAMU where wastes remain in place after closure of the CAMU, will be managed and contained so as to minimize future releases of dangerous wastes and dangerous constituents to the extent practicable;

(v) When appropriate and practicable, the CAMU will expedite the timing of remedial activity implementation;

(vi) The CAMU will enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and

(vii) The CAMU will, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

(b) When designating a CAMU, the director will specify requirements for the CAMU including the following:

(i) The areal configuration of the CAMU;

(ii) Requirements for remediation waste management within the CAMU including specification of applicable design, operation, and closure requirements;

(iii) Requirements for ground water and vadose zone monitoring that are sufficient to:

(A) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of dangerous waste and dangerous constituents in ground water from sources located within the CAMU; and

(B) Detect and subsequently characterize releases of dangerous waste and dangerous constituents to ground water that may occur from areas of the CAMU in which wastes will remain in place after CAMU closure.

(iv) Requirements for closure that will minimize the need for further maintenance of the CAMU; and control, minimize, or eliminate to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, to ground waters, to surface waters, or to the atmosphere and will include, as appropriate and deemed necessary by the director, the following:

(A) Requirements for excavation, removal, treatment, and/or containment of wastes;

(B) For areas in which wastes will remain after closure of the CAMU, requirements for capping of such areas; and

(C) Requirements for removal and decontamination of equipment, devices, and structures used in remediation waste management activities within the CAMU.

(c) In establishing closure requirements for CAMUs under (b)(iv) of this subsection, the director will consider the following factors:

(i) CAMU characteristics;

(ii) Volume of wastes which will remain in place after CAMU closure;

(iii) Potential for releases from the CAMU;

(iv) Physical and chemical characteristics of the waste;

(v) Hydrological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases in and/or from the CAMU; and

(vi) Potential for exposure of humans and environmental receptors if releases were to occur at or from the CAMU.

(d) The director will, for areas of the CAMU in which wastes will remain in place after CAMU closure, specify post-closure requirements to control, minimize, or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, and dangerous waste decomposition products to the ground, to ground waters, to surface waters, and to the atmosphere. Such post-

closure requirements will include, as necessary to protect human health and the environment, monitoring and maintenance activities and the frequency with which such activities will be performed to ensure the integrity of any cap, final cover, or other containment system.

(e) The owner/operator of a facility must provide sufficient information to enable the director to designate a CAMU in accordance with the criteria in WAC 173-303-64650, 173-303-64660, and 173-303-64670.

(f) The director will document the rationale for designating CAMUs and will make such documentation available to the public.

(g) Incorporation of the designation of and requirements for a CAMU into an existing permit must be approved by the director according to the procedures for agency initiated permit modifications under WAC 173-303-830(3), or according to the permit modification procedures of WAC 173-303-830(4).

(3) Incorporation of a regulated unit within a CAMU.

(a) The director may designate a regulated unit (as defined in WAC 173-303-040) as a CAMU, or may incorporate a regulated unit into a CAMU, if:

(i) The regulated unit is closed or closing, meaning it has begun the closure process under WAC 173-303-610(4) or 40 CFR Part 265.113, which is incorporated by reference at WAC 173-303-400 (3)(a); and

(ii) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions at the facility.

(b) The requirements of WAC 173-303-610, 173-303-620, 173-303-645, and the unit specific requirements of WAC 173-303-650 through 173-303-680 that applied to the regulated unit will continue to apply to the portion of the CAMU into which the regulated unit was incorporated.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64640, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64650 Corrective action management unit (CAMU). (1) Except as provided in subsection (2) of this section, CAMUs are subject to the requirements of this section and WAC 173-303-64660 and 173-303-64670.

(2) CAMUs that were approved before April 22, 2002, or for which substantially complete applications (or equivalents) were submitted to the department on or before November 20, 2000, are subject to the requirements in WAC 173-303-64640 for grandfathered CAMUs; CAMU waste, activities, and design will not be subject to the standards in WAC 173-303-64650 and 173-303-64660, so long as the waste, activities, and design remain within the general scope of the CAMU as approved.

(3) In accordance with the requirements of this section, the applicable portions of WAC 173-303-64610 through 173-303-64630, and with WAC 173-303-64660, the department may designate an area at a facility as a corrective action management unit for the purpose of treating, storing or disposing of CAMU-eligible waste that originates at the same facility in order to implement remedies under this section or to implement other cleanup actions. Corrective action management unit means an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

(a) CAMU-eligible waste means:

(i) All solid and dangerous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, that are managed for implementing cleanup. As-generated wastes (either dangerous or nondangerous) from ongoing industrial operations at a site are not CAMU-eligible wastes.

(ii) Wastes that would otherwise meet the description in (a)(i) of this subsection are not "CAMU-Eligible Wastes" where:

(A) The wastes are dangerous wastes found during cleanup in intact or substantially intact containers, tanks, or other nonland-based units found above ground, unless the wastes are first placed in the tanks, containers or nonland-based units as part of cleanup, or the containers or tanks are excavated during the course of cleanup; or

(B) The department exercises the discretion in (b) of this subsection to prohibit the wastes from management in a CAMU.

(iii) Notwithstanding (a)(i) of this subsection, where appropriate, as-generated nondangerous waste may be placed in a CAMU where such waste is being used to facilitate treatment or the performance of the CAMU.

(b) The department may prohibit, where appropriate, the placement of waste in a CAMU where the department has or receives information that such wastes have not been managed in compliance with applicable land disposal treatment standards of WAC 173-303-140(2), or applicable unit design requirements of WAC 173-303-600 through 173-303-695, or applicable unit design requirements of WAC 173-303-400, or that noncompliance with other applicable requirements of this chapter likely contributed to the release of the waste.

(c) Prohibition against placing liquids in CAMUs.

(i) The placement of bulk or noncontainerized liquid dangerous waste or free liquids contained in dangerous waste (whether or not sorbents have been added) in any CAMU is prohibited except where placement of such wastes facilitates the remedy selected for the waste.

(ii) The requirements in WAC 173-303-140 (4)(b)(ii) for placement of containers holding free liquids in landfills apply to placement in a CAMU except where placement facilitates the remedy selected for the waste.

(iii) The placement of any liquid which is not a dangerous waste in a CAMU is prohibited unless such placement facilitates the remedy selected for the waste or a demonstration is made pursuant to WAC 173-303-140 (4)(b)(v).

(iv) The absence or presence of free liquids in either a containerized or a bulk waste must be determined in accordance with WAC 173-303-140 (4)(b)(iii). Sorbents used to treat free liquids in CAMUs must meet the requirements of WAC 173-303-140 (4)(b)(iv).

(d) Placement of CAMU-eligible waste into or within a CAMU does not constitute land disposal of dangerous waste.

(e) Consolidation or placement of CAMU-eligible waste into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.

(4) Designation of a CAMU will not in any way affect the department's existing authorities, including authority under chapter 70.105D RCW, to address clean-up levels, media-specific points of compliance, or other remedy selection decisions.

(5) Designation of a CAMU will not in any way affect the timing or scope of review of any actions taken under the Model Toxics Control Act pursuant to WAC 173-303-64630 to fulfill the corrective action requirements of WAC 173-303-64620 or the corrective action requirements of WAC 173-303-645.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64650, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64660 Designation of a corrective action management unit. (1) The department must designate a CAMU that will be used for storage and/or treatment only in accordance with subsection (4) of this section. When designating all other CAMUs, the department will do so in accordance with WAC 173-303-64650 and 173-303-64670, and the following:

(a) The CAMU will facilitate the implementation of reliable, effective, protective, and cost-effective remedies;

(b) Waste management activities associated with the CAMU will not create unacceptable risks to humans or the environment resulting from exposure to dangerous wastes or dangerous constituents;

(c) The CAMU will include uncontaminated areas of the facility only if including such areas for the purposes of managing CAMU-eligible wastes is more protective than management of such wastes at contaminated areas of the facility;

(d) Areas within the CAMU where wastes remain in place after closure of the CAMU, will be managed and contained so as to minimize future releases of dangerous wastes and dangerous constituents to the extent practicable;

(e) When appropriate and practicable, the CAMU will expedite the timing of remedial activity implementation;

(f) The CAMU will enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and

(g) The CAMU will, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

(2) The owner/operator must provide sufficient information to enable the department to designate a CAMU in accordance with the criteria in this section. This must include, unless not reasonably available, information on:

(a) The origin of the waste and how it was subsequently managed (including a description of the timing and circumstances surrounding the disposal and/or release);

(b) Whether the waste was listed or identified as dangerous at the time of disposal and/or release; and

(c) Whether the disposal and/or release of the waste occurred before or after the land disposal requirements of 40 CFR part 268, which are incorporated by reference at WAC 173-303-140 (2)(a), or, if the waste is a state-only dangerous waste, the land disposal restrictions of WAC 173-303-140 (2)(b), were in effect for the waste listing, characteristic, or criterion.

(3) When designating a CAMU, the department will specify, in the permit or order, requirements for the CAMU including the following:

(a) The areal configuration of the CAMU;

(b) Except as provided in subsection (5) of this section, requirements for CAMU-eligible waste management within the CAMU including specification of applicable design, operation, treatment, and closure requirements;

(c) Minimum design requirements. CAMUs, except as provided in subsection (4) of this section, into which wastes are placed must be designed in accordance with the following:

(i) Unless the department approves alternate requirements under (c)(ii) of this subsection, CAMUs that consist of new, replacement, or laterally expanded units must include a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner. For purposes of this subsection, composite liner means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML) (geomembrane), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than $1x10^{-7}$ cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component;

(ii) Alternate requirements. The department may approve alternate requirements if:

(A) The department finds that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents into the ground water or surface water at least as effectively as the liner and leachate collection systems in (c)(i) of this subsection; or

(B) The CAMU is to be established in an area with existing significant levels of contamination, and the department finds that an alternative design, including a design that does not include a liner, would prevent migration from the unit that would exceed long-term remedial goals.

(d) Minimum treatment requirements: Unless the wastes will be placed in a CAMU for storage and/or treatment only in accordance with subsection (4) of this section, CAMU-eligible wastes that, absent this subsection, would be subject to the treatment requirements of WAC 173-303-140(2), and that the department determines contain principal hazardous constituents must be treated to the standards specified in (d)(iii) of this subsection.

(i) Principal hazardous constituents are those constituents that the department determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.

(A) In general, the department will designate as principal hazardous constituents:

(I) Carcinogens that pose a potential direct risk from ingestion or inhalation at the site at or above 10^{-3}; and

(II) Noncarcinogens that pose a potential direct risk from ingestion or inhalation at the site an order of magnitude or greater over their reference dose.

(B) The department will also designate constituents as principal hazardous constituents, where appropriate, when risks to human health and the environment posed by the potential migration of constituents in wastes to ground water are substantially higher than cleanup levels or goals at the site; when making such a designation, the department may consider such factors as constituent concentrations, and fate and transport characteristics under site conditions.

(C) The department may also designate other constituents as principal hazardous constituents that the department determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.

(ii) In determining which constituents are "principal hazardous constituents," the department must consider all constituents which, absent this section, would be subject to the treatment requirements of WAC 173-303-140(2).

(iii) Waste that the department determines contains principal hazardous constituents must meet treatment standards determined in accordance with (d)(iv) or (v) of this subsection.

(iv) Treatment standards for wastes placed in CAMUs.

(A) For nonmetals, treatment must achieve 90 percent reduction in total principal hazardous constituent concentrations, except as provided by (d)(iv)(C) of this subsection.

(B) For metals, treatment must achieve 90 percent reduction in principal hazardous constituent concentrations as measured in leachate from the treated waste or media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by (d)(iv)(C) of this subsection.

(C) When treatment of any principal hazardous constituent to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the Universal Treatment Standard is not required. Universal Treatment Standards are identified in 40 CFR 268.48 Table UTS, which is incorporated by reference at WAC 173-303-140 (2)(a).

(D) For waste exhibiting the dangerous characteristic of ignitability, corrosivity or reactivity, the waste must also be treated to eliminate these characteristics.

(E) For debris, the debris must be treated in accordance with 40 CFR 268.45, which is incorporated by reference at WAC 173-303-140 (2)(a), or by methods or to levels established under (d)(iv)(A) through (D) of this subsection or (d)(v) of this subsection, whichever the department determines is appropriate.

(F) Alternatives to TCLP. For metal bearing wastes for which metals removal treatment is not used, the department may specify a leaching test other than the TCLP (SW846 Method 1311, WAC 173-303-110 (3)(a)) to measure treatment effectiveness, provided the department determines that an alternative leach testing protocol is appropriate for use, and that the alternative more accurately reflects conditions at the site that affect leaching.

(v) Adjusted standards. The department may adjust the treatment level or method in (d)(iv) of this subsection to a higher or lower level, based on one or more of the following factors, as appropriate. The adjusted level or method must be protective of human health and the environment:

(A) The technical impracticability of treatment to the levels or by the methods in (d)(iv) of this subsection;

(B) The levels or methods in (d)(iv) of this subsection would result in concentrations of principal hazardous constituents (PHCs) that are significantly above or below cleanup standards applicable to the site (established either site-specifically, or promulgated under state or federal law);

(C) The views of the affected local community on the treatment levels or methods in (d)(iv) of this subsection as applied at the site, and, for treatment levels, the treatment methods necessary to achieve these levels;

(D) The short-term risks presented by the on-site treatment method necessary to achieve the levels or treatment methods in (d)(iv) of this subsection;

(E) The long-term protection offered by the engineering design of the CAMU and related engineering controls:

(I) Where the treatment standards in (d)(iv) of this subsection are substantially met and the principal hazardous constituents in the waste or residuals are of very low mobility; or

(II) Where cost-effective treatment has been used and the CAMU meets the liner and leachate collection requirements for new land disposal units at WAC 173-303-665 (2)(h) and (j); or

(III) Where, after review of appropriate treatment technologies, the department determines that cost-effective treatment is not reasonably available, and the CAMU meets the liner and leachate collection requirements for new land disposal units at WAC 173-303-665 (2)(h) and (j); or

(IV) Where cost-effective treatment has been used and the principal hazardous constituents in the treated wastes are of very low mobility; or

(V) Where, after review of appropriate treatment technologies, the department determines that cost-effective treatment is not reasonably available, the principal hazardous constituents in the wastes are of very low mobility, and either the CAMU meets or exceeds the liner standards for new, replacement, or laterally expanded CAMUs in (c)(i) and (ii) of this subsection, or the CAMU provides substantially equivalent or greater protection.

(vi) The treatment required by the treatment standards must be completed prior to, or within a reasonable time after, placement in the CAMU.

(vii) For the purpose of determining whether wastes placed in CAMUs have met site-specific treatment standards, the department may, as appropriate, specify a subset of the principal hazardous constituents in the waste as analytical surrogates for determining whether treatment standards have been met for other principal dangerous constituents. This specification will be based on the degree of difficulty of treatment and analysis of constituents with similar treatment properties.

(e) Except as provided in subsection (4) of this section, requirements for ground water and vadose zone monitoring and corrective action that are sufficient to:

(i) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of dangerous waste and dangerous constituents in ground water from sources located within the CAMU; and

(ii) Detect and subsequently characterize releases of dangerous waste and dangerous constituents to ground water that may occur from areas of the CAMU in which wastes will remain in place after CAMU closure.

(iii) Require notification to the department and corrective action as necessary to protect human health and the environment for releases to ground water from the CAMU.

(f) Except as provided in subsection (4) of this section, requirements for closure will minimize the need for further maintenance; and control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of dangerous wastes, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, to ground waters, to surface waters, or to the atmosphere.

(i) Requirements for closure will include, as appropriate and deemed necessary by the department, the following:

(A) Requirements for excavation, removal, treatment, and/or containment of wastes; and

(B) Requirements for removal and decontamination of equipment, devices, and structures used in CAMU-eligible waste management activities within the CAMU.

(ii) In establishing closure requirements for CAMUs under subsection (3) of this section, the department will consider the following factors:

(A) CAMU characteristics;

(B) Volume of wastes which will remain in place after CAMU closure;

(C) Potential for releases from the CAMU;

(D) Physical and chemical characteristics of the waste;

(E) Hydrological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases in and/or from the CAMU; and

(F) Potential for exposure of humans and environmental receptors if releases were to occur at or from the CAMU.

(iii) Cap requirements:

(A) At final closure of the CAMU, for areas in which wastes will remain after closure of the CAMU, with constituent concentrations at or above remedial levels or goals applicable to the site, the owner or operator must cover the CAMU with a final cover designed and constructed to meet the following performance criteria, except as provided in (f)(iii)(B) of this subsection:

(I) Provide long-term minimization of migration of liquids through the closed unit;

(II) Function with minimum maintenance;

(III) Promote drainage and minimize erosion or abrasion of the cover;

(IV) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(V) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(B) The department may determine that modifications to (f)(iii)(A) of this subsection are needed to facilitate treatment or the performance of the CAMU (e.g., to promote biodegradation).

(iv) The department will, for areas of the CAMU in which wastes will remain in place after CAMU closure, specify post-closure requirements to control, minimize, or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, and dangerous waste decomposition products to the ground, to ground waters, to surface waters, and to the atmosphere. Such post-closure requirements will include, as necessary to protect human health and the environment, monitoring and maintenance activities and the frequency with which such activities will be performed to ensure the integrity of any cap, final cover, or other containment system.

(4) CAMUs used for storage and/or treatment only are CAMUs in which wastes will not remain after closure. Such CAMUs must be designated in accordance with all of the requirements of this subsection, except as follows.

(a) CAMUs that are used for storage and/or treatment only and that operate in accordance with the time limits established in the staging pile regulations at 40 CFR 264.554 (d)(1)(iii), (h), and (i) are subject to the requirements for staging piles at 40 CFR 264.554 (d)(1)(i) and (ii), § 264.554 (d)(2), § 264.554 (e) and (f), and § 264.554 (j) and (k) in lieu of the performance standards and requirements for CAMUs in this section at subsections (1) and (3)(c) through (f). The staging pile requirements of 40 CFR Part 264.554 are incorporated by reference at WAC 173-303-64690.

(b) CAMUs that are used for storage and/or treatment only and that do not operate in accordance with the time limits established in the staging pile regulations at 40 CFR 264.554 (d)(1)(iii), (h), and (i), which are incorporated by reference:

(i) Must operate in accordance with a time limit, established by the department, that is no longer than necessary to achieve a timely remedy selected for the waste; and

(ii) Are subject to the requirements for staging piles at 40 CFR 264.554 (d)(1)(i) and (ii), 264.554 (d)(2), 264.554 (e) and (f), and 264.554 (j) and (k) in lieu of the performance standards and requirements for CAMUs in this section at subsections (1) and (3)(d) and (f).

(5) CAMUs into which wastes are placed where all wastes have constituent levels at or below remedial levels or goals applicable to the site do not have to comply with the requirements for liners at subsection (3)(c)(i) of this section, caps at subsection (3)(f)(iii) of this section, ground water monitoring requirements at subsection (3)(e) of this section or, for treatment and/or storage-only CAMUs, the design standards at subsection (4) of this section.

(6) The department must provide public notice and a reasonable opportunity for public comment before designating a CAMU. Such a notice will include the rationale for any proposed adjustments under subsection (3)(d)(v) of this section to the treatment standards in subsection (3)(d)(iv) of this section.

(7) Notwithstanding any other provision of this subsection, the department may impose additional requirements as necessary to protect human health and the environment.

(8) Incorporation of the designation of and requirements for a CAMU into a existing permit must be approved by the department according to the procedures for agency initiated permit modifications under WAC 173-303-830(3), or according to the permit modification procedures of WAC 173-303-830(4).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64660, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64670 Incorporation of a regulated unit within a CAMU. (1) The department may designate a regulated unit (as defined in WAC 173-303-040) as a CAMU, or may incorporate a regulated unit into a CAMU, if:

(a) The regulated unit is closed or closing, meaning it has begun the closure process under WAC 173-303-610(4) or 40 CFR Part 265.113, which is incorporated by reference at WAC 173-303-400 (3)(a); and

(b) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions at the facility.

(2) The requirements of WAC 173-303-610, 173-303-620, 173-303-645, and the unit specific requirements of WAC 173-303-650 through 173-303-680 that applied to the regulated unit will continue to apply to the portion of the CAMU into which the regulated unit was incorporated.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64670, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64680 Temporary units (TUs). (1) In accordance with the requirements of this subsection, the department may designate a tank or container storage area at a facility as a temporary unit for the purpose of treating or storing remediation waste that originates at the same facility in order to implement remedies under this section or to implement other cleanup actions. The department may replace the design, operating and closure standards applicable to dangerous waste tank and container treatment and storage units under this chapter with alternative requirements that protect human health and the environment.

(2) Any temporary unit to which alternative requirements are applied in accordance with subsection (1) of this section will be:

(a) Located within the facility boundary; and

(b) Used only for treatment or storage of remediation wastes managed pursuant to implementation of the corrective action requirements of WAC 173-303-64620 at the facility.

(3) In establishing standards to be applied to a temporary unit, the department will consider the following factors:

(a) Length of time unit will be in operation;

(b) Type of unit;

(c) Volumes of wastes to be managed;

(d) Physical and chemical characteristics of the wastes to be managed in the unit;

(e) Potential for releases from the unit;

(f) Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases; and

(g) Potential for exposure of humans and environmental receptors if releases were to occur from the unit.

(4) The department will specify the length of time, not to exceed one year, a temporary unit will be allowed to operate. The director will also specify design, operating, and closure requirements for the temporary unit.

(5) The department may extend the operating period of a temporary unit for up to one additional year, provided the director determines that:

(a) Continued operation of the unit will not pose a threat to human health and the environment; and

(b) Continued operation of the unit is necessary to ensure timely and efficient implementation of remedial actions at the facility.

(6) Incorporation of the designation of and requirements for a temporary unit or a time extension for a temporary unit into an existing permit will be:

(a) Approved in accordance with the procedures for agency-initiated permit modifications under WAC 173-303-830(3); or

(b) Requested by the owner or operator as a Class II modification according to the procedures under WAC 173-303-830(4).

(7) The department will document the rationale for designating a temporary unit and for granting time extensions for temporary units and will make such documentation available to the public.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64680, filed 11/30/04, effective 1/1/05.]

WAC 173-303-64690 Staging piles. The requirements for staging piles in 40 CFR Part 264.554 are incorporated by reference. The word "director" in 40 CFR means "department."

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-64690, filed 11/30/04, effective 1/1/05.]

WAC 173-303-646910 Disposal of CAMU-eligible wastes into permitted dangerous waste landfills. (1) The department may approve placement of CAMU-eligible wastes in dangerous waste landfills not located at the site from which the waste originated, without the wastes meeting the requirements of WAC 173-303-140(2), if the conditions in (a) through (c) of this subsection are met:

(a) The waste meets the definition of CAMU-eligible waste in WAC 173-303-64650 (3)(a) and (b).

(b) The department identifies principal hazardous constituents in such waste, in accordance with WAC 173-303-64660 (3)(d)(i) and (ii), and requires that such principal hazardous constituents are treated to any of the following standards specified for CAMU-eligible wastes:

(i) The treatment standards under WAC 173-303-64660 (3)(d)(iv); or

(ii) Treatment standards adjusted in accordance with WAC 173-303-64660 (3)(d)(v)(A), (C), (D) or (E)(I); or

(iii) Treatment standards adjusted in accordance with WAC 173-303-64660 (3)(d)(v)(E)(II), where treatment has been used and that treatment significantly reduces the toxicity or mobility of the principal hazardous constituents in the waste, minimizing the short-term and long-term threat posed by the waste, including the threat at the remediation site.

(c) The landfill receiving the CAMU-eligible waste must have a dangerous waste permit, meet the requirements for new landfills in WAC 173-303-665, and be authorized to

accept CAMU-eligible wastes; for the purposes of this requirement, "permit" does not include interim status.

(2) The person seeking approval must provide sufficient information to enable the department to approve placement of CAMU-eligible waste in accordance with subsection (1) of this section. Information required by WAC 173-303-64660 (2)(a) through (c) for CAMU applications must be provided, unless not reasonably available.

(3) The department must provide public notice and a reasonable opportunity for public comment before approving CAMU-eligible waste for placement in an off-site permitted dangerous waste landfill, consistent with the requirements for CAMU approval at WAC 173-303-64660(6). The approval must be specific to a single remediation.

(4) Applicable dangerous waste management requirements, including recordkeeping requirements to demonstrate compliance with treatment standards approved under this section, for CAMU-eligible waste must be incorporated into the receiving facility permit through permit issuance or a permit modification, providing notice and an opportunity for comment and a hearing. Notwithstanding WAC 173-303-810(8), a landfill may not receive CAMU-eligible waste under this subsection unless its permit specifically authorizes receipt of such waste.

(5) For each remediation, CAMU-eligible waste may not be placed in an off-site landfill authorized to receive CAMU-eligible waste in accordance with subsection (4) of this section until the following additional conditions have been met:

(a) The landfill owner/operator notifies the department responsible for oversight of the landfill and persons on the facility mailing list, maintained in accordance with WAC 173-303-840 (3)(e)(i)(D), of his or her intent to receive CAMU-eligible waste in accordance with this section; the notice must identify the source of the remediation waste, the principal hazardous constituents in the waste, and treatment requirements.

(b) Persons on the facility mailing list may provide comments, including objections to the receipt of the CAMU-eligible waste, to the department within fifteen days of notification.

(c) The department may object to the placement of the CAMU-eligible waste in the landfill within thirty days of notification; the department may extend the review period an additional thirty days because of public concerns or insufficient information.

(d) CAMU-eligible wastes may not be placed in the landfill until the department has notified the facility owner/operator that he or she does not object to its placement.

(e) If the department objects to the placement or does not notify the facility owner/operator that he or she has chosen not to object, the facility may not receive the waste, notwithstanding WAC 173-303-810(8), until the objection has been resolved, or the owner/operator obtains a permit modification in accordance with the procedures of WAC 173-303-830(4) specifically authorizing receipt of the waste.

(f) As part of the permit issuance or permit modification process of subsection (4) of this section, the department may modify, reduce, or eliminate the notification requirements of this subsection as they apply to specific categories of CAMU-eligible waste, based on minimal risk.

(6) Generators of CAMU-eligible wastes sent offsite to a dangerous waste landfill under this subsection must comply with the requirements of 40 CFR 268.7 (a)(4), which is incorporated by reference at WAC 173-303-140(2); off-site facilities treating CAMU-eligible wastes to comply with this section must comply with the requirements of Sec. 268.7 (b)(4), which is incorporated by reference at WAC 173-303-140(2), except that the certification must be with respect to the treatment requirements of subsection (1)(b) of this section.

(7) For the purposes of this subsection only, the "design of the CAMU" in WAC 173-303-64660 (3)(d)(v)(E) means design of the permitted dangerous waste landfill.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-646910, filed 11/30/04, effective 1/1/05.]

WAC 173-303-646920 Disposal of CAMU-eligible wastes into permitted hazardous waste landfills located outside Washington. Notwithstanding any provision of WAC 173-303-646910, the department may approve placement of CAMU-eligible wastes in hazardous waste landfills located outside of the state of Washington if the landfill receiving the CAMU-eligible waste is authorized to accept CAMU-eligible wastes pursuant to 40 CFR § 264.555 or pursuant to EPA-approved state regulations implementing 40 CFR § 264.555, and the conditions of WAC 173-303-646910 (1)(a), (b), (2), (3), and (6) are met.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-646920, filed 11/30/04, effective 1/1/05.]

WAC 173-303-650 Surface impoundments. (1) Applicability. The regulations in this section apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of dangerous waste.

(2) Design and operating requirements.

(a)(i) Any surface impoundment that is not covered by (j) of this subsection must have a liner for all portions of the impoundment (except for an existing portion of a surface impoundment). The liner must be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with subsection (6)(a)(i) of this section. For impoundments that will be closed in accordance with subsection (6)(a)(ii) of this section, the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift;

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(D) For EHW management, the owner or operator must submit an engineering report with their permit application under WAC 173-303-806(4) stating the basis for selecting the liner(s). The report must be certified by an independent, qualified registered professional engineer.

(ii) The owner or operator of a new surface impoundment installed after October 31, 1984, and in which liquid EHW is managed must:

(A) Install a double lined system which incorporates the specifications of subsection (3)(a), (b), and (c) of this section; and

(B) Must comply with either the ground water monitoring requirements of WAC 173-303-645, or the unsaturated zone monitoring requirements of WAC 173-303-655(6).

(b) The owner or operator will be exempted from the requirements of (a) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents listed in WAC 173-303-9905, or which otherwise cause his wastes to be regulated under this chapter, into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.

(d) A surface impoundment must be designed so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.

(e) A surface impoundment must be designed to repel birds.

(f) A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent their failure. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.

(g) Earthen dikes must be kept free of:

(i) Perennial woody plants with root systems which could weaken its structural integrity; and

(ii) Burrowing mammals which could weaken its structural integrity or create leaks through burrows.

(h) Earthen dikes must have a protective cover, such as grass, shale or rock to minimize wind and water erosion and to preserve their structural integrity.

(i) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(j) The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing TSD facility."

(i) The liner system must include:

(A) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1 x 10^{-7}/cm/sec.

(ii) The liners must comply with (a)(i)(A), (B), and (C) of this subsection.

(iii) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of dangerous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this paragraph are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of one percent or more;

(B) Constructed of granular drainage materials with a hydraulic conductivity of 1 x 10^{-1}/cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3 x 10^{-4}/m^2sec or more;

(C) Constructed of materials that are chemically resistant to the waste managed in the surface impoundment and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes and any waste cover materials or equipment used at the surface impoundment;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(k) The department may approve alternative design or operating practices to those specified in (j) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal system specified in (j) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(l) The double liner requirement set forth in (j) of this subsection may be waived by the department for any monofill, if:

(i) The monofill contains only dangerous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes dangerous for reasons other than the toxicity characteristic in WAC 173-303-090(8) or the toxicity criteria at WAC 173-303-100(5); and

(ii)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of this paragraph, the term "liner" means a liner designed, constructed, installed, and operated to prevent dangerous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent dangerous waste from migrating beyond the liner to adjacent subsurface soil, ground water, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of (j) of this subsection on the basis of a liner designed, constructed, installed, and operated to prevent dangerous waste from passing beyond the liner, at the closure of such impoundment, the owner or operator must remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment will comply with appropriate post-closure requirements, including but not limited to ground water monitoring and corrective action;

(B) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in 40 CFR Section 144.3); and

(C) The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under RCRA section 3005(c); or

(iii) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any dangerous constituent into ground water or surface water at any future time.

(m) The owner or operator of any replacement surface impoundment unit is exempt from (j) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of sections 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Reserve.

(4) Monitoring and inspection.

(a) During construction and installation, liners (except in the case of existing portions of surface impoundments exempt from subsection (2)(a)(i) of this section) and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a surface impoundment is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of overtopping control systems;

(ii) Sudden drops in the level of the impoundment's contents; and

(iii) Severe erosion or other signs of deterioration in dikes or other containment devices.

(c) Prior to the issuance of a permit, and after any extended period of time (at least six months) during which the impoundment was not in service, the owner or operator must obtain a certification from a qualified engineer that the impoundment's dike, including that portion of any dike which provides freeboard, has structural integrity. The certification must establish, in particular, that the dike:

(i) Will withstand the stress of the pressure exerted by the types and amounts of wastes to be placed in the impoundment; and

(ii) Will not fail due to scouring or piping, without dependence on any liner system included in the surface impoundment construction.

(d)(i) An owner or operator required to have a leak detection system under subsection (2)(j) or (k) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(ii) After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of

liquids in the sumps must be recorded at least semi annually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semiannual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(iii) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the department based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

(5) Emergency repairs; contingency plans.

(a) A surface impoundment must be removed from service in accordance with (b) of this subsection when:

(i) Unexpected changes of liquid levels occur; or

(ii) The dike leaks.

(b) When a surface impoundment must be removed from service as required by (a) of this subsection, the owner or operator must:

(i) Immediately shut off the flow or stop the addition of wastes into the impoundment;

(ii) Immediately contain any surface leakage which has occurred or is occurring;

(iii) Immediately stop the leak;

(iv) Take any other necessary steps to stop or prevent catastrophic failure;

(v) Empty the impoundment, if a leak cannot be stopped by any other means; and

(vi) Notify the department of the problem in writing within seven days after detecting the problem.

(c) As part of the contingency plan required in WAC 173-303-340 through 173-303-360, the owner or operator must specify:

(i) A procedure for complying with the requirements of (b) of this subsection; and

(ii) A containment system evaluation and repair plan describing: Testing and monitoring techniques; procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure; description of a schedule of actions to be taken in the event of a possible failure; and the repair techniques and materials (and their availability) to be used in the event of leakage due to containment system failure or deterioration which does not require the impoundment to be removed from service.

(d) No surface impoundment that has been removed from service in accordance with the requirements of this section may be restored to service unless the portion of the impoundment which was failing is repaired and the following steps are taken:

(i) If the impoundment was removed from service as the result of actual or imminent dike failure, the dike's structural integrity must be recertified in accordance with subsection (4)(c) of this section;

(ii) If the impoundment was removed from service as the result of a sudden drop in the liquid level, then:

(A) For any existing portion of the impoundment, a liner must be installed in compliance with subsection (2)(a)(i) or (3) of this section; and

(B) For any other portion of the impoundment, the repaired liner system must be certified by a qualified engineer as meeting the design specifications approved in the permit.

(e) A surface impoundment that has been removed from service in accordance with the requirements of this section and that is not being repaired must be closed in accordance with the provisions of subsection (6) of this section.

(6) Closure and post-closure care.

(a) At closure, the owner or operator must:

(i) Remove or decontaminate all dangerous waste and dangerous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with dangerous waste and leachate, and manage them as dangerous waste; or

(ii) If the surface impoundment will be closed as a landfill, except that this option is prohibited if EHW would remain in the closed unit(s):

(A) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;

(B) Stabilize remaining wastes to a bearing capacity sufficient to support a final cover; and

(C) Cover the surface impoundment with a final cover designed and constructed to:

(I) Provide long-term minimization of the migration of liquids through the closed impoundment with a material that has a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present;

(II) Function with minimum maintenance;

(III) Promote drainage and minimize erosion or abrasion of the final cover; and

(IV) Accommodate settling and subsidence so that the cover's integrity is maintained.

(b) If some waste residues or contaminated materials are left in place at final closure (except that no EHW may ever be left in place), the owner or operator must comply with all post-closure requirements contained in WAC 173-303-610 (7), (8), (9), and (10), including maintenance and monitoring throughout the post-closure care period (specified in the permit). The owner or operator must:

(i) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(ii) Maintain and monitor the leak detection system in accordance with subsections (2)(j)(ii)(D) and (E), and (4)(d) of this section, and comply with all other applicable leak detection system requirements of this chapter;

(iii) Maintain and monitor the ground water monitoring system and comply with all applicable requirements of WAC 173-303-645; and

(iv) Prevent run-on and runoff from eroding or otherwise damaging the final cover.

(c)(i) If an owner or operator plans to close a surface impoundment in accordance with (a)(i) of this subsection, and the impoundment does not comply with the liner requirements of subsection (2)(a)(i) of this section, and is not exempt from them in accordance with subsection (2)(b) of this section, then:

(A) The closure plan for the impoundment under WAC 173-303-610(3) must include both a plan for complying with (a)(i) of this subsection, and a contingent plan for complying

with (a)(ii) of this subsection in case not all contaminated subsoils can be practicably removed at closure; and

(B) The owner or operator must prepare a contingent post-closure plan under WAC 173-303-610(8) for complying with (b) of this subsection in case not all contaminated subsoils can be practicably removed at closure.

(ii) The cost estimates calculated under WAC 173-303-620 (3) and (5) for closure and post-closure care of an impoundment subject to (c) of this subsection must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under (a)(i) of this subsection.

Reserve.

(7) Special requirements for ignitable or reactive waste. Ignitable or reactive waste must not be placed in a surface impoundment, unless the waste and impoundment satisfy all applicable requirements of WAC 173-303-140 (2)(a), and:

(a) The waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that:

(i) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090; and

(ii) WAC 173-303-395 (1)(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; or

(c) The surface impoundment is used solely for emergencies.

(8) Special requirements for incompatible wastes. Incompatible wastes and materials must not be placed in the same surface impoundment, unless WAC 173-303-395 (1)(b) is complied with.

(9) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) The wastes F020, F021, F022, F023, F026, or F027 must not be placed in a surface impoundment unless the owner or operator operates the surface impoundment in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this section. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

(10) Action leakage rate.

(a) The department must approve an action leakage rate for surface impoundment units subject to WAC 173-303-650 (2)(j) or (k). The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under WAC 173-303-650 (4)(d) to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period, and if the unit is closed in accordance with WAC 173-303-650 (6)(b), monthly during the post-closure care period when monthly monitoring is required under WAC 173-303-650 (4)(d).

(11) Response actions.

(a) The owner or operator of surface impoundment units subject to subsection (2)(j) or (k) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

(vi) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the department the results of the analyses specified in (b) (iii), (iv), and (v) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b)(iii), (iv), and (v) of this subsection, the owner or operator must:

(i) Assess the source of liquids and amounts of liquids by source;

(ii) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(iv) Document why such assessments are not needed.

(12) Air emission standards. The owner or operator must manage all hazardous waste placed in a surface impoundment in accordance with the applicable requirements of 40 CFR Subparts AA, BB, and CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692.

(13) Existing and newly regulated surface impoundments. The requirements of 3005 (j)(1) and (6) of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, are incorporated by reference. Surface impoundments regulated for the first time by a listing or characteristic adopted after November 8, 1984, must comply with new unit requirements or stop dangerous waste activity by four years after the date of adoption of the new listing or characteristic.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-650, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-650, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-650, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-650, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-650, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-650, filed 3/11/88; 86-12-057 (Order DE-85-10), § 173-303-650, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-650, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-650, filed 2/10/82.]

WAC 173-303-655 Land treatment. (1) Applicability. The regulations in this subpart apply to owners and operators of facilities that treat or dispose of dangerous waste in land treatment units, except as WAC 173-303-600 provides otherwise.

(2) Treatment program.

(a) An owner or operator subject to this section must establish a land treatment program that is designed to ensure that dangerous constituents placed in or on the treatment zone are degraded, transformed, or immobilized within the treatment zone. The department will specify in the facility permit the elements of the treatment program, including:

(i) The wastes that are capable of being treated at the unit based on a demonstration under subsection (3) of this section;

(ii) Design measures and operating practices necessary to maximize the success of degradation, transformation, and immobilization processes in the treatment zone in accordance with subsection (4)(a) of this section; and

(iii) Unsaturated zone monitoring provisions meeting the requirements of subsection (6) of this section.

(b) The department will specify in the facility permit the dangerous constituents that must be degraded, transformed, or immobilized under this section. Dangerous constituents are constituents identified in WAC 173-303-9905, and any other constituents which, although not listed in WAC 173-303-9905, cause a waste to be regulated under this chapter, that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

(c) The department will specify the vertical and horizontal dimensions of the treatment zone in the facility permit. The treatment zone is the portion of the unsaturated zone below, and including, the land surface in which the owner or operator intends to maintain the conditions necessary for effective degradation, transformation, or immobilization of dangerous constituents. The maximum depth of the treatment zone must be:

(i) No more than 1.5 meters (5 feet) below the initial soil surface; and

(ii) More than 3 meters (10 feet) above the seasonal high water table; except that the owner or operator may demonstrate to the satisfaction of the department that a distance of less than 3 meters will be adequate. In no case will the distance be less than 1 meter.

(3) Treatment demonstration.

(a) For each waste that will be applied to the treatment zone, the owner or operator must demonstrate, prior to application of the waste, that dangerous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone.

(b) In making this demonstration, the owner or operator may use field tests, laboratory analyses, available data, or, in the case of existing units, operating data. If the owner or operator intends to conduct field tests or laboratory analyses in order to make the demonstration required under (a) of this subsection, he must obtain a land treatment demonstration permit under WAC 173-303-808. The department will specify in this permit the testing, analytical, design, and operating requirements (including the duration of the tests and analyses, and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure, and clean-up activities) necessary to meet the requirements in (c) of this subsection.

(c) Any field test or laboratory analysis conducted in order to make a demonstration under (a) of this subsection must:

(i) Accurately simulate the characteristics and operating conditions for the proposed land treatment unit including:

(A) The characteristics of the waste and of dangerous constituents present;

(B) The climate in the area;

(C) The topography of the surrounding area;

(D) The characteristics and depth of the soil in the treatment zone; and

(E) The operating practices to be used at the unit;

(ii) Be likely to show that dangerous constituents in the waste to be tested will be completely degraded, transformed, or immobilized in the treatment zone of the proposed land treatment unit; and

(iii) Be conducted in a manner that protects human health and the environment considering:

(A) The characteristics of the waste to be tested;

(B) The operating and monitoring measures taken during the course of the test;

(C) The duration of the test;

(D) The volume of waste used in the test; and

(E) In the case of field tests, the potential for migration of dangerous constituents to ground water or surface water.

(4) Design and operating requirements. The department will specify in the facility permit how the owner or operator will design, construct, operate, and maintain the land treatment unit in compliance with this subsection.

(a) The owner or operator must design, construct, operate, and maintain the unit to maximize the degradation, transformation, and immobilization of dangerous constituents in the treatment zone. The owner or operator must design, construct, operate, and maintain the unit in accordance with all design and operating conditions that were used in the treatment demonstration under subsection (3) of this section. At a minimum, the department will specify in the facility permit:

(i) The rate and method of waste application to the treatment zone;

(ii) Measures to control soil pH;

(iii) Measures to enhance microbial or chemical reactions (e.g., fertilization, tilling); and

(iv) Measures to control the moisture content of the treatment zone.

(b) The owner or operator must design, construct, operate, and maintain the treatment zone to minimize runoff of dangerous constituents during the active life of the land treatment unit.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the treatment zone during peak discharge from at least a twenty-five-year storm.

(d) The owner or operator must design, construct, operate, and maintain a runoff management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(e) Collection and holding facilities (e.g., tanks or basins) associated with run-on and runoff control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain the design capacity of the system.

(f) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator must control wind dispersal.

(g) The owner or operator must inspect the unit weekly and after storms to detect evidence of:

(i) Deterioration, malfunctions, or improper operation of run-on and runoff control systems; and

(ii) Improper functioning of wind dispersal control measures.

(5) Food chain crops. The department may allow the growth of food chain crops in or on the treatment zone only if the owner or operator satisfies the conditions of this subsection. The department will specify in the facility permit the specific food chain crops which may be grown.

(a)(i) The owner or operator must demonstrate that there is no substantial risk to human health caused by the growth of such crops in or on the treatment zone by demonstrating, prior to the planting of such crops, that dangerous constituents other than cadmium:

(A) Will not be transferred to the food or feed portions of the crop by plant uptake or direct contact, and will not otherwise be ingested by food chain animals (e.g., by grazing); or

(B) Will not occur in greater concentrations in or on the food or feed portions of crops grown on the treatment zone than in or on identical portions of the same crops grown on untreated soils under similar conditions in the same region.

(ii) The owner or operator must make the demonstration required under (a)(i) of this subsection prior to the planting of crops at the facility for all dangerous constituents that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

(iii) In making such a demonstration, the owner or operator may use field tests, greenhouse studies, available data, or, in the case of existing units, operating data, and must:

(A) Base the demonstration on conditions similar to those present in the treatment zone, including soil characteristics (e.g., pH, cation exchange capacity), specific wastes, application rates, application methods, and crops to be grown; and

(B) Describe the procedures used in conducting any tests, including the sample selection criteria, sample size, analytical methods, and statistical procedures.

(iv) If the owner or operator intends to conduct field tests or greenhouse studies in order to make the demonstration he must obtain a permit for conducting such activities.

(b) The owner or operator must comply with the following conditions if cadmium is contained in wastes applied to the treatment zone;

(i)(A) The pH of the waste and soil mixture must be 6.5 or greater at the time of each waste application, except for waste containing cadmium at concentrations of 2 mg/kg (dry weight) or less;

(B) The annual application of cadmium from waste must not exceed 0.5 kilograms per hectare (kg/ha) on land used for production of tobacco, leafy vegetables, or root crops grown for human consumption. For other food chain crops, the annual cadmium application rate must not exceed:

Time period	Annual Cd application rate (kilograms per hectare)
Present to June 30, 1984	2.0
July 1, 1984 to Dec. 31, 1986	1.25
Beginning Jan. 1, 1987	0.5

(C) The cumulative application of cadmium from waste must not exceed 5kg/ha if the waste and soil mixture has a pH of less than 6.5; and

(D) If the waste and soil mixture has a pH of 6.5 or greater or is maintained at a pH of 6.5 or greater during crop growth, the cumulative application of cadmium from waste must not exceed: 5 kg/ha if soil cation exchange capacity (CEC) is less than 5 meq/100g; 10 kg/ha if soil CEC is 5-15 meq/100g; and 20 kg/ha if soil CEC is greater than 15 meq/100g; or

(ii)(A) Animal feed must be the only food chain crop produced;

(B) The pH of the waste and soil mixture must be 6.5 or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level must be maintained whenever food chain crops are grown;

(C) There must be an operating plan which demonstrates how the animal feed will be distributed to preclude ingestion by humans. The operating plan must describe the measures to be taken to safeguard against possible health hazards from

cadmium entering the food chain, which may result from alternative land uses; and

(D) Future property owners must be notified by a stipulation in the land record or property deed which states that the property has received waste at high cadmium application rates and that food chain crops must not be grown except in compliance with (b)(ii) of this subsection.

(6) Unsaturated zone monitoring. An owner or operator subject to this section must establish an unsaturated zone monitoring program to discharge the responsibilities described in this subsection.

(a) The owner or operator must monitor the soil and soil-pore liquid to determine whether dangerous constituents migrate out of the treatment zone.

(i) The department will specify the dangerous constituents to be monitored in the facility permit. The dangerous constituents to be monitored are those specified under subsection (2)(b) of this section.

(ii) The department may require monitoring for principal dangerous constituents (PDCs) in lieu of the constituents specified under subsection (2)(b) of this section. PDCs are dangerous constituents contained in the wastes to be applied at the unit that are the most difficult to treat, considering the combined effects of degradation, transformation, and immobilization. The department will establish PDCs if it finds, based on waste analyses, treatment demonstrations, or other data, that effective degradation, transformation, or immobilization of the PDCs will assure treatment at least equivalent levels for the other dangerous constituents in the wastes.

(b) The owner or operator must install an unsaturated zone monitoring system that includes soil monitoring using soil cores and soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system must consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that:

(i) Represent the quality of background soil-pore liquid quality and the chemical makeup of soil that has not been affected by leakage from the treatment zone; and

(ii) Indicate the quality of soil-pore liquid and the chemical makeup of the soil below the treatment zone.

(c) The owner or operator must establish a background value for each dangerous constituent to be monitored under (a) of this subsection. The permit will specify the background values for each constituent or specify the procedures to be used to calculate the background values.

(i) Background soil values may be based on a one-time sampling at a background plot having characteristics similar to those of the treatment zone.

(ii) Background soil-pore liquid values must be based on at least quarterly sampling for one year at a background plot having characteristics similar to those of the treatment zone.

(iii) The owner or operator must express all background values in a form necessary for the determination of statistically significant increases under (f) of this subsection.

(iv) In taking samples used in the determination of all background values, the owner or operator must use an unsaturated zone monitoring system that complies with (b)(i) of this subsection.

(d) The owner or operator must conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The department will specify the frequency and timing of soil and soil-pore liquid monitoring in the facility permit after considering the frequency, timing, and rate of waste application, and the soil permeability. The owner or operator must express the results of soil and soil-pore liquid monitoring in a form necessary for the determination of statistically significant increases under (f) of this subsection.

(e) The owner or operator must use consistent sampling and analysis procedures that are designed to ensure sampling results that provide a reliable indication of soil-pore liquid quality and the chemical makeup of the soil below the treatment zone. At a minimum, the owner or operator must implement procedures and techniques for:

(i) Sample collection;

(ii) Sample preservation and shipment;

(iii) Analytical procedures; and

(iv) Chain of custody control.

(f) The owner or operator must determine whether there is a statistically significant change over background values for any dangerous constituent to be monitored under (a) of this subsection, below the treatment zone each time he conducts soil monitoring and soil-pore liquid monitoring under (d) of this subsection.

(i) In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent, as determined under (d) of this subsection, to the background value for that constituent according to the statistical procedure specified in the facility permit under this subsection.

(ii) The owner or operator must determine whether there has been a statistically significant increase below the treatment zone within a reasonable time period after completion of sampling. The department will specify that time period in the facility permit after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of soil and soil-pore liquid samples.

(iii) The owner or operator must determine whether there is a statistically significant increase below the treatment zone using a statistical procedure that provides reasonable confidence that migration from the treatment zone will be identified. The department will specify a statistical procedure in the facility permit that it finds:

(A) Is appropriate for the distribution of the data used to establish background values; and

(B) Provides a reasonable balance between the probability of falsely identifying migration from the treatment zone and the probability of failing to identify real migration from the treatment zone.

(g) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant increase of dangerous constituents below the treatment zone, he must:

(i) Notify the department of his finding in writing within seven days. The notification must indicate what constituents have shown statistically significant increases;

(ii) Within forty-five days, submit to the department an application for a permit modification to amend the operating practices at the facility in order to maximize the success of degradation, transformation, or immobilization processes in the treatment zone; and

(iii) Continue to monitor in accordance with the unsaturated zone monitoring program established under this subsection.

(h) If the owner or operator determines, pursuant to (f) of this subsection, that there is a statistically significant increase of dangerous constituents below the treatment zone, he may demonstrate that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. While the owner or operator may make a demonstration under this subsection, he is not relieved of the requirement to submit concurrently a permit modification application within the forty-five-day period, unless the demonstration made under this subsection successfully shows that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. In making a demonstration under this subsection, the owner or operator must:

(i) Notify the department in writing within seven days of determining a statistically significant increase below the treatment zone that he intends to make a demonstration under this subsection;

(ii) Within forty-five days, submit a report to the department demonstrating that a source other than the regulated units caused the increase or that the increase resulted from error in sampling, analysis, or evaluation;

(iii) Within forty-five days, submit to the department an application for a permit modification to make any appropriate changes to the unsaturated zone monitoring program at the facility; and

(iv) Continue to monitor in accordance with the unsaturated zone monitoring program established under this subsection.

(7) Recordkeeping. The owner or operator must include dangerous waste application dates and rates in the operating record required under WAC 173-303-380.

(8) Closure and post-closure care.

(a) During the closure period the owner or operator must:

(i) Continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of dangerous constituents within the treatment zone as required under subsection (4)(a) of this section, except to the extent such measures are inconsistent with (a)(viii) of this subsection;

(ii) Continue all operations in the treatment zone to minimize runoff of dangerous constituents as required under subsection (4)(b) of this section;

(iii) Maintain the run-on control system required under subsection (4)(c) of this section;

(iv) Maintain the runoff management system required under subsection (4)(d) of this section;

(v) Control wind dispersal of dangerous waste if required under subsection (4)(f) of this section;

(vi) Continue to comply with any prohibitions or conditions concerning growth of food chain crops under subsection (5) of this section;

(vii) Continue unsaturated zone monitoring in compliance with subsection (6) of this section, except that soil-pore liquid monitoring may be terminated ninety days after the last application of waste to the treatment zone; and

(viii) Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of dangerous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.

(b) For the purpose of complying with WAC 173-303-610(6) when closure is completed, the owner or operator may submit to the department a certification by an independent qualified soil scientist, in lieu of an independent, qualified registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

(c) During the post-closure care period the owner or operator must:

(i) Continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of dangerous constituents in the treatment zone to the extent that such measures are consistent with other post-closure care activities;

(ii) Maintain a vegetative cover over closed portions of the facility;

(iii) Maintain the run-on control system required under subsection (4)(c) of this section;

(iv) Maintain the runoff management system required under subsection (4)(d) of this section;

(v) Control wind dispersal of dangerous waste, if required under subsection (4)(f) of this section;

(vi) Continue to comply with any prohibitions or conditions concerning growth of food chain crops under subsection (5) of this section; and

(vii) Continue unsaturated zone monitoring in compliance with subsection (6) of this section, except that soil-pore liquid monitoring may be terminated one hundred eighty days after the last application of waste to the treatment zone.

(d) The owner or operator is not subject to regulation under (a)(viii) and (c) of this subsection, if the department finds that the level of dangerous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in (d)(iii) of this subsection. The owner or operator may submit such a demonstration to the department at any time during the closure or post-closure care periods. For the purposes of this subsection:

(i) The owner or operator must establish background soil values and determine whether there is a statistically significant increase over those values for all dangerous constituents specified in the facility permit under subsection (2)(b) of this section;

(A) Background soil values may be based on a one-time sampling of a background plot having characteristics similar to those of the treatment zone;

(B) The owner or operator must express background values and values for dangerous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under (d)(iii) of this subsection;

(ii) In taking samples used in the determination of background and treatment zone values, the owner or operator must take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical makeup of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively;

(iii) In determining whether a statistically significant increase has occurred, the owner or operator must compare

the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator must use a statistical procedure that:

(A) Is appropriate for the distribution of the data used to establish background values; and

(B) Provides a reasonable balance between the probability of falsely identifying dangerous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.

(e) The owner or operator is not subject to regulation under WAC 173-303-645 if the department finds that the owner or operator satisfies (d) of this subsection, and if unsaturated zone monitoring under subsection (6) of this section, indicates that dangerous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

(9) Special requirements for ignitable or reactive waste. The owner or operator must not apply ignitable or reactive waste to the treatment zone unless the waste and the treatment zone meet all applicable requirements of WAC 173-303-140 (2)(a), and:

(a) The waste is immediately incorporated into the soil so that:

(i) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090 (5) and (7); and

(ii) WAC 173-303-395 is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

(10) Special requirements for incompatible wastes. The owner or operator must not place incompatible wastes, or incompatible wastes and materials, in or on the same treatment zone, unless WAC 173-303-395 (1)(b) is complied with.

(11) Special requirements for extremely hazardous waste. Under no circumstances will EHW be allowed to remain in a closed land treatment unit after concluding the post-closure care period. If EHW remains at the end of the scheduled post-closure care period specified in the permit, then the department will either extend the post-closure care period, or require that all EHW be disposed of off-site or that it be treated. In deciding whether to extend post-closure care or require disposal or treatment, the department will take into account the likelihood that the waste will or will not continue to degrade in the land treatment unit to the extent that it is no longer EHW. For the purposes of this subsection, EHW will be considered to remain in a land treatment unit if representative samples of the treatment zone are designated as EHW. Procedures for representative sampling and testing will be specified in the permit.

(12) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) Dangerous wastes F020, F021, F022, F023, F026, or F027 must not be placed in a land treatment unit unless the owner or operator operates the facility in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection and in accord with all other applicable requirements of this chapter. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary for land treatment facilities managing dangerous wastes F020, F021, F022, F023, F026, or F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-655, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-655, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-655, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-655, filed 4/18/84.]

WAC 173-303-660 Waste piles. (1) Applicability.

(a) The regulations in this section apply to owners and operators of facilities that store or treat dangerous waste in piles.

(b) The regulations in this section do not apply to owners or operators of waste piles that will be closed with wastes left in place. Such waste piles are subject to regulation under WAC 173-303-665 (Landfills).

(c) The owner or operator of any waste pile that is inside or under a structure that provides protection from precipitation so that neither runoff nor leachate is generated is not subject to regulation under subsection (2) of this section, or under WAC 173-303-645, provided that:

(i) Liquids or materials containing free liquids are not placed in the pile;

(ii) The pile is protected from surface water run-on by the structure or in some other manner;

(iii) The pile is designed and operated to control dispersal of the waste by wind, by means other than wetting; and

(iv) The pile will not generate leachate through decomposition or other reactions.

(d) Reserve.

(2) Design and operating requirements.

(a) A waste pile (except for an existing portion of a waste pile) must have:

(i) A liner that is designed, constructed, installed and maintained to prevent any migration of wastes out of the pile into the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to

prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(ii) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the pile and to the leachate expected to be generated; and

(II) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying wastes, waste cover materials, and by any equipment used at the pile; and

(B) Designed and operated to function without clogging through the scheduled closure of the waste pile.

(b) A liner and leachate collection and removal system must be protected from plant growth which could adversely affect any component of the system.

(c) The owner or operator must submit an engineering report with his permit application stating the basis for selecting the liner required in subsection (2)(a)(i) of this section. The statement must be certified by an independent, qualified registered professional engineer.

(d) The owner or operator will be exempted from the requirements of (a), (b), and (c) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents identified under WAC 173-303-645(4) into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(e) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto any portion of the pile during peak discharge from at least a twenty-five-year storm.

(f) The owner or operator must design, construct, operate, and maintain a runoff management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(g) Collection and holding facilities (e.g., tanks or basins) associated with run-on and runoff control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain design capacity of the system.

(h) If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.

(i) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(j) The owner or operator of each new waste pile unit on which construction commences after January 29, 1992, each lateral expansion of a waste pile unit on which construction commences after July 29, 1992, and each replacement of an existing waste pile unit that commences reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing facility."

(i) The liner system must include:

(A) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(C) The liners must comply with (a)(i), (A), (B), and (C) of this subsection.

(ii) The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and post-closure care period. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed twelve inches (30.5 cm). The leachate collection and removal system must comply with (j)(iii) (D) and (E) of this subsection.

(iii) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of dangerous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this paragraph are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of one percent or more;

(B) Constructed of granular drainage materials with a hydraulic conductivity of 1 x 10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3 x 10^{-5} m^2/sec or more:

(C) Constructed of materials that are chemically resistant to the waste managed in the waste pile and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the waste pile;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(k) The department may approve alternative design or operating practices to those specified in (j) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in (c) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(l) Subitem (j) of this subsection does not apply to monofills that are granted a waiver by the department in accordance with WAC 173-303-650 (2)(l).

(m) The owner or operator of any replacement waste pile unit is exempt from (j) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of section 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Action leakage rate.

(a) The department must approve an action leakage rate for waste piles subject to subsection (2)(j) or (k) of this section. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly flow rate from the monitoring data obtained under subsection (5)(c) of this section to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period.

(4) Response actions.

(a) The owner or operator of waste pile units subject to subsection (2)(j) or (k) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

(vi) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the department the results of the analyses specified in (b) of this subsection and in subsections (3), (4), and (5) of this section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b) (C), (D), and (E) of this subsection, the owner or operator must:

(i)(A) Assess the source of liquids and amounts of liquids by source;

(B) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(ii) Document why such assessments are not needed.

(5) Monitoring and inspection.

(a) During construction or installation, liners (except in the case of existing portions of piles exempt from subsection (2)(a) of this section), and cover systems (e.g., membranes, sheets, coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a waste pile is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of run-on and runoff control systems;

(ii) Proper functioning of wind dispersal control systems; and

(iii) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

(c) An owner or operator required to have a leak detection system under subsection (2)(j) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(6) Containment system repairs—Contingency plans.

(a) Whenever there is any indication of a possible failure of the containment system, that system must be inspected in accordance with the provisions of the containment system evaluation and repair plan required by (d) of this subsection. Indications of possible failure of the containment system include liquid detected in the leachate detection system, evidence of leakage or the potential for leakage in the base, erosion of the base, or apparent or potential deterioration of the liner(s) based on observation or test samples of the liner materials.

(b) Whenever there is a positive indication of a failure of the containment system, the waste pile must be removed from service. Indications of positive failure of the containment system include waste detected in the leachate detection system, or a breach (e.g., a hole, tear, crack, or separation) in the base.

(c) If the waste pile must be removed from service as required by (b) of this subsection, the owner or operator must:

(i) Immediately stop adding wastes to the pile;

(ii) Immediately contain any leakage which has occurred or is occurring;

(iii) Immediately cause the leak to be stopped; and

(iv) If the leak cannot be stopped by any other means, remove the waste from the base.

(d) As part of the contingency plan required in WAC 173-303-350, the owner or operator must specify:

(i) A procedure for complying with the requirements of (c) of this subsection; and

(ii) A containment system evaluation and repair plan describing: Testing and monitoring techniques; procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure; a schedule of actions to be taken in the event of a possible failure; and a description of the repair techniques and materials (and their availability) to be used in the event of leakage due to containment system failure or deterioration which does not require the waste pile to be removed from service. For EHW piles, the owner or operator must submit with his permit application a statement signed by an independent, qualified registered professional engineer of the basis on which the evaluation and repair plan has been established.

(e) No waste pile that has been removed from service pursuant to (b) of this subsection, may be restored to service unless:

(i) The containment system has been repaired; and

(ii) The containment system has been certified by a qualified engineer as meeting the design specifications approved in the permit.

(f) A waste pile that has been removed from service pursuant to (b) of this subsection, and will not be repaired, must be closed in accordance with subsection (9) of this section.

(7) Special requirements for ignitable or reactive waste. Ignitable or reactive waste must not be placed in a waste pile, unless the waste and waste pile satisfy all applicable requirements of WAC 173-303-140 (2)(a), and:

(a) Addition of the waste to an existing pile results in the waste or mixture no longer meeting the definition of ignitable or reactive waste under WAC 173-303-090, and complies with WAC 173-303-395 (1)(b); or

(b)(i) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; and

(ii) The generator complies with WAC 173-303-395 (1)(d).

(8) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials must not be placed in the same pile, unless WAC 173-303-395 (1)(b) is complied with.

(b) A pile of dangerous waste that is incompatible with any waste or other material stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device. Piles of incompatible wastes must not be served by the same containment system.

(c) Dangerous waste must not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with WAC 173-303-395 (1)(b).

(9) Closure and post-closure care.

(a) At closure, the owner or operator must remove or decontaminate all dangerous waste, waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them in accordance with this chapter.

(b) If, after removing or decontaminating all residues and making all reasonable efforts regarding removal or decontamination of contaminated components, subsoils, structures, and equipment as required in (a) of this subsection, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated (except that no EHW may ever be left in place), he must close the facility and perform post-closure care in accordance with

the closure and post-closure care requirements that apply to landfills, WAC 173-303-665(6).

(c)(i) The owner or operator of a waste pile that does not comply with the liner requirements of subsection (2)(a)(i) of this section, and is not exempt from them in accordance with subsection (1)(c) or (2)(d) of this section, must:

(A) Include in the closure plan for the pile under WAC 173-303-610(3) both a plan for complying with (a) of this subsection, and a contingent plan for complying with (b) of this subsection, in case not all contaminated subsoils can be practicably removed at closure; and

(B) Prepare a contingent post-closure plan under WAC 173-303-610(8) for complying with (b) of this subsection, in case not all contaminated subsoils can be practicably removed at closure.

(ii) The cost estimates calculated under WAC 173-303-620 (3) and (5) for closure and post-closure care of a pile must include the cost of complying with the contingent closure plan and the contingent post-closure plan but are not required to include the cost of expected closure under (a) of this subsection.

(10) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) Dangerous wastes F020, F021, F022, F023, F026, and F027 must not be placed in waste piles that are not enclosed (as defined in subsection (1)(c) of this section) unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this chapter. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary in order to reduce the possibility of migration of these wastes to ground water, to surface water, or air so as to protect human health and the environment.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-660, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-660, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-660, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-660, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-660, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-660, filed 2/10/82.]

WAC 173-303-665 Landfills. (1) Applicability. The regulations in this section apply to owners and operators of facilities that dispose of dangerous waste in landfills, except as WAC 173-303-600 provides otherwise. No landfill will be permitted to dispose of EHW, except for the Hanford facility under WAC 173-303-700.

(2) Design and operating requirements.

(a) Any landfill that is not covered by (h) of this subsection must have a liner system for all portions of the landfill (except for an existing portion of a landfill). The liner system must have:

(i) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or ground water or surface water at anytime during the active life (including the closure period) of the landfill. The liner must be constructed of materials that prevent wastes from passing into the liner during the active life of the facility. The owner or operator must submit an engineering report with his permit application under WAC 173-303-806(4) stating the basis for selecting the liner(s). The report must be certified by a licensed professional engineer. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(ii) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

(II) Of sufficient strength and thickness to prevent failure under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

(B) Designed and operated to function without clogging through the scheduled closure of the landfill.

(b) The owner or operator will be exempted from the requirements of (a) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternative design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the landfill and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a twenty-five-year storm.

(d) The owner or operator must design, construct, operate, and maintain a runoff management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(e) Collection and holding facilities (e.g., tanks or basins) associated with run-on and runoff control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain design capacity of the system.

(f) If the landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the landfill to control wind dispersal.

(g) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(h) The owner or operator of each new landfill unit on which construction commences after January 29, 1992, each lateral expansion of a landfill unit on which construction commences after July 29, 1992, and each replacement of an existing landfill unit that commences reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in WAC 173-303-040 under "existing facility."

(i) The liner system must:

(A) Include a top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into such liner during the active life and post-closure care period; and

(B) Include a composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of dangerous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of dangerous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(C) The liners must comply with (a)(i)(A), (B), and (C) of this subsection.

(ii) The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and post-closure care period. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed twelve inches (30.5 cm). The leachate collection and removal system must comply with (h)(iii) and (iv) of this subsection.

(iii) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of dangerous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this subsection are satisfied by installation of a system that is, at a minimum:

(A) Constructed with a bottom slope of one percent or more;

(B) Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more;

(C) Constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the landfill;

(D) Designed and operated to minimize clogging during the active life and post-closure care period; and

(E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

(iv) The owner or operator will collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

(v) The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of ground water.

(j) The department may approve alternative design or operating practices to those specified in (h) of this subsection if the owner or operator demonstrates to the department that such design and operating practices, together with location characteristics:

(i) Will prevent the migration of any dangerous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in (c) of this subsection; and

(ii) Will allow detection of leaks of dangerous constituents through the top liner at least as effectively.

(k) The double liner requirement set forth in (h) of this subsection may be waived by the department for any monofill, if:

(i) The monofill contains only dangerous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes dangerous for reasons other than the toxicity characteristic in WAC 173-303-090(8), with dangerous waste numbers D004 through D017 or the toxicity criteria at WAC 173-303-100(5); and

(ii)(A) The monofill has at least one liner for which there is no evidence that such liner is leaking;

(B) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in 40 CFR section 144.3); and

(C) The monofill is in compliance with generally applicable ground water monitoring requirements for facilities with permits under RCRA 3005(c); or

(D) The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any dangerous constituent into ground water or surface water at any future time.

(l) The owner or operator of any replacement landfill unit is exempt from (h) of this subsection if:

(i) The existing unit was constructed in compliance with the design standards of section 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(ii) There is no reason to believe that the liner is not functioning as designed.

(3) Reserve.

(4) Monitoring and inspection.

(a) During construction or installation, liners (except in the case of existing portions of landfills exempt from subsection (2)(a) of this section), and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a landfill is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of run-on and runoff control systems;

(ii) Proper functioning of wind dispersal control systems; and

(iii) The presence of leachate in and proper functioning of leachate collection and removal systems.

(c)(i) An owner or operator required to have a leak detection system under subsection (2)(h) or (j) of this section must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

(ii) After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semiannually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semiannual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

(iii) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the department based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

(5) Surveying and recordkeeping. The owner or operator of a landfill must maintain the following items in the operating record required under WAC 173-303-380:

(a) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and

(b) The contents of each cell and the approximate location of each dangerous waste type within each cell.

(6) Closure and post-closure care.

(a) At final closure of the landfill or upon closure of any cell, the owner or operator must cover the landfill or cell with a final cover designed and constructed to:

(i) Provide long-term minimization of migration of liquids through the closed landfill;

(ii) Function with minimum maintenance;

(iii) Promote drainage and minimize erosion or abrasion of the cover;

(iv) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(v) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) After final closure, the owner or operator must comply with all post-closure requirements contained in WAC 173-303-610 (7), (8), (9), and (10) including maintenance and monitoring throughout the post-closure care period. The owner or operator must:

(i) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(ii) Maintain and monitor the leak detection system in accordance with subsections (2)(h) and (4)(c) of this section, where such a system is present between double liner systems;

(iii) Continue to operate the leachate collection and removal system until leachate is no longer detected;

(iv) Maintain and monitor the ground water monitoring system and comply with all other applicable requirements of WAC 173-303-645;

(v) Prevent run-on and runoff from eroding or otherwise damaging the final cover; and

(vi) Protect and maintain surveyed benchmarks used in complying with subsection (5) of this section.

(c) Reserve.

(7) Special requirements for incompatible wastes. Incompatible wastes, or incompatible wastes and materials must not be placed in the same landfill cell, unless WAC 173-303-395 (1)(b) is complied with.

(8) Action leakage rate.

(a) The department must approve an action leakage rate for surface impoundment units subject to subsection (2)(h) or (j) of this section. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding l foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage mate-

rial), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

(b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under subsection (2)(h) of this section, to an average daily flow rate (gallons per acre per day) for each sump. Unless the department approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period, and monthly during the post-closure care period when monthly monitoring is required under subsection (9) of this section.

(9) Response actions.

(a) The owner or operator of landfill units subject to subsection (2)(h) or (j) of this section must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in (b) of this subsection.

(b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

(i) Notify the department in writing of the exceedance within seven days of the determination;

(ii) Submit a preliminary written assessment to the department within fourteen days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

(iii) Determine to the extent practicable the location, size, and cause of any leak;

(iv) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

(v) Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

(vi) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the department the results of the analyses specified in (b)(iii), (iv), and (v) of this subsection, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the department a report summarizing the results of any remedial actions taken and actions planned.

(c) To make the leak and/or remediation determinations in (b)(iii), (iv), and (v) of this subsection, the owner or operator must:

(i) Assess the source of liquids and amounts of liquids by source;

(ii) Conduct a fingerprint, dangerous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

(iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(iv) Document why such assessments are not needed.

(10) Special requirements for ignitable or reactive waste.

(a) Except as provided in subsection (8)(b) of this section, and in WAC 173-303-161, ignitable or reactive waste must not be placed in a landfill, unless the waste and landfill meet all applicable requirements for owners and operators of dangerous waste treatment, storage and disposal facilities contained in this chapter, and:

(i) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090 (5) or (7); and

(ii) WAC 173-303-395(1) is complied with.

(b) Except for prohibited wastes which remain subject to treatment standards in WAC 173-303-140 (2)(a), ignitable wastes in containers may be landfilled without meeting the requirements of (a) of this subsection, provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes must be disposed of in nonleaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; must be covered daily with soil or other noncombustible material to minimize the potential for ignition of the wastes; and must not be disposed of in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the waste.

(11) Special requirements for hazardous wastes F020, F021, F022, F023, F026, and F027.

(a) Hazardous wastes F020, F021, F022, F023, F026, and F027 must not be placed in landfills unless the owner or operator operates the landfill in accord with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this section. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through the soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring requirements.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary for landfills managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

(12) Special requirements for containers. Unless they are very small, such as an ampule, containers must be either:

(a) At least ninety percent full when placed in the landfill; or

(b) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-665, filed 1/12/98, effective 2/12/98; 95-22-008

(Order 94-30), § 173-303-665, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-665, filed 1/5/88, effective 2/5/88; 86-12-057 (Order DE-85-10), § 173-303-665, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-665, filed 4/18/84.]

WAC 173-303-670 Incinerators. (1) Applicability.

(a) Except as WAC 173-303-600 provides otherwise, the regulations in this section apply to owners and operators of facilities that incinerate dangerous waste and to owners and operators who burn dangerous waste in boilers or industrial furnaces in order to destroy them, or who burn dangerous waste in boilers or in industrial furnaces for any recycling purpose and elect to be regulated under this section.

(b) *Integration of the MACT standards*. 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). Note that if you are subject to Part 63 you must get an air permit from ecology or the local air authority.

(i) Except as provided by (b)(ii), (iii), and (iv) of this subsection, the standards of this section no longer apply when an owner or operator demonstrates compliance with the maximum achievable control technology (MACT) requirements of 40 CFR part 63, subpart EEE, by conducting a comprehensive performance test and submitting to the department a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with the requirements of part 63, subpart EEE. Nevertheless, even after this demonstration of compliance with the MACT standards, dangerous waste permit conditions that were based on the standards of this section will continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.

(ii) The MACT standards do not replace the closure requirements of WAC 173-303-610 or the applicable requirements of WAC 173-303-280 through 173-303-395, 173-303-645, 173-303-610, 173-303-620, 173-303-691, 173-303-692, and 173-303-902.

(iii) The particulate matter standard of subsection (4)(c)(ii) of this section remains in effect for incinerators that elect to comply with the alternative to the particulate matter standard of 40 CFR 63.1206 (b)(14).

(iv) The following requirements remain in effect for startup, shutdown, and malfunction events if you elect to comply with 40 CFR 270.235 (a)(1)(i), which is incorporated by reference, to minimize emissions of toxic compounds from these events:

(A) Subsection (6)(a) of this section requiring that an incinerator operate in accordance with operating requirements specified in the permit; and

(B) Subsection (6)(c) of this section requiring compliance with the emission standards and operating requirements during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes.

(c) The department may, in establishing permit conditions, exempt the facility from all requirements of this section except subsection (2) of this section, waste analysis, and subsection (8) of this section, closure, if the department finds, after an examination of the waste analysis included with Part B of the owner/operator's permit application, that the waste to be burned:

(i)(A) Is either listed as a dangerous waste in WAC 173-303-080 only because it is ignitable or, that the waste is designated only as an ignitable dangerous waste under WAC 173-303-090; or

(B) Is either listed in WAC 173-303-080 or is designated under WAC 173-303-090 solely because it is reactive for the characteristics described in WAC 173-303-090 (7)(a)(i), (ii), (iii), (vi), (vii) and (viii), and will not be burned when other dangerous wastes are present in the combustion zone; and

(ii) Contains none of the dangerous constituents listed in WAC 173-303-9905 above significant concentration limits; and

(iii) Is not designated by the dangerous waste criteria of WAC 173-303-100.

(d) The owner or operator of an incinerator may conduct trial burns, subject only to the requirements of WAC 173-303-807, trial burn permits.

(2) Waste analysis.

(a) As a portion of a trial burn plan required by WAC 173-303-807, or with Part B of his permit application, the owner or operator must have included an analysis of his waste feed sufficient to provide all information required by WAC 173-303-807 or 173-303-806 (3) and (4).

(b) Throughout normal operation the owner or operator must conduct sufficient waste analysis to verify that waste feed to the incinerator is within the physical and chemical composition limits specified in his permit (under subsection (6)(b) of this section).

(3) Designation of principal organic dangerous constituents and dangerous combustion by-products. Principal organic dangerous constituents (PODCs) and dangerous combustion by-products must be treated to the extent required by the performance standards specified in subsection (4) of this section. For each waste feed to be burned, one or more PODCs and dangerous combustion by-products will be specified in the facility's permit from among those constituents listed in WAC 173-303-9905 and, to the extent practical, from among those constituents which contribute to the toxicity, persistence, or carcinogenicity of wastes designated under WAC 173-303-100. This specification will be based on the degree of difficulty of incineration of the organic constituents of the waste feed and its combustion by-products and their concentration or mass, considering the results of waste analyses and trial burns or alternative data submitted with Part B of the facility's permit application. Organic constituents or by-products which represent the greatest degree of difficulty of incineration will be those most likely to be designated as PODCs and dangerous combustion by-products. Constituents are more likely to be designated as PODCs or dangerous combustion by-products if they are present in large quantities or concentrations. Trial PODCs will be designated for performance of trial burns in accordance with the procedure specified in WAC 173-303-807 for obtaining trial burn permits. Trial dangerous combustion by-products may be designated under the same procedures.

(4) Performance standards. An incinerator burning dangerous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under subsection (6) of this section, it will meet the following performance standards:

(a)(i) Except as provided in (a)(ii) of this subsection, an incinerator burning dangerous waste must achieve a destruction and removal efficiency (DRE) of 99.99 percent for each

PODC designated (under subsection (3) of this section) in its permit for each waste feed. DRE is determined for each PODC from the following equation:

$$DRE = \frac{(W_{in} - W_{out}) \times 100\%}{W_{in}}$$

Where:

W_{in} = Mass feed rate of one PODC in the waste stream feeding the incinerator, and

W_{out} = Mass emission rate of the same PODC present in exhaust emissions prior to release to the atmosphere.

(ii) An incinerator burning dangerous wastes F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic dangerous constituent (PODCs) designated (under subsection (3) of this section) in its permit. This performance must be demonstrated on PODCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each PODCs from the equation in subsection (4)(a)(i) of this section. In addition, the owner or operator of the incinerator must notify the department of his intent to incinerate dangerous wastes F020, F021, F022, F023, F026, or F027.

(b) Incinerators burning dangerous waste must destroy dangerous combustion by-products designated under subsection (3) of this section so that the total mass emission rate of these by-products emitted from the stack is no more than .01 percent of the total mass feed rate of PODCs fed into the incinerator.

(c)(i) An incinerator burning dangerous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or one percent of the HCl in the stack gas prior to entering any pollution control equipment.

(ii) An incinerator burning dangerous waste must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the formula:

$$Pc = \frac{Pm \times 14}{21-Y}$$

Where Pc is the corrected concentration of particulate matter, Pm is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in 40 CFR Part 60, Appendix A (Method 3). This correction procedure is to be used by all dangerous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the department will select an appropriate correction procedure to be specified in the facility permit.

(d) The emission standards specified in (c) of this subsection must be met when no other more stringent standards exist. Where a state or local air pollution control authority has jurisdiction and has more stringent emission standards, an incinerator burning dangerous wastes must comply with the applicable air pollution control authority's emission standards (including limits based on best available control technology).

(e) For purposes of permit enforcement, compliance with the operating requirements specified in the permit (under subsection (6) of this section), will be regarded as compliance with subsection (4) of this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of subsection (4) of this section, may be evidence justifying modification, revocation, or reissuance of a permit under WAC 173-303-830.

(5) Trial burns and permit modifications.

(a) The owner or operator of a dangerous waste incinerator may burn only wastes specified in his permit and only under operating conditions specified for those wastes under subsection (6) of this section, except:

(i) In approved trial burns under WAC 173-303-807; or

(ii) Under exemptions created by WAC 173-303-670(1).

(b) New dangerous wastes may be burned only after operating conditions have been specified in a trial burn permit or a permit modification has been issued, as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with Part B of a permit application under WAC 173-303-806(4).

(c) The permit for a new dangerous waste incinerator must establish appropriate conditions for each of the applicable requirements of this section, including but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of subsection (6) of this section, sufficient to comply with the following standards:

(i) For the period beginning with initial introduction of dangerous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish operating conditions required in (c)(ii) of this subsection, not to exceed a duration of seven hundred twenty hours operating time for treatment of dangerous waste. The operating requirements must be those most likely to ensure compliance with the performance standards of subsection (4) of this section, based on the department's engineering judgment. The department may extend the duration of this period once for up to seven hundred twenty additional hours when good cause for the extension is demonstrated by the applicant;

(ii) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the performance standards of subsection (4) of this section, and must be in accordance with the approved trial burn plan;

(iii) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the department, the operating requirements must be those most likely to ensure compliance with the performance standards of subsection (4) of this section, based on the department's engineering judgment;

(iv) For the remaining duration of the permit, the operating requirements must be those demonstrated, in a trial burn or by alternative data specified in WAC 173-303-806 (4)(f)

(iii)(G), as sufficient to ensure compliance with the performance standards of subsection (4) of this section.

(6) Operating requirements.

(a) An incinerator must be operated in accordance with operating requirements specified in the permit. These will be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in subsection (5)(b) of this section and included with Part B of a facility's permit application) to be sufficient to comply with the performance standards of subsection (4) of this section.

(b) Each set of operating requirements will specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed which will not affect compliance with the performance requirement of subsection (4) of this section) to which the operating requirements apply. For each such waste feed, the permit will specify acceptable operating limits including the following conditions:

(i) Carbon monoxide (CO) level in the stack exhaust gas;

(ii) Waste feed rate;

(iii) Combustion temperature;

(iv) An appropriate indicator of combustion gas velocity;

(v) Allowable variations in incinerator system design or operating procedures; and

(vi) Such other operating requirements as are necessary to ensure that the performance standards of subsection (4) of this section are met.

(c) During startup and shutdown of an incinerator, dangerous waste (except waste exempted in accordance with subsection (1)(b) of this section) must not be fed into the incinerator unless the incinerator is operating within the conditions of operation (temperature, air feed rate, etc.) specified in the permit.

(d) Fugitive emissions from the combustion zone must be controlled by:

(i) Keeping the combustion zone totally sealed against fugitive emissions;

(ii) Maintaining a combustion zone pressure lower than atmospheric pressure; or

(iii) An alternate means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(e) An incinerator must be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under (a) of this subsection.

(f) An incinerator must cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

(7) Monitoring and inspections.

(a) The owner or operator must conduct, as a minimum, the following monitoring while incinerating dangerous waste:

(i) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit must be monitored on a continuous basis;

(ii) Carbon monoxide (CO) must be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere; and

(iii) As required by the department, sampling and analysis of the waste and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the performance standards of subsection (4) of this section.

(b) The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be completely inspected at least daily for leaks, spills, fugitive emissions, and signs of tampering. All emergency waste feed cutoff controls and system alarms must be tested at least weekly to verify proper operation, unless the owner or operator demonstrates to the department that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, emergency cutoff and alarm systems must be tested at least monthly.

(c) This monitoring and inspection data must be recorded and the records must be placed in the operating log required by WAC 173-303-380(1).

(8) Closure. At closure the owner or operator must remove all dangerous waste and dangerous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the incinerator site. Remaining equipment, bases, liners, soil, and debris containing or contaminated with dangerous waste or waste residues must be decontaminated or removed.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-670, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-670, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-670, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-670, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-670, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-670, filed 2/10/82.]

WAC 173-303-675 Drip pads. (1) Applicability.

(a) The requirements of this section apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water runoff to an associated collection system. Existing drip pads are those constructed before December 6, 1990, and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads. The requirement in subsection (4)(b)(iii) of this section to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992, except for those constructed after December 24, 1992, for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 24, 1992.

(b) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither runoff nor run-on is generated is not subject to regulation under subsection (4)(e) or (f) of this section, as appropriate.

(c) The requirements of this section are not applicable to the management of infrequent and incidental drippage in storage yards provided that: The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage. At a

minimum, the contingency plan must describe how the owner or operator will do the following:

(i) Clean up the drippage;

(ii) Document the cleanup of the drippage;

(iii) Retain documents regarding cleanup for three years; and

(iv) Manage the contaminated media in a manner consistent with federal regulations.

(2) Assessment of existing drip pad integrity.

(a) For each existing drip pad as defined in subsection (1) of this section, the owner or operator must evaluate the drip pad and determine that it meets all of the requirements of this section, except the requirements for liners and leak detection systems of subsection (4)(b) of this section. No later than the effective date of this rule, the owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all of the standards of subsection (4) of this section are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of subsection (4) of this section, except the standards for liners and leak detection systems, specified in subsection (4)(b) of this section.

(b) The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of subsection (4)(b) of this section, and submit the plan to the department no later than two years before the date that all repairs, upgrades, and modifications are complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of subsection (4) of this section. The plan must be reviewed and certified by an independent qualified registered professional engineer.

(c) Upon completion of all upgrades, repairs, and modifications, the owner or operator must submit to the department, the as-built drawings for the drip pad together with a certification by an independent qualified registered professional engineer attesting that the drip pad conforms to the drawings.

(d) If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of subsection (4)(m) of this section or close the drip pad in accordance with subsection (6) of this section.

(3) Design and installation of new drip pads.

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with one of the following:

(a) All of the requirements of subsections (4) of this section (except subsection (4)(a)(iv)), (5) and (6) of this section; or

(b) All of the requirements of subsections (4) of this section (except subsection (4)(b)), (5) and (6) of this section.

(4) Design and operating requirements.

(a) Drip pads must:

(i) Be constructed of nonearthen materials, excluding wood and nonstructurally supported asphalt:

(ii) Be sloped to free-drain treated wood drippage, rain and other waters, or solutions of drippage and water or other wastes to the associated collection system;

(iii) Have a curb or berm around the perimeter;

(iv)(A) Have a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with subsection (3)(a) of this section instead of subsection (3)(b) of this section.

(B) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this subsection, except for (b) of this subsection.

(v) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

Note: The department will generally consider applicable standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) or the American Society of Testing and Materials (ASTM) in judging the structural integrity requirement of this subsection.

(b) If an owner/operator elects to comply with subsection (3)(b) of this section instead of subsection (3)(a) of this section, the drip pad must have:

(i) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or ground water or surface water during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients

above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and

(C) Installed to cover all surrounding earth that could come in contact with the waste or leakage; and

(ii) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and

(II) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad;

(B) Designed and operated to function without clogging through the scheduled closure of the drip pad; and

(C) Designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.

(iii) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.

(c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.

Note: See subsection (4)(m) of this section for remedial action required if deterioration or leakage is detected.

(d) The drip pad and associated collection system must be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent runoff.

(e) Unless protected by a structure, as described in subsection (1)(b) of this section, the owner or operator must design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a twenty-four-hour, twenty-five-year storm, unless the system has sufficient excess capacity to contain any runoff that might enter the system.

(f) Unless protected by a structure or cover as described in subsection (1)(b) of this section, the owner or operator must design, construct, operate and maintain a runoff management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(g) The drip pad must be evaluated to determine that it meets the requirements of (a) through (f) of this subsection and the owner or operator must obtain a statement from an independent, qualified registered professional engineer certifying that the drip pad design meets the requirements of this section.

(h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.

(i) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log. The owner/operator must determine if the residues are dangerous under WAC 173-303-070 and, if so, must manage them under this chapter.

(j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

(k) After being removed from the treatment vessel, treated wood from pressure and nonpressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the drip pad following treatment in accordance with this requirement.

(l) Collection and holding units associated with run-on and runoff control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

(m) Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

(i) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must:

(A) Enter a record of the discovery in the facility operating log;

(B) Immediately remove the portion of the drip pad affected by the condition from service;

(C) Determine what steps must be taken to repair the drip pad and clean up any leakage from below the drip pad, and establish a schedule for accomplishing the repairs;

(D) Within twenty-four hours after discovery of the condition, notify the department of the condition and, within ten working days, provide written notice to the department with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.

(ii) The department will review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete and notify the owner or operator of the determination and the underlying rationale in writing.

(iii) Upon completing all repairs and clean up, the owner or operator must notify the department in writing and provide a certification signed by an independent, qualified registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with (m)(i)(D) of this subsection.

(n) Should a permit be necessary, the department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

(o) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

(5) Inspections.

(a) During construction or installation, liners and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners must be inspected and certified as meeting the requirements of subsection (4) of this section by an independent qualified, registered professional engineer. This certification must be maintained at the facility as part of the facility operating record. After installation, liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

(b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions or improper operation of run-on and runoff control systems;

(ii) The presence of leakage in and proper functioning of leak detection system;

(iii) Deterioration or cracking of the drip pad surface.

Note: See subsection (4)(m) of this section for remedial action required if deterioration or leakage is detected.

(6) Closure.

(a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in (a) of this subsection, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with closure and post-closure care requirements that apply to landfills (WAC 173-303-665(6)). For permitted units, the requirement to have a permit continues throughout the post-closure period. In addition, for the purpose of closure, post-closure, and financial responsibility, such a drip pad is then considered to be landfill, and the owner or operator must meet all of the requirements for landfills specified in WAC 173-303-610 and 173-303-620.

(c)(i) The owner or operator of an existing drip pad, as defined in subsection (1) of this section, that does not comply with the liner requirements of subsection (4)(b)(i) of this section must:

(A) Include in the closure plan for the drip pad under WAC 173-303-610(3), both a plan for complying with (a) of this subsection and a contingent plan for complying with (b) of this subsection in case not all contaminated subsoils can be practicably removed at closure; and

(B) Prepare a contingent post-closure plan under WAC 173-303-610(8) for complying with (b) of this subsection in case not all contaminated subsoils can be practicably removed at closure.

(ii) The cost estimates calculated under WAC 173-303-610 and 173-303-620 for closure and post-closure care of a drip pad subject to this subsection must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under (a) of this subsection.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-675, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-675, filed 10/19/95, effective 11/19/95.]

WAC 173-303-680 Miscellaneous units. (1) Applicability. The requirements of this section apply to owners and operators of facilities that treat, store, or dispose of dangerous waste in miscellaneous units, except as WAC 173-303-600 provides otherwise.

(2) Environmental performance standards. A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as necessary to protect human health and the environment, including, but not limited to, as appropriate, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of dangerous waste or dangerous constituents from the unit. Permit terms and provisions must include those requirements in WAC 173-303-630 through 173-303-670, 40 CFR Subparts AA through CC, which are incorporated by reference at WAC 173-303-690 through 173-303-692, WAC 173-303-800 through 173-303-806, part 63 subpart EEE (which is incorporated by reference at WAC 173-400-075 (5)(a)), and 40 CFR Part 146 that are appropriate for the miscellaneous units being permitted. Protection of human health and the environment includes, but is not limited to:

(a) Prevention of any releases that may have adverse effects on human health or the environment due to migration of wastes constituents in the ground water or subsurface environment, considering:

(i) The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;

(ii) The hydrologic and geologic characteristics of the unit and the surrounding area;

(iii) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water;

(iv) The quantity and direction of ground water flow;

(v) The proximity to and withdrawal rates of current and potential ground water users;

(vi) The patterns of land use in the region;

(vii) The potential for deposition or migration of waste constituents into subsurface physical structures, and into the root zone of food-chain crops and other vegetation;

(viii) The potential for health risks caused by human exposure to waste constituents; and

(ix) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(b) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, or wetlands or on the soil surface considering:

(i) The volume and physical and chemical characteristics of the waste in the unit;

(ii) The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

(iii) The hydrologic characteristics of the unit and the surrounding area, including the topography of the land around the unit;

(iv) The patterns of precipitation in the region;

(v) The quantity, quality, and direction of ground water flow;

(vi) The proximity of the unit to surface waters;

(vii) The current and potential uses of nearby surface waters and any water quality standards established for those surface waters;

(viii) The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;

(ix) The patterns of land use in the region;

(x) The potential for health risks caused by human exposure to waste constituents; and

(xi) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(c) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering:

(i) The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols and particulates;

(ii) The effectiveness and reliability of systems and structures to reduce or prevent emissions of dangerous constituents to the air;

(iii) The operating characteristics of the unit;

(iv) The atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area;

(v) The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

(vi) The potential for health risks caused by human exposure to waste constituents; and

(vii) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(3) Monitoring, analysis, inspection, response, reporting, and corrective action. Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies must ensure compliance with subsection (2) of this section, WAC 173-303-320, 173-303-340(1), 173-303-390, and 173-303-64620 as well as meet any additional requirements needed to protect human health and the environment as specified in the permit.

(4) Post-closure care. A miscellaneous unit that is a disposal unit must be maintained in a manner that complied with subsection (2) of this section during the post-closure care period. In addition, if a treatment or storage unit has contaminated soils or ground water that cannot be completely removed or decontaminated during closure, then that unit must also meet the requirements of subsection (2) of this section during post-closure care. The post-closure plan under WAC 173-303-610(8) must specify the procedures that will be used to satisfy this requirement.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-680, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-680, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-680, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-680, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-680, filed 3/7/91, effective 4/7/91.]

WAC 173-303-690 Air emission standards for process vents. (1) Applicability.

(a) The regulations in this section apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes.

(b) Except for 40 CFR 264.1034(d) and (e), this section applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in one of the following:

(i) A unit that is subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(ii) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of WAC 173-303-200(1) (i.e., a hazardous waste recycling unit that is not a ninety-day tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(iii) A unit that is exempt from permitting under the provisions of WAC 173-303-200(1) (i.e., a "ninety-day" tank or container) and is not a recycling unit under the provisions of WAC 173-303-120.

(c) For the owner and operator of a facility subject to this section and who received a final hazardous waste permit prior to December 6, 1996, the requirements of this section must be incorporated into the permit when the permit is reissued in accordance with the requirements of WAC 173-303-840(8) or reviewed in accordance with the requirements of WAC 173-303-806(11). Until such date when the owner and operator receives a final permit incorporating the requirements of this section, the owner and operator is subject to the requirements of 40 CFR 265 Subpart AA.

Note: The requirements of 40 CFR Parts 264.1032 through 264.1036 apply to process vents on hazardous waste recycling units previously exempt under WAC 173-303-120 (4)(d). Other exemptions under WAC 173-303-071 and 173-303-600(2) are not affected by these requirements.

(d) The requirements of this section do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to this section are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR Part 60, Part 61, or Part 63. The documentation of compliance under regulations at 40 CFR Part 60,

Part 61, or Part 63 must be kept with, or made readily available with, the facility operating record.

(2) 40 CFR 264.1031 through 1036 (Subpart AA) is incorporated by reference.

Note: Where the incorporated language refers to 264.1030, refer to subsection (1) of this section. Where the incorporated language refers to Part 270, refer to WAC 173-303-800 through 173-303-840.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-690, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-690, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-690, filed 10/19/95, effective 11/19/95.]

WAC 173-303-691 Air emission standards for equipment leaks. (1) Applicability.

(a) The regulations in this section apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes.

(b) Except as provided in 40 CFR 264.1064(k), this section applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following:

(i) A unit that is subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(ii) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of WAC 173-303-200(1) (i.e., a hazardous waste recycling unit that is not a "ninety-day" tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of WAC 173-303-800 through 173-303-840; or

(iii) A unit that is exempt from permitting under the provisions of WAC 173-303-200(1) (i.e., a "ninety-day" tank or container) and is not a recycling unit under the provisions of WAC 173-303-120.

(c) For the owner or operator of a facility subject to the requirements of 40 CFR 264.1052 through 264.1065 and who received a final permit under section 3005 of RCRA prior to December 6, 1996, the requirements of 40 CFR 264.1052 through 264.1065 must be incorporated into the permit when the permit is reissued under WAC 173-303-840(8) or reviewed under WAC 173-303-806(11). Until such date when the owner or operator receives a final permit incorporating the requirements of 40 CFR 264.1052 through 264.-1065, the owner or operator is subject to the requirements of 40 CFR 265, Subpart BB, which is incorporated by reference at WAC 173-303-400 (3)(a).

(d) Each piece of equipment to which this section applies must be marked in such a manner that it can be distinguished readily from other pieces of equipment.

(e) Equipment that is in vacuum service is excluded from the requirements of 40 CFR 264.1052 to 264.1060 if it is identified as required in 40 CFR 264.1064 (g)(5).

(f) Equipment that contains or contacts hazardous waste with an organic concentration of at least ten percent by weight for less than three hundred hours per calendar year is excluded from the requirements of 40 CFR Parts 264.1052 through 264.1060 if it is identified, as required in 40 CFR Part 264.1064 (g)(6).

Note: The requirements of 40 CFR Parts 264.1052 through 264.1065 apply to equipment associated with hazardous waste recycling units previously exempt under WAC 173-303-120 (4)(d). Other exemptions under WAC 173-303-071 and 173-303-600(2) are not affected by these requirements.

(2) 40 CFR 264.1051 through 1065 (Subpart BB) is incorporated by reference.

Note: Where the incorporated language refers to 264.1050, refer to WAC 173-303-691. Where the incorporated language refers to Part 270, refer to WAC 173-303-800 through 173-303-840.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-691, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-691, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-691, filed 10/19/95, effective 11/19/95.]

WAC 173-303-692 Air emission standards for tanks, surface impoundments, and containers. (1) **Applicability.**

(a) The requirements of 40 CFR Part 264 Subpart CC apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to either WAC 173-303-630, 173-303-640, or 173-303-650 except as WAC 173-303-600 and (b) of this subsection provide otherwise.

(b) The requirements of 40 CFR Part 264 Subpart CC do not apply to the following waste management units at the facility:

(i) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.

(ii) A container that has a design capacity less than or equal to 0.1 m^3.

(iii) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

(iv) A surface impoundment in which an owner or operator has stopped adding hazardous waste (except to implement an approved closure plan) and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

(v) A waste management unit that is used solely for onsite treatment or storage of hazardous waste that is placed in the unit as a result of implementing remedial activities required under the corrective action authorities of WAC 173-303-646, or RCRA section 3008(h), or CERCLA authorities.

(vi) A waste management unit that is used solely for the management of radioactive mixed waste in accordance with all applicable regulations under the authority of the Atomic Energy Act and the Nuclear Waste Policy Act.

(vii) A hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR Parts 60, 61, or 63. For the purpose of complying with this paragraph, a tank for which the air emission control includes an enclosure, as opposed to a cover, must be in compliance with the enclosure and control device requirements of 40 CFR Part 264.1084(i), except as provided in 40 CFR Part 264.1082 (c)(5).

(viii) A tank that has a process vent as defined in 40 CFR Part 264.1031.

(c) For the owner and operator of a facility subject to this section who received a final permit under the Hazardous Waste Management Act prior to December 6, 1996, the requirements of 40 CFR Part 264 Subpart CC will be incorporated into the permit when the permit is reissued in accordance with the requirements of WAC 173-303-840(8) or reviewed in accordance with the requirements of WAC 173-303-806 (11)(d). Until such date when the permit is reissued in accordance with the requirements of WAC 173-303-840(8) or reviewed in accordance with the requirements of WAC 173-303-806 (11)(d), the owner and operator is subject to the requirements of 40 CFR Part 265 Subpart CC, which is incorporated by reference at WAC 173-303-400 (3)(a).

(d) The requirements of 40 CFR Part 264 Subpart CC, except for the recordkeeping requirements specified in 40 CFR Part 264.1089(i), are administratively stayed for a tank or a container used for the management of hazardous waste generated by organic peroxide manufacturing and its associated laboratory operations when the owner or operator of the unit meets all of the following conditions:

(i) The owner or operator identifies that the tank or container receives hazardous waste generated by an organic peroxide manufacturing process producing more than one functional family of organic peroxides or multiple organic peroxides within one functional family, that one or more of these organic peroxides could potentially undergo self-accelerating thermal decomposition at or below ambient temperatures, and that organic peroxides are the predominant products manufactured by the process. For the purpose of meeting the conditions of this paragraph, "organic peroxide" means an organic compound that contains the bivalent —O—O— structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

(ii) The owner or operator prepares documentation, in accordance with the requirements of 40 CFR Part 264.1089(i) explaining why an undue safety hazard would be created if air emission controls specified in 40 CFR Parts 264.1084 through 264.1087 are installed and operated on the tanks and containers used at the facility to manage the hazardous waste generated by the organic peroxide manufacturing process or processes meeting the conditions of (d)(i) of this subsection.

(iii) The owner or operator notifies the department in writing that hazardous waste generated by an organic peroxide manufacturing process or processes meeting the conditions of (d)(i) of this subsection are managed at the facility in tanks or containers meeting the conditions of (d)(ii) of this subsection. The notification must state the name and address of the facility, and must be signed and dated by an authorized representative of the facility owner or operator.

(2) **40 CFR Parts 264.1081 through 264.1091 (Subpart CC) is incorporated by reference.**

Note: Where the incorporated language refers to 264.1080, refer to WAC 173-303-692. Where the incorporated language refers to Part 270, refer to WAC 173-303-800 through 173-303-840.

(3) **References within 40 CFR Part 264 Subpart CC to the following parts are incorporated by reference:** 40 CFR Parts 60, 61, and 63. This includes Method 25E - Determination of Vapor Phase Organic Concentration in Waste Samples at 40 CFR Part 60 Appendix A.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-692, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-692, filed 5/10/00, effective 6/10/00.]

WAC 173-303-693 Dangerous waste munitions and explosives storage. (1) **Applicability.** The requirements of this section apply to owners or operators who store munitions and explosive dangerous wastes, except as WAC 173-303-600(3) provides otherwise. (NOTE: Depending on explosive hazards, dangerous waste munitions and explosives may also be managed in other types of storage units, including containment buildings (WAC 173-303-695), tanks (WAC 173-303-640), or containers (WAC 173-303-630). See WAC 173-303-578(4) for storage of waste military munitions.)

(2) **Design and operating standards.**

(a) Dangerous waste munitions and explosives storage units must be designed and operated with containment systems, controls, and monitoring, that:

(i) Minimize the potential for detonation or other means of release of dangerous waste, dangerous constituents, dangerous decomposition products, or contaminated runoff, to the soil, ground water, surface water, and atmosphere;

(ii) Provide a primary barrier, which may be a container (including a shell) or tank, designed to contain the dangerous waste;

(iii) For wastes stored outdoors, provide that the waste and containers will not be in standing precipitation;

(iv) For liquid wastes, provide a secondary containment system that assures that any released liquids are contained and promptly detected and removed from the waste area, or vapor detection system that assures that any released liquids or vapors are promptly detected and an appropriate response taken (for example, additional containment, such as overpacking, or removal from the waste area); and

(v) Provide monitoring and inspection procedures that assure the controls and containment systems are working as designed and that releases that may adversely impact human health or the environment are not escaping from the unit.

(b) Dangerous waste munitions and explosives stored in accordance with this section may be stored in one of the following:

(i) Earth-covered magazines. Earth-covered magazines must be:

(A) Constructed of waterproofed, reinforced concrete or structural steel arches, with steel doors that are kept closed when not being accessed;

(B) Designed and constructed:

(I) To be of sufficient strength and thickness to support the weight of any explosives or munitions stored and any equipment used in the unit;

(II) To provide working space for personnel and equipment in the unit; and

(III) To withstand movement activities that occur in the unit; and

(C) Located and designed, with walls and earthen covers that direct an explosion in the unit in a safe direction, so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.

(ii) Above-ground magazines. Above-ground magazines must be located and designed so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.

(iii) Outdoor or open storage areas. Outdoor or open storage areas must be located and designed so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.

(c) Dangerous waste munitions and explosives must be stored in accordance with a standard operating procedure specifying procedures to ensure safety, security, and environmental protection. If these procedures serve the same purpose as the security and inspection requirements of WAC 173-303-310, the preparedness and prevention procedures of WAC 173-303-340, and the contingency plan and emergency procedures requirements of WAC 173-303-350, then these procedures will be used to fulfill those requirements.

(d) Dangerous waste munitions and explosives must be packaged to ensure safety in handling and storage.

(e) Dangerous waste munitions and explosives must be inventoried at least annually.

(f) Dangerous waste munitions and explosives and their storage units must be inspected and monitored as necessary to ensure explosives safety and to ensure that there is no migration of contaminants out of the unit.

(3) **Closure and post-closure care.**

(a) At closure of a magazine or unit that stored dangerous waste in accordance with this section, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components, contaminated subsoils, and structures and equipment contaminated with waste, and manage them as dangerous waste. The closure plan, closure activities, cost estimates for closure, and financial responsibility for magazines or units must meet all of the requirements specified in WAC 173-303-610 and 173-303-620, except that the owner or operator may defer closure of the unit as long as it remains in service as a munitions or explosives magazine or storage unit.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in (a) of this subsection, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he or she must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (WAC 173-303-665(6)).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-693, filed 5/10/00, effective 6/10/00.]

WAC 173-303-695 Containment buildings. The requirements for containment buildings at 40 CFR Part 264 Subpart DD are incorporated by reference. The words "regional administrator" will mean "department."

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-695, filed 10/19/95, effective 11/19/95.]

WAC 173-303-700 Requirements for the Washington state extremely hazardous waste management facility at Hanford. (1) Purpose and applicability. The purpose of this section is to set forth the requirements for the Washington EHW management (EHWM) facility located at Hanford, Washington. It is the only facility within the state that is allowed under law to dispose of EHW (RCW 70.105.050).

(2) Waste acceptance at Hanford.

(a) The state operator will accept EHW for treatment, storage, or disposal when:

(i) The waste has been specified in the state operator's permit as not requiring prior approval from the department and the state operator sends a copy of each written request for disposal of waste at the EHWM facility to the department, not later than one week after receiving the request; or

(ii) If the waste has not been specified in the state operator's permit, then the department provides written approval that the waste may be accepted at the EHWM facility. Notices of approval or disapproval will be provided as soon as possible, but not later than 15 days, after the state operator has notified the department. Written approval from the department is not required in emergencies, as specified; and

(iii) The generator has obtained prior written approval for waste acceptance from the state operator;

(iv) The waste is accompanied by a manifest specified in the generator requirements of WAC 173-303-180, Manifest; and

(v) Waste containers meet the labeling and container condition requirements of WAC 173-303-190.

(b) The state operator may accept DW, as defined in this regulation, for storage, treatment, or disposal when:

(i) All the conditions of EHW acceptance, (a) of this subsection, are met;

(ii) The generator and/or operator shows that no other permitted TSD facility in the state will handle such DW. The generator and/or operator must refer to:

(A) County or municipal ordinances or solid waste permits forbidding DW disposal at nearby sites;

(B) The EHWM site being the shortest economical haul distance where other remotely located, DW sites may be available; and

(C) Specific rejection or disapproval, in writing, by nearby DW site operators, public or private; and

(iii) The EHWM facility is designed to handle such a request or can be modified to the extent necessary to adequately dispose of the waste.

(c) The state operator, after consulting with the department, may refuse to accept any waste that does not meet the requirements of the acceptance procedures of this subsection until the facts are ascertained, including but not limited to:

(i) The requirement that samples of waste be taken and analyzed; or

(ii) The condition of the containers by physical inspection of the delivery load.

(d) The state operator may accept dangerous waste under emergency conditions if:

(i) An emergency and potential threat to the public health and safety exists;

(ii) The state operator notifies the department as soon as possible;

(iii) The state operator stores the waste upon delivery until the full manifest has been received and approved by the department; and

(iv) The generator is fully apprised that the waste remains his liability until approved under (d)(iii) of this subsection.

(3) Other applicable requirements. The EHWM facility at Hanford must meet all other requirements of chapter 173-303 WAC, including specific requirements for storage, treatment, transfer and disposal of EHW, and siting, performance, and operation of facilities. The EHWM facility must also meet the following requirements:

(a) The state operator must not remove any dangerous waste from the facility without the department's approval;

(b) The state operator must maintain facilities for telephone and radio contact with the Hanford Reservation security patrol, and include this information with the contingency plan required in WAC 173-303-350;

(c) As a minimum, the state operator must provide personnel having knowledge and background in the following areas:

(i) Inspecting and checking manifests for completeness and accuracy;

(ii) Applied chemistry as it relates to reactivity, explosiveness, and flammability; and

(iii) Industrial hygiene and/or toxicology of industrial, commercial, and agricultural chemicals, and emergency procedures;

(d) The state operator must ensure that new personnel have a complete physical examination and annual checkups thereafter. The physician should be alerted to the kinds of materials the employee has been handling, so that more specific analyses can be made. The medical records must be made a part of the state operator's records as required in WAC 173-303-380(1); and

(e) The state operator must submit copies of all fee schedules to the department for yearly review and approval. The state operator must supply, and the department will use, the following criteria to review such disposal fees:

(i) Their relationship to other fees charged for similar services;

(ii) Reasonable return on investment and profit for the operator; and

(iii) The cost of administration, development, operation, maintenance, and perpetual management of the EHW facility, including administrative costs and perpetual management costs of the department.

(4) Department surveillance.

(a) In addition to the reports required under WAC 173-303-390, facility reports, the EHWM facility operator must report the following to the department:

(i) Copies of all environmental sampling results during the previous quarter;

(ii) Telephone and written accounts of any accidents or emergencies requiring action under WAC 173-303-360; and

(iii) Complete financial reports during the previous year.

(b) The state operator must admit the department's duly authorized representative to inspect the site at any reasonable hour of the day. Inspection may cover any of the following:

(i) The site and facilities;

(ii) The waste being delivered, stored, processed, or buried, including the taking of samples, a portion of each sample being given to the operator upon his request;

(iii) The environment, by the drilling of test wells and obtaining of samples; and

(iv) Any records, reports, information, or test results relating to the purpose of this regulation.

The inspection results will be written, filed with the department, and a copy made available to the state operator.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-700, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-700, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-700, filed 2/10/82.]

WAC 173-303-800 Permit requirements for dangerous waste management facilities. (1) The purpose of WAC 173-303-800 through 173-303-840 is to establish the requirements for permits which will allow a dangerous waste facility to operate without endangering the public health and the environment.

(2) The owner/operator of a dangerous waste facility that transfers, treats, stores, or disposes (TSD) or recycles dangerous waste must, when required by this chapter, obtain a permit in accordance with WAC 173-303-800 through 173-303-840 covering the active life, closure period, ground water protection compliance period, and for any regulated unit (as defined in WAC 173-303-040) or for any facility which at closure does not meet the removal or decontamination limits of WAC 173-303-610 (2)(b), post-closure care period, unless they demonstrate closure by removal or decontamination as provided under WAC 173-303-800 (9) and (10). If a post-closure permit is required, the permit must address applicable ground water monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements of this chapter. The denial of a permit for the active life of a dangerous waste management facility or unit does not affect the requirement to obtain a post-closure permit under this section.

(3) TSD facility permits will be granted only if the objectives of the siting and performance standards set forth in WAC 173-303-282 and 173-303-283 are met.

(4) Permits will be issued according to the requirements of all applicable TSD facility standards.

(5) The owner/operator of a TSD facility is responsible for obtaining all other applicable federal, state, and local permits authorizing the development and operation of the TSD facility.

(6) The terms used in regard to permits which are not defined in WAC 173-303-040 have the same meanings as set forth in 40 CFR 270.2.

(7) Exemptions.

(a) A permit for an on-site cleanup action may be exempted as provided in a consent decree or order signed by the department and issued pursuant to chapter 70.105D RCW.

(b) A permit is not required for an on-site cleanup action performed by the department pursuant to chapter 70.105D RCW.

(c) Further exemptions.

(i) A person is not required to obtain a dangerous waste permit for treatment or containment activities taken during immediate response to any of the following situations:

(A) A discharge of a dangerous waste;

(B) An imminent and substantial threat of a discharge of dangerous waste;

(C) A discharge of a material that, when discharged, becomes a dangerous waste;

(D) An immediate threat to human health, public safety, property, or the environment from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in WAC 173-303-040.

(E) In the case of emergency responses involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

(ii) Any person who continues or initiates dangerous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(iii) Universal waste handlers and universal waste transporters (as defined in WAC 173-303-040) handling the wastes listed below are not required to obtain a dangerous waste permit. These handlers are subject to regulation under WAC 173-303-573, when handling the below listed universal wastes.

(A) Batteries as described in WAC 173-303-573(2);

(B) Thermostats as described in WAC 173-303-573(3);

(C) Mercury-containing equipment as described in WAC 173-303-573(4); and

(D) Lamps as described in WAC 173-303-573(5).

(8) Each permit issued under this chapter will contain terms and conditions as the department determines necessary to protect human health and the environment.

(9) Closure by removal. Owners/operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under 40 CFR Part 265 standards as referenced by WAC 173-303-400 must obtain a post-closure permit unless they can demonstrate to the department that the closure met the standards for closure by removal or decontamination in WAC 173-303-650(6), 173-303-655(8), or 173-303-660(9), as appropriate, and such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed standards for closure at 40 CFR Part 264.111, as appropriate. The demonstration may be made in the following ways:

(a) If the owner/operator has submitted a Part B application for a post-closure permit, the owner/operator may request a determination, based on information contained in the application, that 40 CFR Part 264.111 standards for closure by removal were met. If the department believes that 40 CFR Part 264.111 standards were met, the department will notify the public of this proposed decision, allow for public comment, and reach a final determination according to the procedures in subsection (10) of this section.

(b) If the owner/operator has not submitted a Part B application for a post-closure permit, the owner/operator may petition the department for a determination that a post-closure permit is not required because the closure met the applicable 40 CFR Part 264.111 closure standards.

(i) The petition must include data demonstrating that standards for closure by removal or decontamination were met, or it must demonstrate that the unit closed under chapter 173-303 WAC requirements that met or exceeded the applicable 40 CFR Part 264.111 closure-by-removal standard.

(ii) The department will approve or deny the petition according to the procedures outline in subsection (10) of this section.

(10) Procedures for closure equivalency determination.

(a) If a facility owner/operator seeks an equivalency demonstration under subsection (9) of this section, the department will provide the public, through a newspaper notice, the opportunity to submit written comments on the information submitted by the owner/operator within thirty days from the date of the notice. The department will also, in response to a request or at the discretion of the department, hold a public hearing whenever such a hearing might clarify one or more issues concerning the equivalence of the 40 CFR Part 265 closure, as referenced by WAC 173-303-400, to a 40 CFR Part 264.111 closure. The department will give public notice of the hearing at least thirty days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.)

(b) The department will determine whether the 40 CFR Part 265 closure met 40 CFR Part 264.111 closure by removal or decontamination requirements within ninety days of its receipt. If the department finds that the closure did not meet the applicable 40 CFR Part 264.111 standards, the department will provide the owner/operator with a written statement of the reasons why the closure failed to meet 40 CFR Part 264.111 standards. The owner/operator may submit additional information in support of an equivalency demonstration within thirty days after receiving such written statement. The department will review any additional information submitted and make a final determination within sixty days.

(c) If the department determines that the facility did not close in accordance with 40 CFR Part 264.111 standards for closure by removal, the facility is subject to post-closure permitting requirements.

(11) The department may require a permittee or an applicant to submit information in order to establish permit conditions under subsection (8) of this section and WAC 173-303-806 (11)(d).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-800, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-800, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-800, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-800, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-800, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-800, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-800, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-800, filed 3/11/88; 84-09-088 (Order DE 83-36), § 173-303-800, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-800, filed 2/10/82.]

WAC 173-303-801 Types of dangerous waste management facility permits. The following types of permits

may be issued by the department to carry out the purpose of this regulation.

(1) Permits by rule:

(a) Ocean disposal - See WAC 173-303-802(2);

(b) Underground injection wells - See WAC 173-303-802(3);

(c) Publicly owned treatment works - See WAC 173-303-802(4); and

(d) Totally enclosed treatment facilities and elementary neutralization and wastewater treatment units - See WAC 173-303-802(5).

(2) Emergency permits - See WAC 173-303-804.

(3) Interim status permits - See WAC 173-303-805.

(4) Final facility permits:

(a) Final status TSD permits - See WAC 173-303-806; and

(b) Recycling permits - See WAC 173-303-806.

(5) Trial burns for dangerous waste incinerator final facility permits - See WAC 173-303-807.

(6) Demonstrations for dangerous waste land treatment final facility permits - See WAC 173-303-808.

(7) Research, development, and demonstration permits - See WAC 173-303-809.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-801, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-801, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-801, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-801, filed 2/10/82.]

WAC 173-303-802 Permits by rule. (1) Purpose and applicability. This section provides for permit by rule for particular facilities and activities managing dangerous wastes, provided that certain conditions are met. These facilities, activities, and conditions are listed in this section. Owners and operators of facilities with permits by rule are not required to submit an application for a dangerous waste facility permit.

(2) Ocean disposal barges or vessels. The owner or operator of a barge or other vessel which accepts dangerous waste for ocean disposal, will have a permit by rule if the owner or operator:

(a) Has a permit for ocean dumping issued under 40 CFR Part 220 (Ocean Dumping, authorized by the Marine Protection, Research, and Sanctuaries Act, as amended, 33 U.S.C. §1420 et seq.);

(b) Complies with the conditions of that permit; and

(c) Complies with the following dangerous waste regulations:

(i) WAC 173-303-060, notification and identification numbers;

(ii) WAC 173-303-170 through 173-303-230 when initiating shipments of dangerous waste;

(iii) WAC 173-303-370, manifest system;

(iv) WAC 173-303-380 (1)(a), operating record;

(v) WAC 173-303-390(2), annual report; and

(vi) WAC 173-303-390(1), unmanifested waste report.

(3) Underground injection wells. Underground injection wells with an underground injection control (UIC) permit for underground injection will have a permit by rule if the owner or operator has a UIC permit issued by the department under a federally approved program for underground injection control, and complies with the conditions of the permit and requirements of 40 CFR 144.14 and applicable state waste discharge rules. For UIC permits issued after November 8, 1984, the owner or operator must comply with WAC 173-303-64620, corrective action for solid waste management units; and where the UIC well is the only unit at a facility which requires a RCRA permit, complies with WAC 173-303-806 (4)(a)(xxiii). All underground injection wells must comply with WAC 173-303-060, notification and identification numbers. However, underground injection wells disposing of EHW are prohibited.

(4) Publicly owned treatment works (POTW). The owner or operator of a POTW which accepts dangerous waste for treatment, will have a permit by rule if the owner or operator:

(a) Has a National Pollutant Discharge Elimination System (NPDES) permit;

(b) Complies with the conditions of that permit;

(c) Complies with the following regulations:

(i) WAC 173-303-060, notification and identification numbers;

(ii) WAC 173-303-170 through 173-303-230 when initiating shipments of dangerous waste;

(iii) WAC 173-303-283, performance standards;

(iv) WAC 173-303-370, manifest system;

(v) WAC 173-303-380 (1)(a), operating record;

(vi) WAC 173-303-390(2), annual report;

(vii) WAC 173-303-390(1), unmanifested waste reports; and

(viii) For NPDES permits issued after November 8, 1984, WAC 173-303-64620, corrective action for solid waste management units;

(d) Accepts the waste only if it meets all federal, state, and local pretreatment requirements which would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance; and

(e) Accepts no EHW for disposal at the POTW.

(5) Totally enclosed treatment facilities or elementary neutralization or wastewater treatment units.

(a) The owner or operator of a totally enclosed treatment facility or an elementary neutralization unit that treats state-only dangerous wastes generated on or offsite, or federally regulated hazardous waste generated on-site, or a wastewater treatment unit that treats dangerous wastes generated on or off-site, will have a permit by rule, subject to limitations in (b) and (c) of this subsection, if they:

(i) Have an NPDES permit, state waste discharge permit, pretreatment permit (or written discharge authorization from the local sewerage authority) issued by the department, or pretreatment permit (or written discharge authorization) from a local sewage utility delegated pretreatment program responsibilities pursuant to RCW 90.48.165, and the permit or authorization covers the waste stream and constituents being discharged;

(ii) Include the wastestream as a source of wastewater in the application and provide an estimate of flow, the chemical characteristics of the wastestream, whether it is a batch vs. continuous discharge, and the treatment that it will receive;

(iii) Comply with the conditions of that permit;

(iv) Comply with the following regulations:

(A) WAC 173-303-060, notification and identification numbers;

(B) WAC 173-303-070, designation of dangerous waste;

(C) WAC 173-303-283, performance standards;

(D) WAC 173-303-300, general waste analysis;

(E) WAC 173-303-310, security;

(F) WAC 173-303-350, contingency plan and emergency procedures;

(G) WAC 173-303-360, emergencies;

(H) WAC 173-303-370, manifest system;

(I) WAC 173-303-380 (1)(d), operating record, and WAC 173-303-380 (1)(a) when the owner or operator of a wastewater treatment unit is treating federally regulated wastewaters generated off-site;

(J) WAC 173-303-390, facility reporting.

(b) The owner or operator of a wastewater treatment unit may treat dangerous wastewater received from offsite provided the wastewater is generated within the same industry and the wastewaters will be effectively treated by the wastewater treatment unit, if:

The owner or operator complies with (a)(i) through (iv) of this subsection.

(c) The department may require the owner or operator of a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit subject to (a) or (b) of this subsection to apply for and obtain a final facility permit or a permit modification in accordance with WAC 173-303-800 through 173-303-840, if:

(i) The owner or operator violates the general facility or performance requirements specified in (a) of this subsection;

(ii) The owner or operator is conducting other activities which require him to obtain a final facility permit;

(iii) The department determines that the general facility or performance requirements specified in (a) of this subsection, are not sufficient to protect public health or the environment and that additional requirements under this chapter are necessary to provide such protection; or

(iv) The owner or operator does not comply with applicable local, state or federal requirements established pursuant to sections 402 or 307(b) of the Federal Clean Water Act, or chapter 90.48 RCW.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-802, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-802, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-802, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-802, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-802, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-802, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-802, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-802, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-802, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-802, filed 4/18/84.]

WAC 173-303-803 Permit application requirements. (1) **Applicability.** The requirements in this section apply to both interim and final status facilities. In addition to this section, the applicable provisions of WAC 173-303-800, 173-303-805, and 173-303-806 must be followed. Persons currently authorized with interim status must apply for permits when required by the department (see requirements at WAC 173-303-806).

(2) **Existing dangerous waste management facilities and interim status qualifications.**

(a) Owners and operators of existing dangerous waste management facilities or of dangerous waste management facilities in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act and RCRA that render the facility subject to the requirement to have a dangerous waste permit must submit part A of their permit application no later than:

(i) Six months after the date of publication of regulations that first require them to comply with the standards set forth in WAC 173-303-400, 173-303-505, 173-303-520, or 173-303-525, or 40 CFR Part 266 Subpart H; or

(ii) Thirty days after the date they first become subject to the standards set forth in WAC 173-303-400, 173-303-505, 173-303-520, or 173-303-525, or 40 CFR Part 266 Subpart H 40 CFR, whichever first occurs;

(iii) For generators generating greater than 220 pounds but less than 2200 pounds of dangerous waste in a calendar month and treats, stores, or disposes of these wastes on-site, by March 24, 1987.

(b) The owner or operator of an existing dangerous waste management facility may be required to submit part B of their permit application. The department may require submission of part B if the department has received interim or final authorization; if not, the EPA Regional Administrator may require submission of part B. Any owner or operator will be allowed at least six months from the date of request to submit part B of the application. Any owner or operator of an existing dangerous waste management facility may voluntarily submit part B of the application at any time. Notwithstanding the above, any owner or operator of an existing dangerous waste management facility must submit a part B permit application in accordance with the dates specified in WAC 173-303-805(8). Any owner or operator of a land disposal facility in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act or RCRA that render the facility subject to the requirement to have an RCRA permit must submit a part B application in accordance with the dates specified in WAC 173-303-805(8).

(c) Failure to furnish a requested part B application on time, or to furnish in full the information required by the part B application, is grounds for termination of interim status under WAC 173-303-840.

(3) **Contents of part A of the permit application.** Part A of the final facility permit application must include the following information:

(a) The activities conducted by the applicant that require it to obtain a permit under the Hazardous Waste Management Act;

(b) Name, mailing address, and location, including latitude and longitude of the facility for which the application is submitted;

(c) Up to four NAICS codes that best reflect the principal products or services provided by the facility;

(d) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity;

(e) The name, address, and phone number of the owner of the facility;

(f) Whether the facility is located on tribal lands;

(g) An indication of whether the facility is new or existing and whether it is a first or revised application;

(h) For existing facilities:

(i) A scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas; and

(ii) Photographs of the facility clearly delineating all existing structures, existing treatment, storage, and disposal areas, and sites of future treatment, storage, and disposal areas;

(i) A description of the processes to be used for treating, storing, and disposing of dangerous waste, and the design capacity of these items;

(j) A specification of the dangerous wastes listed or designated under WAC 173-303-070 to be treated, stored, or disposed of at the facility, an estimate of the quantity of those wastes to be treated, stored, or disposed annually, and a general description of the processes to be used for the wastes;

(k) A listing of all permits or construction approvals received or applied for under any of the following programs:

(i) Hazardous waste management program;

(ii) UIC program under the SWDA;

(iii) NPDES program under the CWA;

(iv) Prevention of Significant Deterioration (PSD) program under the Clean Air Act;

(v) Nonattainment program under the Clean Air Act;

(vi) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act;

(vii) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act;

(viii) Dredge or fill permits under section 404 of the CWA;

(ix) Other relevant environmental permits, including state permits;

(l) A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its dangerous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundary;

(m) A brief description of the nature of the business;

(n) For hazardous debris, a description of the debris category(ies) and contaminant category(ies) to be treated, stored, or disposed of at the facility.

(4) **New TSD facilities.**

(a) Except as provided in 40 CFR 270.10 (f)(3) for TSCA facilities, no person may begin physical construction of a new TSD facility without having submitted parts A and B of the permit application and having received a finally effective final facility permit.

(b) An application for a permit for a new TSD facility (including both parts A and B) may be filed any time after adoption of those standards in WAC 173-303-630 that apply to such a facility. The application must be filed with the EPA Regional Administrator if at the time of application the state in which the new TSD facility is proposed to be located has not received interim or final authorization for permitting such facility; otherwise it must be filed with the department. Except as provided in paragraph 40 CFR 270.10 (f)(3), all applications must be submitted at least one hundred eighty days before physical construction is expected to begin.

(5)(a) **Updating permit applications.**

(i) If any owner or operator of a dangerous waste management facility has filed part A of a permit application and has not yet filed part B, the owner or operator must file an amended part A application:

(A) With the EPA Regional Administrator if the department has not obtained interim authorization or final authorization, within six months after the adoption of revised regulations under 40 CFR Part 261 listing or identifying additional hazardous wastes, if the facility is treating, storing, or disposing of any of those newly listed or identified wastes;

(B) With the department, if it has obtained interim authorization or final authorization, no later than the effective date of regulatory provisions listing or designating wastes as dangerous in addition to those listed or designated under the previously approved state program, if the facility is treating, storing, or disposing of any of those newly listed or designated wastes; or

(C) As necessary to comply with provisions of WAC 173-303-805(7) for changes during interim status. Revised part A applications necessary to comply with the provisions of WAC 173-303-805(7) must be filed with the department.

(b) The owner or operator of a facility who fails to comply with the updating requirements of (a)(i) of this subsection does not receive interim status as to the wastes not covered by duly filed part A applications.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-803, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-803, filed 5/10/00, effective 6/10/00.]

WAC 173-303-804 Emergency permits. Requirements for an emergency permit. In the event the department finds that an imminent and substantial endangerment to human health or the environment exists, the department may issue a temporary emergency permit to a facility to allow treatment, storage, or disposal (TSD) of dangerous waste at a nonpermitted facility, or at a facility covered by an effective permit that does not otherwise allow treatment, storage, or disposal of such dangerous waste. Notice of the issuance of an emergency permit will be given to the fire marshal, police department, and other local emergency service agencies with jurisdiction near the location of the facility. The emergency permit:

(1) May be oral or written. If oral, it will be followed within five days by a written emergency permit;

(2) Will not exceed ninety days in duration for dangerous wastes;

(3) Will not exceed one hundred eighty days in duration for special waste;

(4) Will clearly specify the dangerous wastes to be received, and the manner and location of their treatment, storage, or disposal;

(5) May be terminated by the department at any time without following the decision making procedures of WAC 173-303-840 if the department determines that termination is appropriate to protect public health and the environment;

(6)(a) Will be accompanied by a public notice published under WAC 173-303-840 (3)(d) that includes:

(i) The name and address of the department;

(ii) The name and location of the permitted TSD facility;

(iii) A brief description of the wastes involved;

(iv) A brief description of the action authorized and reasons for authorizing it; and

(v) The duration of the emergency permit; and

(b) Will be given public notice by:

(i) Publication in a daily newspaper within the area affected;

(ii) By radio broadcast within the area affected;

(iii) By mailing a copy of the public notice to the persons described in WAC 173-303-840 (3)(e)(i); and

(iv) Any other method reasonably determined to give actual notice of the emergency permit to persons potentially affected by it; and

(7) Will incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this chapter.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-804, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-804, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-804, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-804, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-804, filed 4/18/84.]

WAC 173-303-805 Interim status permits. (1)(a) Applicability. This section applies to all facilities eligible for an interim status permit. When a facility is owned by one person but is operated by another person, it is the operator's duty to qualify for interim status, except that the owner must also sign an interim status application. Prior to submittal of an interim status permit application the requirements of WAC 173-303-281 must be met.

(b) Any person who owns or operates an "existing dangerous waste TSD facility" or a facility in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act or RCRA that renders the facility subject to the requirement to have a dangerous waste permit will have interim status and will be treated as having been issued a permit to the extent he or she has:

(i) Complied with the requirements of WAC 173-303-060 pertaining to notification of dangerous waste activity.

(Comment: Some existing facilities may not be required to file a notification under WAC 173-303-060. These facilities may qualify for interim status by meeting (b)(ii) of this subsection.)

(ii) Complied with the requirements of WAC 173-303-803 governing submission of part A applications.

(c) This subsection (1) will not apply to any facility that has been previously denied a final facility permit or if authority to operate the facility under the Hazardous Waste Management Act has been previously terminated.

(2) Failure to qualify for interim status. If the department has reason to believe upon examination of a Part A application that it fails to provide the required information, it will notify the owner or operator in writing of the apparent deficiency. Such notice will specify the grounds for the department's belief that the application is deficient. The owner or operator will have thirty days from receipt to respond to such a notification and to explain or cure the alleged deficiency in his Part A application. If, after such notification and opportunity for response, the department determines that the application is deficient it may take appropriate enforcement action.

(3) Interim status for facilities under RCRA interim status. Any existing facility operating under interim status gained under section 3005 of RCRA will be deemed to have an interim status permit under this chapter provided that the owner/operator complies with the applicable requirements of WAC 173-303-400 and this section.

(4) Interim status for facilities managing state-designated (non-RCRA) dangerous wastes. Any existing facility which does not satisfy subsection (3) of this section, but which is only managing dangerous wastes that are not hazardous wastes under 40 CFR Part 261, will be deemed to have an interim status permit provided that the owner/operator of the facility has complied with the notification requirements of WAC 173-303-060 by May 11, 1982 and has submitted Part A of his permit application by August 9, 1982. If an existing facility becomes subject to this chapter due to amendments to this chapter and the facility was not previously subject to this chapter, then the owner/operator of an existing facility may qualify for an interim status permit by complying with the notification requirements of WAC 173-303-060 within three months, and submitting Part A of his permit application within six months, after the adoption date of the amendments which cause the facility to be subject to the requirements of this chapter. Facilities qualifying for interim status under this subsection will not be deemed to have interim status under section 3005 of RCRA, and may only manage non-RCRA wastes until they either qualify separately for interim status under section 3005 of RCRA or receive a final status facility permit allowing them to manage RCRA wastes.

(5) Maintaining the interim status permit.

(a) Timely notification and submission of a Part A application qualifies the owner/operator of the existing TSD facility for the interim status permit, until the department terminates interim status pursuant to subsection (8) of this section.

(b) Interim status for the existing TSD facility will be maintained while the department makes final administrative disposition of a final facility permit pursuant to WAC 173-303-806 if:

(i) The owner/operator has submitted his final facility permit application (as described in WAC 173-303-806) within six months of the written request by the department to submit such application; and

(ii) Grounds for terminating interim status (as described in subsection (8) of this section) do not exist.

(c) The owner/operator of an interim status facility must update his Part A whenever he is managing wastes that are newly regulated under this chapter, and as necessary to comply with subsection (7) of this section. Failure to comply with this updating requirement is a violation of interim status.

(6) Prohibitions for interim status permits. Facilities with an interim status permit must not:

(a) Treat, store, or dispose of dangerous waste not specified in Part A of the permit application;

(b) Employ processes not specified in Part A of the permit application; or

(c) Exceed the design capacities specified in Part A of the permit application.

(7) Changes during interim status.

(a) Except as provided in (b) of this subsection, the owner or operator of an interim status facility may make the following changes at the facility:

(i) Treatment, storage, or disposal of new dangerous wastes not previously identified in Part A of the permit application (and, in the case of newly listed or identified wastes, addition of the units being used to treat, store, or dispose of the dangerous wastes on the effective date of the listing or identification) if the owner or operator submits a revised Part A permit application prior to such treatment, storage, or disposal (along with a justification detailing the equipment and process or processes that the owner or operator will use to treat, store, or dispose of the new dangerous wastes) and if the department does not explicitly deny the changes within sixty days of receipt of the revised application;

(ii) Increases in the design capacity of processes used at the facility if the owner or operator submits a revised Part A permit application prior to such a change (along with a justification explaining the need for the change), the requirements of WAC 173-303-281 are met, and the department approves the changes because:

(A) There is a lack of available treatment, storage, or disposal capacity at other dangerous waste management facilities; or

(B) The change is necessary to comply with a federal, state, or local requirement.

(iii) Changes in the processes for the treatment, storage, or disposal of dangerous waste or addition of processes if the owner or operator submits a revised Part A permit application prior to such change (along with a justification explaining the need for the change) and the department approves the change because:

(A) The change is necessary to prevent a threat to human health and the environment because of an emergency situation; or

(B) The change is necessary to comply with a federal, state, or local requirement.

(iv) Changes in the ownership or operational control of a facility if the new owner or operator submits a revised Part A permit application no later than ninety days prior to the scheduled change. When a transfer of operational control of a facility occurs, the old owner or operator must comply with the interim status financial requirements of 40 CFR Part 265, Subpart H (as referenced in WAC 173-303-400), until the new owner or operator has demonstrated to the department that he is complying with the financial requirements. Upon demonstration to the department by the new owner or operator of compliance with the interim status financial requirements, the department will notify the old owner or operator in writing that he no longer needs to comply with the interim status financial requirements as of the date of demonstration. The new owner or operator must demonstrate compliance with the financial requirements within six months of the date of the change in ownership or operational control of the facility. All other interim status duties are transferred effective immediately upon the date of the change in ownership or operational control of the facility.

(v) Changes made in accordance with an interim status corrective action order issued by EPA under section 3008(h) of RCRA or other federal authority, including an order or consent decree issued pursuant to WAC 173-303-64620 or 173-303-64630, by the department under chapter 70.105 RCW or other state authority, or by a court in a judicial action brought by EPA or by the department. Changes under this subsection (7)(a)(v) are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(vi) Addition of newly regulated units for the treatment, storage, or disposal of dangerous waste if the owner or operator submits a revised Part A permit application on or before the date on which the unit becomes subject to the new requirements.

(b) Except as specifically allowed under this subsection (7)(b), changes listed under (a) of this subsection may not be made if they amount to reconstruction of the dangerous waste management facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds fifty percent of the capital cost of a comparable entirely new dangerous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

(i) Changes made solely for the purposes of complying with the requirements of WAC 173-303-640(4) for tanks and ancillary equipment.

(ii) If necessary to comply with federal, state, or local requirements, changes to an existing unit, changes solely involving tanks or containers, or addition of replacement surface impoundments that satisfy the standards of section 3004(o) of RCRA.

(iii) Changes that are necessary to allow owners or operators to continue handling newly listed or identified dangerous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of the rule establishing the new listing or identification.

(iv) Changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan.

(v) Changes necessary to comply with an interim status corrective action order issued by EPA under section 3008(h) or other federal authority, by the department under chapter 70.105 RCW or other state authority, or by a court in a judicial proceeding brought by EPA or an authorized state, provided that such changes are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(vi) Changes to treat or store, in tanks, containers, or containment buildings hazardous wastes subject to land disposal restrictions imposed by 40 CFR Part 268 or RCRA section 3004, provided that such changes are made solely for the purpose of complying with 40 CFR Part 268 or RCRA section 3004.

(vii) Addition of newly regulated units under (a)(vi) of this subsection.

(viii) Changes necessary to comply with standards under 40 CFR part 63, subpart EEE—National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors, which are incorporated by reference at WAC 173-400-075 (5)(a).

(8) Termination of interim status permit. The following are causes for terminating an interim status permit, or for denying a revised permit application:

(a) Final administrative disposition of a final facility permit application is made pursuant to WAC 173-303-806;

(b) When the department on examination or reexamination of a Part A application determines that it fails to meet the applicable standards of this chapter, it may notify the owner or operator that the application is deficient and that the interim status permit has been revoked. The owner or operator will then be subject to enforcement for operating without a permit;

(c) Failure to submit a requested Part B application on time, or to provide in full the information required in the Part B application;

(d) Violation of applicable interim status standards;

(e) A determination that the permit applicant has failed to satisfy the performance standards of WAC 173-303-283;

(f) For owners or operators of each land disposal facility which has been granted interim status prior to November 8, 1984, interim status terminated on November 8, 1985, unless:

(i) The owner or operator submits a Part B application for a permit for such facility prior to that date; and

(ii) The owner or operator certifies that such facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(g) For owners or operators of each land disposal facility which is in existence on the effective date of statutory or regulatory amendments under the Hazardous Waste Management Act that render the facility subject to the requirement to have a final facility permit and which is granted interim status, interim status terminates twelve months after the date on which the facility first becomes subject to such permit requirement unless the owner or operator of such facility:

(i) Submits a Part B application for a final facility permit for such facility before the date twelve months after the date on which the facility first becomes subject to such permit requirement; and

(ii) Certifies that such facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(h) For owners or operators of any land disposal unit that is granted authority to operate under subsection (7)(a)(i), (ii) or (iii) of this section, interim status terminates on the date twelve months after the effective date of such requirement, unless the owner or operator certifies that such unit is in compliance with all applicable ground water monitoring and financial responsibility requirements;

(i) For owners and operators of each incinerator facility which achieved interim status prior to November 8, 1984, interim status terminated on November 8, 1989, unless the owner or operator of the facility submitted a Part B application for a final facility permit for an incinerator facility by November 8, 1986; or

(j) For owners or operators of any facility (other than a land disposal or an incinerator facility) which has achieved interim status prior to November 8, 1984, interim status terminated on November 8, 1992, unless the owner or operator of the facility submitted a Part B application for a final facility permit for the facility by November 8, 1988.

(9) Reserve.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-805, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-805, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-805, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-805, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-805, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-805, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-805, filed 1/4/89; 88-18-083 (Order 88-29), § 173-303-805, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-805, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-805, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-805, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-805, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-805, filed 2/10/82.]

WAC 173-303-806 Final facility permits. (1) Applicability. This section applies to all dangerous waste facilities required to have a final facility permit. The final facility permit requirements are applicable to:

(a) Final status TSD facilities; and

(b) Certain recycling facilities that are not exempt from the permit requirements.

(2)(a) Application. Any person subject to the permit requirements of this section who intends to operate a new TSD facility must comply with WAC 173-303-281 and apply for a final facility permit. The department may, at any time, require the owner or operator of an existing TSD facility to apply for a final facility permit. Such owner or operator will be allowed one hundred eighty days to submit his application; the department may extend the length of the application period if it finds that there are good reasons to do so. The owner or operator of an existing TSD facility may voluntarily apply for a final facility permit at any time. Any person seeking a final facility permit must complete, sign, and submit an application to the department. An application must consist of a Part A permit form (which can be obtained from the department), and the contents of Part B as specified in subsection (4) of this section. The requirements for the contents of a part A permit application are at WAC 173-303-803(4).

(b) Persons covered by permits by rule (WAC 173-303-802) need not apply. Procedures for applications, issuance and administration of emergency permits are found exclusively in WAC 173-303-804. Procedures for application, issuance and administration of research, development, and demonstration permits are found exclusively in WAC 173-303-809.

(3) Effective regulations. A final facility permit will include all applicable requirements of this chapter which are in effect on the date that the permit is issued by the department. WAC 173-303-840(7) provides a means for reopening permit proceedings at the discretion of the department where new requirements become effective during the permitting process and are of sufficient magnitude to make additional proceedings desirable. Any other changes to the final facility permit will be in accordance with the permit modification requirements of WAC 173-303-830.

(4) Contents of Part B. Part B of a permit application must consist of the information required in (a) through (m) of this subsection.

(a) General requirements. Part B of the permit application consists of the general information requirements of this

subsection, and the specific information requirements in (b) through (h) of this subsection as applicable to the facility. The Part B information requirements presented in (a) through (h) of this subsection, reflect the standards promulgated in WAC 173-303-600. These information requirements are necessary in order for the department to determine compliance with WAC 173-303-600 through 173-303-670. If owners and operators of TSD facilities can demonstrate that the information prescribed in Part B cannot be provided to the extent required, the department may make allowance for submission of such information on a case-by-case basis. Information required in Part B must be submitted to the department and signed in accordance with requirements in WAC 173-303-810(12). Certain technical data, such as design drawings and specifications, and engineering studies must be certified by a registered professional engineer. The following information is required for all TSD facilities, except as WAC 173-303-600(3) provides otherwise.

(i) A general description of the facility.

(ii) Chemical, biological, and physical analyses of the dangerous waste and hazardous debris to be handled at the facility. At a minimum, these analyses must contain all the information which must be known to treat, store, or dispose of the wastes properly in accordance with WAC 173-303-600.

(iii) A copy of the waste analysis plan required by WAC 173-303-300(5) and, if applicable WAC 173-303-300 (5)(g).

(iv) A description of the security procedures and equipment required by WAC 173-303-310, or a justification demonstrating the reasons for requesting a waiver of this requirement.

(v) A copy of the general inspection schedule required by WAC 173-303-320(2): Include where applicable, as part of the inspection schedule, specific requirements in WAC 173-303-395 (1)(d), 173-303-630(6), 173-303-640 (4)(a)(i) and (6), 173-303-650(4), 173-303-655(4), 173-303-660 (4) and (5), 173-303-665(4), 173-303-670(7), and 173-303-680(3), and 40 CFR 264.1033, 264.1035, 264.1052, 264.-1053, 264.1058, 264.1064, 264.1067, 264.1084, 264.1085, 264.1086, and 264.1088.

(vi) A justification of any request for a waiver(s) of the preparedness and prevention requirements of WAC 173-303-340, or a description of the procedures used to comply with these requirements.

(vii) A copy of the contingency plan required by WAC 173-303-350: Include, where applicable, as part of the contingency plan, specific requirements in WAC 173-303-640(7), 173-303-650(5) and 173-303-660(6).

(viii) A description of procedures, structures, or equipment used at the facility to:

(A) Prevent hazards and contain spills in unloading/loading operations (for example, ramps, berms, pavement, special forklifts);

(B) Prevent runoff from dangerous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);

(C) Prevent contamination of water supplies;

(D) Mitigate effects of equipment failure and power outages;

(E) Prevent undue exposure of personnel to dangerous waste (for example, protective clothing); and

(F) Prevent releases to the atmosphere.

(ix) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required to demonstrate compliance with WAC 173-303-395 including documentation demonstrating compliance with WAC 173-303-395 (1)(c).

(x) Traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes (if appropriate); describe access road surfacing and load bearing capacity; show traffic control signals).

(xi) Seismic risk consideration. The owner/operator of a proposed facility or expansion of an existing facility must identify the seismic risk zone in which the facility is intended to be located. Where state or local maps are not available, United States Geological Survey Open File Report number 82-1033 may be used to identify seismic risk zones. The owner/operator must demonstrate that the facility can and will be designed to resist seismic ground motion and that the design is sufficient to withstand the maximum horizontal acceleration of a design earthquake specified in the demonstration.

(xii) An outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the TSD facility in a safe manner as required to demonstrate compliance with WAC 173-303-330. A brief description of how training will be designed to meet actual job tasks in accordance with requirements in WAC 173-303-330 (1)(d).

(xiii) A copy of the closure plan and, where applicable, the post-closure plan required by WAC 173-303-610 (3) and (8). Include, where applicable, as part of the plans, specific requirements in WAC 173-303-630(10), 173-303-640(8), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), and 173-303-680 (2) and (4).

(xiv) For dangerous waste disposal units that have been closed, documentation that notices required under WAC 173-303-610(10) have been filed.

(xv) The most recent closure cost estimate for the facility prepared in accordance with WAC 173-303-620(3) and a copy of the documentation required to demonstrate financial assurance under WAC 173-303-620(4). For a new facility, a copy of the required documentation may be submitted sixty days prior to the initial receipt of dangerous wastes, if that is later than the submission of the Part B.

(xvi) Where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with WAC 173-303-620(5) plus a copy of the documentation required to demonstrate financial assurance under WAC 173-303-620(6). For a new facility, a copy of the required documentation may be submitted sixty days prior to the initial receipt of dangerous wastes, if that is later than the submission of the Part B.

(xvii) Where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of WAC 173-303-620(8). For a new facility, documentation showing the amount of insurance meeting the specification of WAC 173-303-620 (8)(a) and, if applicable, WAC 173-303-620 (8)(b), that the owner or operator plans to have in effect before initial receipt of dangerous waste for treatment, storage, or disposal. A request for a variance in the

amount of required coverage, for a new or existing facility, may be submitted as specified in WAC 173-303-620 (8)(c).

(xviii) A topographic map showing a distance of one thousand feet around the facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet). Contours must be shown on the map. The contour interval must be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters (5 feet), if relief is greater than 6.1 meters (20 feet), or an interval of 0.6 meters (2 feet), if relief is less than 6.1 meters (20 feet). Owners and operators of TSD facilities located in mountainous areas should use large contour intervals to adequately show topographic profiles of facilities. The map must clearly show the following:

(A) Map scale and date;

(B) One hundred-year flood plain area;

(C) Surface waters including intermittent streams;

(D) Surrounding land uses (residential, commercial, agricultural, recreational);

(E) A wind rose (i.e., prevailing windspeed and direction);

(F) Orientation of the map (north arrow);

(G) Legal boundaries of the TSD facility site;

(H) Access control (fences, gates);

(I) Injection and withdrawal wells both on-site and off-site;

(J) Buildings; treatment, storage, or disposal operations; or other structure (recreation areas, runoff control systems, access and internal roads, storm, sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, etc.);

(K) Barriers for drainage or flood control; and

(L) Location of operational units within the TSD facility site, where dangerous waste is (or will be) treated, stored, or disposed (include equipment clean-up areas).

(Note - For large TSD facilities the department will allow the use of other scales on a case-by-case basis.)

(xix) Applicants may be required to submit such information as may be necessary to enable the department to carry out its duties under other state or federal laws as required.

(xx) Additional information requirements. The following additional information regarding protection of ground water is required from owners or operators of dangerous waste facilities containing a regulated unit except as otherwise provided in WAC 173-303-645 (1)(b):

(A) A summary of the ground water monitoring data obtained during the interim status period under 40 CFR 265.90 through 265.94, where applicable;

(B) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including ground water flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);

(C) On the topographic map required under (a)(xviii) of this subsection, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under WAC 173-303-645(6), the proposed location of ground water monitoring wells as required under WAC 173-303-645(8), and, to the extent possible, the information required in (a)(xx)(B) of this subsection;

(D) A description of any plume of contamination that has entered the ground water from a regulated unit at the time that the application was submitted that:

(I) Delineates the extent of the plume on the topographic map required under (a)(xviii) of this subsection;

(II) Identifies the concentration of each constituent throughout the plume or identifies the maximum concentrations of each constituent in the plume. (Constituents are those listed in Appendix IX of 40 CFR Part 264, and any other constituents not listed there which have caused a managed waste to be regulated under this chapter.);

(E) Detailed plans and an engineering report describing the proposed ground water monitoring program to be implemented to meet the requirements of WAC 173-303-645(8);

(F) If the presence of dangerous constituents has not been detected in the ground water at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of WAC 173-303-645(9). This submission must address the following items specified under WAC 173-303-645(9):

(I) A proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of dangerous constituents in the ground water;

(II) A proposed ground water monitoring system;

(III) Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

(IV) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground water monitoring data;

(G) If the presence of dangerous constituents has been detected in the ground water at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of WAC 173-303-645(10). The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of WAC 173-303-645(11) except as provided in WAC 173-303-645 (9)(h)(v). Alternatively, the owner or operator can obtain written authorization in advance from the department to submit a proposed permit schedule for development and submittal of such information. To demonstrate compliance with WAC 173-303-645(10), the owner or operator must address the following items:

(I) A description of the wastes previously handled at the facility;

(II) A characterization of the contaminated ground water, including concentrations of dangerous constituents and parameters;

(III) A list of constituents and parameters for which compliance monitoring will be undertaken in accordance with WAC 173-303-645 (8) and (10);

(IV) Proposed concentration limits for each dangerous constituent and parameter, based on the criteria set forth in WAC 173-303-645 (5)(a), including a justification for establishing any alternate concentration limits;

(V) Detailed plans and an engineering report describing the proposed ground water monitoring system, in accordance with the requirements of WAC 173-303-645(8); and

(VI) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground water monitoring data; and

(H) If dangerous constituents or parameters have been measured in the ground water which exceed the concentration limits established under WAC 173-303-645(5), Table 1, or if ground water monitoring conducted at the time of permit application under 40 CFR 265.90 through 265.94 at the waste boundary indicates the presence of dangerous constituents from the facility in ground water over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of WAC 173-303-645(11). However, an owner or operator is not required to submit information to establish a corrective action program if he demonstrates to the department that alternate concentration limits will protect human health and the environment after considering the criteria listed in WAC 173-303-645(5). An owner or operator who is not required to establish a corrective action program for this reason must instead submit sufficient information to establish a compliance monitoring program which meets the requirements of WAC 173-303-645 (10) and (a)(xx)(F) of this subsection. To demonstrate compliance with WAC 173-303-645(11), the owner or operator must address, at a minimum, the following items:

(I) A characterization of the contaminated ground water, including concentrations of dangerous constituents and parameters;

(II) The concentration limit for each dangerous constituent and parameter found in the ground water as set forth in WAC 173-303-645(5);

(III) Detailed plans and an engineering report describing the corrective action to be taken;

(IV) A description of how the ground water monitoring program will demonstrate the adequacy of the corrective action; and

(V) The permit may contain a schedule for submittal of the information required in (a)(xx)(H)(III) and (IV) of this subsection, provided the owner or operator obtains written authorization from the department prior to submittal of the complete permit application.

(xxi) Contingent ground water protection program. The following actions are required for owners or operators of proposed land-based facilities and may be required for owners/operators of existing land-based facilities, except as provided in WAC 173-303-645 (1)(b).

(A) Contingent ground water protection program. The owner or operator must develop a contingent ground water protection program. The purpose of this program will be to prevent the migration of dangerous waste or dangerous waste constituents from waste management units to the nearest hydraulically downgradient receptor at any time during the life of the facility. For the purposes of this subsection, the downgradient receptor will be the facility property line, perennial surface water or domestic well, whichever is nearest to the dangerous waste management unit. The contingent ground water protection program must at a minimum:

(I) Define the local and regional hydrogeologic characteristics. The contingent ground water protection program must be based on a sufficient understanding of site geology, hydrology, and other factors to allow evaluation of its adequacy by the department. Site characterization must be performed in sufficient detail to provide, at a minimum, the following information: Site geostratigraphy; site hydrostratigraphy; identification of aquifers, aquitards, and aquicludes; flow models for each stratum (i.e., porus media or fracture flow); the distribution of vertical and horizontal hydraulic conductivity; effective porosity; horizontal and vertical hydraulic gradients; ground water travel time to receptors; and heterogeneity for each stratigraphic unit. Site interpretative models must include ranges of tested values: The provisions of WAC 173-303-806 (4)(a)(xx) and 173-303-645, must be used as guidance in the development of the contingent ground water protection program.

(II) Identify the range of potential release scenarios that could occur during facility operation and the post-closure care period. The scenarios must incorporate the intended design(s) of the dangerous waste management unit(s), wastes to be placed in the dangerous waste management unit(s), waste and leachate chemistry, waste, and soil and rock geochemical interactions, and the results of site characterization pursuant to WAC 173-303-806 (4)(a)(xx) and (xxi);

(III) Include specific physical action to be taken if dangerous waste or dangerous waste constituents are detected in one or more of the monitoring wells. The physical actions must be based upon engineering feasibility studies describing remedial actions established from site specific conditions and waste features. Such actions may include installation of a pump and treat system between the monitoring well and the receptor or installation of a section of slurry wall to decrease ground water travel times. The description of the systems must also provide how the remediation system will achieve cleanup, its efficiency, and the time frames involved;

(IV) Incorporate the design, construction, and sampling methods outlined in WAC 173-303-645 (8)(c), (d), (e), (f), and (g);

(V) Demonstrate to the satisfaction of the department that the owner/operator of the dangerous waste management facility has the financial capability to implement the proposed ground water protection plan; and

(VI) Include reporting procedures to the department.

(B) The response actions identified in WAC 173-303-806 (4)(a)(xxi)(A)(III) must be activated if the presence of dangerous waste or dangerous waste constituents have been detected at the point of compliance in accordance with WAC 173-303-645 (9)(g), and must continue until the concentration of dangerous waste or dangerous waste constituents under WAC 173-303-645(4) are reduced to levels below their respective concentration limits specified in WAC 173-303-645(5).

(C) If the owner/operator does not demonstrate that the ground water protection program will prevent the migration of dangerous waste or its constituents to the nearest receptor, the department will require corrections to be made in the protection program, increase setbacks from the nearest receptor, or deny the permit.

(xxii) Additional requirements for incineration facilities. The following actions regarding the protection of human

health and the environment must be taken by owners/operators of proposed hazardous waste incineration facilities and may be required for owners or operators of existing incineration facilities.

(A) Ambient monitoring program. The owner/operator will be required to develop an ambient monitoring program. The purpose of this ambient monitoring program will be to: Gather baseline environmental information characterizing on-site and off-site environmental conditions prior to facility operation; and, to identify and measure changes in the environment which may be linked to the construction and operation of the facility. The ambient monitoring program must, at a minimum:

(I) Include a characterization of facility emission sources and pathways of contaminant transport.

(II) Characterize local and regional ecosystems, including agricultural, and their sensitivity to the potential contaminants from the facility.

(III) Incorporate the findings of the environmental impact statement's health risk assessment and/or other assessments specific to the proposal or available to the scientific community regarding emissions from dangerous waste management facilities and their potential human health and environmental effects.

(IV) Identify sensitive indicator plants and animals for biomonitoring, identify specific chemical constituents of concern, sampling locations, sampling frequency, sampling and analytical methods, chain of custody procedures, quality assurance/quality control procedures, reporting times, recordkeeping procedures, and data evaluation procedures.

(B) Environmental review procedures. The owner/operator must establish procedures to allow for public review of facility operation and all monitoring data required by the facility's permit. In developing this process, the owner/operator must, at a minimum:

(I) Coordinate this effort with the public and interested local organizations;

(II) Identify the informational needs of the community and develop a public information process which meets these needs; and

(III) Develop procedures allowing full access by the public to all monitoring data required by the permit.

(C) Impact mitigation plan. Prior to the department issuing a permit, the owner/operator must submit an impact mitigation plan which demonstrates to the satisfaction of the department that the owner/operator will mitigate all probable significant adverse impacts, including economic, due to facility location and operations. The owner/operator must use as a basis for identifying probable significant adverse economic impacts those probable economic impacts identified during a public review process, such as the environmental impact statement scoping process, if applicable.

The plan must include, but is not limited to, a description of what the owner/operator will do to reduce or prevent any probable significant impacts before they occur, to mitigate such impacts should they occur, and to ensure the owner/operator has and will have the financial capability to implement such preventative and mitigative measures. Mitigation measures may include, as an element, financial compensation to adversely affected parties.

This plan may be submitted with environmental reports the department requires for compliance with the State Environmental Policy Act, with the written citizen proponent negotiation report and agreements, or with the Part B permit application. If the plan does not demonstrate that the owner/operator is capable of adequately mitigating the identified probable significant adverse economic impacts, the department will require modification of the plan or of the proposed facility location, or will deny the permit application. The department must be satisfied with the plan prior to the issuance of the permit.

(xxiii) Information requirements for solid waste management units.

(A) The following information is required for each solid waste management unit:

(I) The location of the unit on the topographic map required under (a)(xviii) of this subsection.

(II) Designation of type of unit.

(III) General dimensions and structural description (supply any available drawings).

(IV) Time frame over which the unit was operated.

(V) Specification of all wastes that have been managed in the unit, to the extent available.

(B) The owner/operator of any facility containing one or more solid waste management units must submit all available information pertaining to any release of dangerous wastes or dangerous constituents from such unit or units.

(C) The owner/operator must conduct and provide the results of sampling and analysis of ground water, landsurface, and subsurface strata, surface water, or air, which may include the installation of wells, where the department determines it is necessary to complete a RCRA Facility Assessment that will determine if a more complete investigation is necessary.

WAC 173-303-806 (4)(a)(xxiv):

(xxiv) Information requirements for known releases.

(A) In order to provide for corrective action necessary to protect human health and the environment, the following information is required for all known significant releases of dangerous waste and dangerous constituents (as defined by WAC 173-303-64610(4)) at, and from, the facility. A significant release is a release which has affected or has the potential to affect human health or the environment at or beyond the facility.

(I) The location of the release on the topographic map required under (a)(xviii) of this subsection.

(II) General dimensions of the release and any relevant structural description. For example, if the release is from a storage tank, provide a structural description of the tank. Supply any available drawings.

(III) Time frame over which the release occurred.

(IV) Specification of all dangerous waste or dangerous constituents (as defined by WAC 173-303-64610(4)) present in the release, to the extent available.

(xxv) A summary of the preapplication meeting, along with a list of attendees and their addresses, and copies of any written comments or materials submitted at the meeting, as required under WAC 173-303-281 (3)(c).

(xxvi) For land disposal facilities, if a case-by-case extension has been approved under 40 CFR 268.5 or a peti-

tion has been approved under 40 CFR 268.6, a copy of the notice of approval for the extension or petition is required.

(b) Specific Part B information requirements for containers. Except as otherwise provided in WAC 173-303-600(3), owners or operators of facilities that store containers of dangerous waste must provide the following additional information:

(i) A description of the containment system to demonstrate compliance with WAC 173-303-630(7). Show at least the following:

(A) Basic design parameters, dimensions, and materials of construction including allowance for a twenty-five-year, twenty-four-hour storm;

(B) How the design promotes positive drainage control or how containers are kept from contact with standing liquids in the containment system;

(C) Capacity of the containment system relative to the volume of the largest container to be stored;

(D) Provisions for preventing or managing run-on;

(E) How accumulated liquids can be analyzed and removed to prevent overflow; and

(F) A description of the building or other protective covering for EHW containers;

(ii) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with WAC 173-303-630 (7)(c), including:

(A) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

(B) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids;

(iii) A description of the procedures for labeling containers;

(iv) Sketches, drawings, or data demonstrating compliance with WAC 173-303-630(8) (location of buffer zone and containers holding ignitable or reactive wastes) and WAC 173-303-630 (9)(c) (location of incompatible wastes), where applicable;

(v) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with WAC 173-303-630 (9)(a) and (b), and 173-303-395 (1)(b) and (c); and

(vi) Information on air emission control equipment as required in (m) of this subsection.

(c) Specific Part B information requirements for tanks. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that use tanks to store or treat dangerous waste must provide the following information:

(i) A written assessment that is reviewed and certified by an independent, qualified, registered professional engineer as to the structural integrity and suitability for handling dangerous waste of each tank system, as required under WAC 173-303-640 (2) and (3);

(ii) Dimensions and capacity of each tank;

(iii) Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);

(iv) A diagram of piping, instrumentation, and process flow for each tank system;

(v) A description of materials and equipment used to provide external corrosion protection, as required under WAC 173-303-640 (3)(a)(iii)(B);

(vi) For new tank systems, a detailed description of how the tank system(s) will be installed in compliance with WAC 173-303-640 (3)(b), (c), (d), and (e);

(vii) Detailed plans and a description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of WAC 173-303-640 (4)(a), (b), (c), (d), (e), and (f);

(viii) For tank systems for which a variance from the requirements of WAC 173-303-640(4) is sought (as provided by WAC 173-303-640 (4)(g)):

(A) Detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous waste or dangerous constituents into the ground water or surface water during the life of the facility; or

(B) A detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment.

(ix) Description of controls and practices to prevent spills and overflows, as required under WAC 173-303-640 (5)(b);

(x) For tank systems in which ignitable, reactive, or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with the requirements of WAC 173-303-640 (9) and (10);

(xi) A description of the marking and/or labeling of tanks;

(xii) Tank design to prevent escape of vapors and emissions of acutely or chronically toxic (upon inhalation) EHW; and

(xiii) Information on air emission control equipment as required in (m) of this subsection.

(d) Specific Part B information requirements for surface impoundments. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that store, treat, or dispose of dangerous waste in surface impoundments must provide the following additional information:

(i) A list of the dangerous wastes placed or to be placed in each surface impoundment;

(ii) Detailed plans and an engineering report describing how the surface impoundment is designed, and is or will be constructed, operated and maintained to meet the requirements of WAC 173-303-650 (2)(j), (10), (11), and 173-303-335, addressing the following items:

(A) The liner system (except for an existing portion of a surface impoundment), including the certification required by WAC 173-303-650 (2)(a)(i)(D) for EHW management. If an exemption from the requirement for a liner is sought as provided by WAC 173-303-650 (2)(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituents into the ground water or surface water at any future time;

(B) Prevention of overtopping;

(C) Structural integrity of dikes;

(D) The double liner and leak (leachate) detection, collection, and removal system, if the surface impoundment must meet the requirements of WAC 173-303-650 (2)(j). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-650 (2)(k), (l), or (m), submit appropriate information;

(E) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(F) The construction quality assurance (CQA) plan if required under WAC 173-303-335; and

(G) Proposed action leakage rate, with rationale, if required under WAC 173-303-650(10), and response action plan, if required under WAC 173-303-650(11).

(iii) Reserve.

(iv) A description of how each surface impoundment, including the double liner system, leak detection system, cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of WAC 173-303-650 (4)(a), (b), and (d). This information should be included in the inspection plan submitted under (a)(v) of this subsection;

(v) A certification by a qualified engineer which attests to the structural integrity of each dike, as required under WAC 173-303-650 (4)(c). For new units, the owner or operator must submit a statement by a qualified engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications;

(vi) A description of the procedure to be used for removing a surface impoundment from service, as required under WAC 173-303-650 (5)(b) and (c). This information should be included in the contingency plan submitted under (a)(vii) of this subsection;

(vii) A description of how dangerous waste residues and contaminated materials will be removed from the unit at closure, as required under WAC 173-303-650 (6)(a)(i). For any wastes not to be removed from the unit upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-650 (6)(a)(ii) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection;

(viii) If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how WAC 173-303-650(7) will be complied with;

(ix) If incompatible wastes, or incompatible wastes and materials will be placed in a surface impoundment, an explanation of how WAC 173-303-650(8) will be complied with;

(x) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how the surface impoundment is or will be designed to meet the requirements of WAC 173-303-650(9); and

(xi) Information on air emission control equipment as required in (m) of this subsection.

(e) Specific Part B information requirements for waste piles. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that store or treat dangerous waste in waste piles must provide the following additional information:

(i) A list of dangerous wastes placed or to be placed in each waste pile;

(ii) If an exemption is sought to WAC 173-303-660(2), and 173-303-645 as provided by WAC 173-303-660 (1)(c), an explanation of how the standards of WAC 173-303-660 (1)(c) will be complied with;

(iii) Detailed plans and an engineering report describing how the waste pile is designed, and is or will be constructed, operated, and maintained to meet the requirements of WAC 173-303-335, 173-303-660 (2)(j), (11) and (12), addressing the following items:

(A)(I) The liner system (except for an existing portion of a pile) if the waste pile must meet the requirements of WAC 173-303-660(2), including the licensed engineer's certification when required by WAC 173-303-660 (2)(c). If an exemption from the requirement for a liner is sought, as provided by WAC 173-303-660 (2)(d), submit detailed plans and engineering and hydrogeologic reports, as applicable, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituents into the ground water or surface water at any future time;

(II) The double liner and leak (leachate) detection, collection, and removal system, if the waste pile must meet the requirements of WAC 173-303-660 (2)(j). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-660 (2)(k), (l), or (m), submit appropriate information;

(III) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(IV) The construction quality assurance (CQA) plan if required under WAC 173-303-335;

(V) Proposed action leakage rate, with rationale, if required under WAC 173-303-660(3), and response action plan, if required under WAC 173-303-660(4);

(B) Control of run-on;

(C) Control of runoff;

(D) Management of collection and holding units associated with run-on and runoff control systems; and

(E) Control of wind dispersal of particulate matter, where applicable;

(iv) Reserve.

(v) A description of how each waste pile, including the double liner system, leachate collection and removal system, leak detection system, cover system and appurtenances for control of run-on and runoff, will be inspected in order to meet the requirements of WAC 173-303-660(5). This information should be included in the inspection plan submitted under (a)(v) of this subsection. If an exemption is sought to WAC 173-303-645 pursuant to WAC 173-303-660(4), describe in the inspection plan how the inspection requirements of WAC 173-303-660 (4)(a)(iii) will be complied with;

(vi) If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;

(vii) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how the requirements of WAC 173-303-660(7) will be complied with;

(viii) If incompatible wastes, or incompatible wastes and materials will be placed in a waste pile, an explanation of how WAC 173-303-660(8) will be complied with;

(ix) A description of how dangerous waste, waste residues and contaminated materials will be removed from the waste pile at closure, as required under WAC 173-303-660 (9)(a). For any waste not to be removed from the waste pile upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-665 (6)(a) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection;

(x) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how a waste pile that is not enclosed (as defined in WAC 173-303-660 (1)(c)) is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-660(10).

(f) Specific Part B information requirements for incinerators. Except as WAC 173-303-670(1) and subsection (4)(f)(v) of this section provide otherwise, owners and operators of facilities that incinerate dangerous waste must fulfill the informational requirements of (f) of this subsection.

(i) When seeking an exemption under WAC 173-303-670 (1)(b) (ignitable or reactive wastes only):

(A) Documentation that the waste is listed as a dangerous waste in WAC 173-303-080, solely because it is ignitable; or

(B) Documentation that the waste is listed as a dangerous waste in WAC 173-303-080, solely because it is reactive for characteristics other than those listed in WAC 173-303-090 (7)(a)(iv) and (v), and will not be burned when other dangerous wastes are present in the combustion zone; or

(C) Documentation that the waste is a dangerous waste solely because it possesses the characteristic of ignitability, as determined by the tests for characteristics of dangerous waste under WAC 173-303-090; or

(D) Documentation that the waste is a dangerous waste solely because it possesses the reactivity characteristics listed in WAC 173-303-090 (7)(a)(i), (ii), (iii), (vi), (vii), and (viii), and that it will not be burned when other dangerous wastes are present in the combustion zone.

(ii) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with WAC 173-303-807.

(iii) In lieu of a trial burn, the applicant may submit the following information;

(A) An analysis of each waste or mixture of wastes to be burned including:

(I) Heating value of the waste in the form and composition in which it will be burned;

(II) Viscosity (if applicable), or description of physical form of the waste, and specific gravity of the waste;

(III) An identification of any dangerous organic constituents listed in WAC 173-303-9905 or, if not listed, which cause the waste(s) to be regulated, which are present in the waste to be burned, except that the applicant need not analyze for constituents which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in WAC 173-303-110 (3)(a), or their equivalent;

(IV) An approximate quantification of the dangerous constituents identified in the waste, within the precision produced by the analytical methods specified in WAC 173-303-110 (3)(a); and

(V) A quantification of those dangerous constituents in the waste which may be designated as principal organic dangerous constituents (PODC's) based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in WAC 173-303-670(4);

(B) A detailed engineering description of the incinerator, including:

(I) Manufacturer's name and model number of incinerator;

(II) Type of incinerator;

(III) Linear dimension of incinerator unit including cross sectional area of combustion chamber;

(IV) Description of auxiliary fuel system (type/feed);

(V) Capacity of prime mover;

(VI) Description of automatic waste feed cutoff system(s);

(VII) Stack gas monitoring and pollution control monitoring system;

(VIII) Nozzle and burner design;

(IX) Construction materials; and

(X) Location and description of temperature, pressure, and flow indicating devices and control devices;

(C) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in (f)(iii)(A) of this subsection. This analysis should specify the principal organic dangerous constituents (PODC's) which the applicant has identified in the waste for which a permit is sought, and any differences from the PODC's in the waste for which burn data are provided;

(D) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available;

(E) A description of the results submitted from any previously conducted trial burn(s) including:

(I) Sampling and analysis techniques used to calculate performance standards in WAC 173-303-670(4); and

(II) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement);

(F) The expected incinerator operation information to demonstrate compliance with WAC 173-303-670 (4) and (6), including:

(I) Expected carbon monoxide (CO) level in the stack exhaust gas;

(II) Waste feed rate;

(III) Combustion zone temperature;

(IV) Indication of combustion gas velocity;

(V) Expected stack gas volume, flow rate, and temperature;

(VI) Computed residence time for waste in the combustion zone;

(VII) Expected hydrochloric acid removal efficiency;

(VIII) Expected fugitive emissions and their control procedures; and

(IX) Proposed waste feed cutoff limits based on the identified significant operating parameters;

(G) Such supplemental information as the department finds necessary to achieve the purposes of this subsection;

(H) Waste analysis data, including that submitted in (f)(iii)(A) of this subsection, sufficient to allow the department to specify as permit principal organic dangerous constituents (permit PODC's) those constituents for which destruction and removal efficiencies will be required; and

(I) Test protocols and sampling and analytical data to demonstrate the designation status under WAC 173-303-070 of:

(I) Incinerator ash residues, if any; and

(II) Residues from the air pollution control devices.

(iv) The department will approve a permit application without a trial burn if the department finds that:

(A) The wastes are sufficiently similar; and

(B) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under WAC 173-303-670(6)) operating conditions that will ensure that the performance standards in WAC 173-303-670(4) will be met by the incinerator.

(v) When an owner or operator demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of 40 CFR part 63, subpart EEE), the requirements of this subsection do not apply, except those provisions the department determines are necessary to ensure compliance with WAC 173-303-670 (6)(a) and (c) if you elect to comply with 40 CFR 270.235 (a)(1)(i), which is incorporated by reference at WAC 173-303-841, to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the department may apply the provisions of this subsection, on a case-by-case basis, for purposes of information collection in accordance with WAC 173-303-800(11) and 173-303-815 (2)(b)(ii). Note that 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). If you are subject to 40 CFR Part 63 you must get an air permit from ecology or the local air authority.

(g) Specific Part B information requirements for land treatment facilities. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that use land treatment to dispose of dangerous waste must provide the following additional information:

(i) A description of plans to conduct a treatment demonstration as required under WAC 173-303-655(3). The description must include the following information:

(A) The wastes for which the demonstration will be made and the potential dangerous constituents in the waste;

(B) The data sources to be used to make the demonstration (e.g., literature, laboratory data, field data, or operating data);

(C) Any specific laboratory or field test that will be conducted, including:

(I) The type of test (e.g., column leaching, degradation);

(II) Materials and methods, including analytical procedures;

(III) Expected time for completion; and

(IV) Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices;

(ii) A description of a land treatment program, as required under WAC 173-303-655(2). This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items:

(A) The wastes to be land treated;

(B) Design measures and operating practices necessary to maximize treatment in accordance with WAC 173-303-655 (4)(a) including:

(I) Waste application method and rate;

(II) Measures to control soil pH;

(III) Enhancement of microbial or chemical reactions; and

(IV) Control of moisture content;

(C) Provisions for unsaturated zone monitoring, including:

(I) Sampling equipment, procedures, and frequency;

(II) Procedures for selecting sampling locations;

(III) Analytical procedures;

(IV) Chain of custody control;

(V) Procedures for establishing background values;

(VI) Statistical methods for interpreting results; and

(VII) The justification for any dangerous constituents recommended for selection as principal dangerous constituents, in accordance with the criteria for such selection in WAC 173-303-655 (6)(a);

(D) A list of dangerous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to WAC 173-303-300;

(E) The proposed dimensions of the treatment zone;

(iii) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of WAC 173-303-655(4). This submission must address the following items:

(A) Control of run-on;

(B) Collection and control of runoff;

(C) Minimization of runoff of dangerous constituents from the treatment zone;

(D) Management of collection and holding facilities associated with run-on and runoff control systems;

(E) Periodic inspection of the unit. This information should be included in the inspection plan submitted under (a)(v) of this subsection; and

(F) Control of wind dispersal of particulate matter, if applicable;

(iv) If food-chain crops are to be grown in or on the treatment zone of the land treatment unit, a description of how the

demonstration required under WAC 173-303-655(5) will be conducted including:

(A) Characteristics of the food-chain crop for which the demonstration will be made;

(B) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;

(C) Procedures for crop growth, sample collection, sample analysis, and data evaluation;

(D) Characteristics of the comparison crop including the location and conditions under which it was or will be grown; and

(E) If cadmium is present in the land treated waste, a description of how the requirements of WAC 173-303-655 (5)(b) will be complied with;

(v) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required under WAC 173-303-655 (8)(a)(viii) and (c)(ii). This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under (a)(xiii) of this subsection;

(vi) If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of WAC 173-303-655(9) will be complied with; and

(vii) If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how WAC 173-303-655(10) will be complied with.

(viii) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-655(12).

(h) Specific Part B information requirements for landfills. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that dispose of dangerous waste in landfills must provide the following additional information;

(i) A list of the dangerous wastes placed or to be placed in each landfill or landfill cell;

(ii) Detailed plans and an engineering report describing how the landfill is designed, and is or will be constructed, operated and maintained to comply with the requirements of WAC 173-303-335, 173-303-665 (2), (8) and (9) addressing the following items:

(A)(I) The liner system (except for an existing portion of a landfill), if the landfill must meet the requirements of WAC 173-303-665 (2)(a), including the licensed engineer's certification required by WAC 173-303-665 (2)(a)(i). If an exemption from the requirements for a liner and a leachate collection and removal system is sought, as provided by WAC 173-303-665 (2)(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate designs and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituent into the ground water or surface water at any future time;

(II) The double liner and leak (leachate) detection, collection, and removal system, if the landfill must meet the requirements of WAC 173-303-665 (2)(h). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by WAC 173-303-665 (2)(j), (k) or (l), submit appropriate information;

(III) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

(IV) The construction quality assurance (CQA) plan if required under WAC 173-303-335;

(V) Proposed action leakage rate, with rationale, if required under WAC 173-303-665(8), and response action plan, if required under 173-303-665(9);

(B) Control of run-on;

(C) Control of runoff;

(D) Management of collection and holding facilities associated with run-on and runoff control systems; and

(E) Control of wind dispersal of particulate matter, where applicable;

(iii) Reserve.

(iv) A description of how each landfill, including the double liner system, leachate collection and removal system, cover systems, and appurtenances for control for run-on and runoff will be inspected in order to meet the requirements of WAC 173-303-665(4). This information must be included in the inspection plan submitted under (a)(v) of this subsection;

(v) Detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with WAC 173-303-665 (6)(a), and a description of how each landfill will be maintained and monitored after closure in accordance with WAC 173-303-665 (6)(b) and (c). This information should be included in the closure and post-closure plans submitted under (a)(xiii) of this subsection;

(vi) If incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how WAC 173-303-665(7) will be complied with;

(vii) A description of how each landfill will be designed and operated in order to comply with WAC 173-303-140.

(i) Specific Part B information requirements for miscellaneous units. Except as otherwise provided in WAC 173-303-680(1), owners and operators of facilities that treat, store, or dispose of dangerous waste in miscellaneous units must provide the following additional information:

(i) A detailed description of the unit being used or proposed for use, including the following:

(A) Physical characteristics, materials of construction, and dimensions of the unit;

(B) Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of WAC 173-303-680 (2) and (3); and

(C) For disposal units, a detailed description of the plans to comply with the post-closure requirements of WAC 173-303-680(4).

(ii) Detailed hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards of WAC 173-303-680(2). If the applicant can demonstrate that

he does not violate the environmental performance standards of WAC 173-303-680(2) and the department agrees with such demonstration, preliminary hydrologic, geologic, and meteorologic assessments will suffice.

(iii) Information on the potential pathways of exposure of humans or environmental receptors to dangerous waste or dangerous constituents and on the potential magnitude and nature of such exposures.

(iv) For any treatment unit, a report on a demonstration of the effectiveness of the treatment based on laboratory or field data.

(v) Any additional information determined by the department to be necessary for evaluation of compliance of the unit with the environmental performance standards of WAC 173-303-680(2).

(j) Specific Part B information requirements for process vents. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that have process vents to which WAC 173-303-690 applies must provide the following additional information:

(i) For facilities that cannot install a closed-vent system and control device to comply with the provisions of WAC 173-303-690 on the effective date that the facility becomes subject to the provisions of WAC 173-303-690 or 40 CFR 265 Subpart AA incorporated by reference at WAC 173-303-400 (3)(a), an implementation schedule as specified in 40 CFR section 264.1033 (a)(2).

(ii) Documentation of compliance with the process vent standards in 40 CFR section 264.1032, including:

(A) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the dangerous waste management units on a facility plot plan).

(B) Information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, estimates of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or concentrations) that represent the conditions that exist when the waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(C) Information and data used to determine whether or not a process vent is subject to the requirements of 40 CFR section 264.1032.

(iii) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with the requirements of 40 CFR 264.1032, and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in 40 CFR 264.1035 (b)(3).

(iv) Documentation of compliance with 40 CFR 264.-1033, including:

(A) A list of all information references and sources used in preparing the documentation.

(B) Records, including the dates, of each compliance test required by 40 CFR 264.1033(k).

(C) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" (WAC 173-303-110 (3)(g)(viii)) or other engineering texts acceptable to the department that present basic control device design information. The design analysis will address the vent stream characteristics and control device operation parameters as specified in 40 CFR 264.1035 (b)(4)(iii).

(D) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the dangerous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(E) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater unless the total organic emission limits of 40 CFR 264.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.

(k) Specific Part B information requirements for equipment leaks. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that have equipment to which WAC 173-303-691 applies must provide the following additional information:

(i) For each piece of equipment to which WAC 173-303-691 applies:

(A) Equipment identification number and dangerous waste management unit identification.

(B) Approximate locations within the facility (e.g., identify the dangerous waste management unit on a facility plot plan).

(C) Type of equipment (e.g., a pump or pipeline valve).

(D) Percent by weight total organics in the hazardous waste stream at the equipment.

(E) Hazardous waste state at the equipment (e.g., gas/vapor or liquid).

(F) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").

(ii) For facilities that cannot install a closed-vent system and control device to comply with the provisions of WAC 173-303-691 on the effective date that the facility becomes subject to the provisions of WAC 173-303-691 or 40 CFR Part 265 Subpart BB incorporated by reference at WAC 173-303-400 (3)(a), an implementation schedule as specified in 40 CFR 264.1033 (a)(2).

(iii) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in 40 CFR section 264.1035 (b)(3).

(iv) Documentation that demonstrates compliance with the equipment standards in 40 CFR sections 264.1052 to

264.1059. This documentation will contain the records required under 40 CFR 264.1064. The department may request further documentation before deciding if compliance has been demonstrated.

(v) Documentation to demonstrate compliance with 40 CFR section 264.1060 will include the following information:

(A) A list of all information references and sources used in preparing the documentation.

(B) Records, including the dates, of each compliance test required by 40 CFR 264.1033(j).

(C) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "ATPI Course 415: Control of Gaseous Emissions" (incorporated by reference as specified in WAC 173-303-110 (3)(g)(viii)) or other engineering texts acceptable to the department that present basic control device design information. The design analysis will address the vent stream characteristics and control device operation parameters as specified in 40 CFR 264.1035(b)(4)(iii).

(D) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the dangerous waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(E) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater.

(l) Special Part B information requirements for drip pads.

Except as otherwise provided by WAC 173-303-600(3), owners and operators of dangerous waste treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads must provide the following additional information:

(i) A list of hazardous wastes placed or to be placed on each drip pad.

(ii) If an exemption is sought to WAC 173-303-645, as provided by WAC 173-303-645(1), detailed plans and an engineering report describing how the requirements of WAC 173-303-645 (1)(b) will be met.

(iii) Detailed plans and an engineering report describing how the drip pad is or will be designed, constructed, operated and maintained to meet the requirements of WAC 173-303-675(4), including the as-built drawings and specifications. This submission must address the following items as specified in WAC 173-303-675(2):

(A) The design characteristics of the drip pad;

(B) The liner system;

(C) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time;

(D) Practices designed to maintain drip pads;

(E) The associated collection system;

(F) Control of run-on to the drip pad;

(G) Control of runoff from the drip pad;

(H) The interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad;

(I) Procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or other materials, including but not limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning and provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned.

(J) Operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized;

(K) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and nonpressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices;

(L) Provisions for ensuring that collection and holding units associated with the run-on and runoff control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system;

(M) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals.

(N) A description of how each drip pad, including appurtenances for control of run-on and runoff, will be inspected in order to meet the requirements of WAC 173-303-675(4). This information should be included in the inspection plan submitted under (a)(v) of this subsection.

(O) A certification signed by an independent qualified, registered professional engineer, stating that the drip pad design meets the requirements of WAC 173-303-675 (4)(a) through (f).

(P) A description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under WAC 173-303-675 (6)(a). For any waste not to be removed from the drip pad upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-665(6) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection.

(m) Specific Part B information requirements for air emission controls for tanks, surface impoundments, and containers (Subpart CC) at 40 CFR Part 270.27 are incorporated by reference.

(n) When an owner or operator of a cement or lightweight aggregate kiln demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of part 63, subpart EEE), the requirements of this subsection do not apply, except those provisions the director determines are necessary to ensure compliance with 40 CFR 266.102 (e)(1) and 266.102 (e)(2)(iii) if you elect to comply with 40 CFR 270.235 (a)(1)(i), which is incorporated by reference at WAC 173-303-841, to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the director may apply the provisions of this subsection, on a case-by-case basis, for

purposes of information collection in accordance with WAC 173-303-800(11) and 173-303-815 (2)(b)(ii).

(5) Construction. A person may begin physical construction of a new facility, or of new portions of an existing facility if the new portions would amount to reconstruction under interim status (WAC 173-303-805(7)), only after complying with WAC 173-303-281, submitting Part A and Part B of the permit application and receiving a final facility permit. All permit applications must be submitted at least one hundred eighty days before physical construction is expected to begin.

(6) Reapplications. Any dangerous waste facility with an effective final facility permit must submit a new application one hundred eighty days prior to the expiration date of the effective permit, unless the department grants a later date provided that such date will never be later than the expiration date of the effective permit.

Note: See public notice requirements at WAC 173-303-281(5).

(7) Continuation of expiring permits.

(a) When the owner/operator submits a timely application for a final facility permit and the application is determined by the department to be complete pursuant to subsection (8) of this section, the facility is allowed to continue operating under the expiring or expired permit until the effective date of the new permit.

(b) When the facility is not in compliance with the conditions of the expiring or expired permit, the department may choose to do any of the following:

(i) Initiate enforcement action based upon the permit which has been continued;

(ii) Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(iii) Issue a new permit with appropriate conditions; and/or

(iv) Take other actions authorized by this chapter.

(8) Completeness. The department will not issue a final facility permit before receiving a complete application, except for permits by rule or emergency permits. An application for a permit is complete when the application form and any supplemental information has been submitted to the department's satisfaction. The completeness of any application for a permit will be judged independently of the status of any other permit application or permit for the same facility or activity. The department may deny a permit for the active life of a dangerous waste management facility or unit before receiving a complete application for a permit.

(9) Recordkeeping. Applicants must keep records of all data used to complete the permit applications, and any supplemental information submitted to the department for a period of at least three years from the date the application is signed.

(10) General permit conditions. All final facility permits will contain general permit conditions described in WAC 173-303-810.

(11) Permit duration.

(a) Final facility permits will be effective for a fixed term not to exceed ten years.

(b) The department may issue any final facility permit for a duration that is less than the full allowable term.

(c) The term of a final facility permit will not be extended beyond ten years, unless otherwise authorized under subsection (7) of this section.

(d) Each permit for a land disposal facility will be reviewed by the department five years after the date of permit issuance or reissuance and will be modified as necessary, as provided in WAC 173-303-830(3).

(12) Reserve.

(13) Grounds for denial. A permit application will be denied pursuant to the procedures in WAC 173-303-840 if it is determined that the proposed location and/or activity endangers public health and the environment as demonstrated by the permit applicant's failure to satisfy the performance standards of WAC 173-303-283.

(14) Permit changes. All final facility permits will be subject to the requirements of permit changes, WAC 173-303-830.

(15) Procedures for decision making. Issuance of final facility permits will be subject to the procedures for decision making described in WAC 173-303-840.

(16) Other requirements for final recycling facility permits. In lieu of issuing a final recycling facility permit, the department may, after providing opportunity for public comment in accordance with WAC 173-303-840, defer to a permit already issued under other statutory authority administered by the department (such as the State Water Pollution Control Act, chapter 90.48 RCW, the State Clean Air Act, chapter 70.94 RCW, etc.) which incorporates the requirements of this section, and WAC 173-303-500 through 173-303-525 for recycling facilities.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-806, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-806, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.-007. 00-11-040 (Order 99-01), § 173-303-806, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-806, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-806, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-806, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-806, filed 3/7/91, effective 4/7/91. Statutory Authority: RCW 43.21A.080 and 70.105.210 et seq. 90-20-016, § 173-303-806, filed 9/21/90, effective 10/22/90. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-806, filed 1/4/89; 88-18-083 (Order 88-29), § 173-303-806, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-806, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-806, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-806, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-806, filed 4/18/84.]

WAC 173-303-807 Trial burns for dangerous waste incinerator final facility permits. When an owner or operator demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of part 63, subpart EEE), the requirements of this section do not apply, except those provisions the department determines are necessary to ensure compliance with WAC 173-303-670 (6)(a) and (c) if you elect to comply with 40 CFR 270.235

(a)(1)(i), which is incorporated by reference at WAC 173-303-841, to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the department may apply the provisions of this section on a case-by-case basis, for purposes of information collection in accordance with WAC 173-303-800(11) and 173-303-815 (2)(b)(ii). 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). Note that if you are subject to Part 63 you must get an air permit from ecology or the local air authority.

(1) Purpose and applicability. For purposes of determining operational readiness and establishing conditions in final facility permits for dangerous waste incinerators, the department may approve trial burns. Trial burns may not exceed seven hundred twenty hours operating time, except that the department may extend the duration of this operational period once, up to seven hundred twenty additional hours, at the request of the owner/operator of the incinerator when good cause is shown. The permit may be modified to reflect the extension according to WAC 173-303-830(4). The procedures for requesting and approving trial burns are described in:

(a) Subsection (11) of this section for existing incinerators with interim status permits; and

(b) Subsection (13) of this section for new incinerators and for incinerators with final facility permits in which the owner/operator wishes to burn new wastes not currently included in the permit.

(2) Trial burn plan. The trial burn must be conducted in accordance with a trial burn plan prepared by the applicant and approved by the department. The trial burn plan will then become a condition of the permit and will include the following information:

(a) An analysis of each waste or mixture of waste to be burned which includes:

(i) Heating value of the waste in the form and composition in which it will be burned;

(ii) Viscosity (if applicable), or description of physical form of the waste, and specific gravity of the waste;

(iii) An analysis identifying any dangerous organic constituents listed in WAC 173-303-9905, and any other dangerous constituents which, although not listed, caused the waste to be regulated as a dangerous waste, which are reasonably expected to be present in the waste to be burned. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified or referenced in WAC 173-303-110 (3)(a), or their equivalent;

(iv) An approximate quantification of the dangerous constituents identified in the waste, within the precision produced by the analytical methods specified or referenced in WAC 173-303-110 (3)(a); and

(v) A quantification of those dangerous constituents in the waste which may be designated as principal organic dangerous constituents (PODC) based on data submitted from other trial or operational burns which demonstrate compliance with the performance standard in WAC 173-303-670(4);

(b) A detailed engineering description of the incinerator for which the trial burn permit is sought including:

(i) Manufacturer's name and model number of incinerator (if available);

(ii) Type of incinerator;

(iii) Linear dimensions of the incinerator unit including the cross sectional area of the combustion chamber;

(iv) Description of the auxiliary fuel system (type/feed);

(v) Capacity of the prime air mover;

(vi) Description of automatic waste feed cutoff system(s);

(vii) Stack gas monitoring and pollution control equipment;

(viii) Nozzle and burner design;

(ix) Construction materials; and

(x) Location and description of temperature, pressure, and flow indicating and control devices;

(c) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;

(d) A detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the department's decision under subsection (5) of this section;

(e) A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, air feed rate, use of auxiliary fuel, and other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator;

(f) A description of, and planned operating conditions for, any emission control equipment which will be used;

(g) Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction;

(h) A detailed test protocol to sample and analyze the following for designation under WAC 173-303-070:

(i) Any incinerator ash residue collected in the incinerator; and

(ii) Any residues collected in the air pollution control devices; and

(i) Such other information as the department reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this section.

(3) Additional information required. The department, in reviewing the trial burn plan, will evaluate the adequacy of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this section.

(4) Trial PODCs. Based on the waste analysis data in the trial burn plan, the department will specify as trial principal organic dangerous constituents (trial PODCs) those constituents for which destruction and removal efficiencies must be calculated during the trial burn. These trial PODCs will be specified by the department based on its estimate of the difficulty of incineration of the constituents identified in the waste analysis, the concentration or mass in the waste feed, and the dangerous waste constituent or constituents identified in WAC 173-303-9905, or identified as causing the waste to be regulated as a dangerous waste.

(5) Approval of the plan. The department will approve a trial burn plan if it finds that:

(a) The trial burn is likely to determine whether the incinerator performance standard required by WAC 173-303-670(4) can be met;

(b) The trial burn itself will not present an imminent hazard to public health or the environment;

(c) The trial burn will help the department to determine operating requirements to be specified under WAC 173-303-670(6); and

(d) The information sought in (a), (b), and (c) of this subsection cannot reasonably be developed through other means.

(6) The department must send a notice to all persons on the facility mailing list as set forth in WAC 173-303-840 (3)(e)(i)(D) and to the appropriate units of state and local government as set forth in WAC 173-303-840 (3)(e)(i)(E) announcing the scheduled beginning and completion dates for the trial burn. The applicant may not begin the trial burn until after the department has issued such notice.

(a) This notice must be mailed within a reasonable time period before the scheduled trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the department.

(b) This notice must contain:

(i) The name and telephone number of the applicant's contact person;

(ii) The name and telephone number of the department's contact office;

(iii) The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

(iv) An expected time period for beginning and completion of the trial burn.

(7) Trial burns. During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:

(a) A quantitative analysis of the trial PODCs in the waste feed to the incinerator;

(b) A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial PODCs, O_2, hydrogen chloride (HC1), carbon monoxide (CO) and dangerous combustion by-products, including the total mass emission rate of by-products as a percent of the total mass feed rate of PODCs fed to the incinerator;

(c) A quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial PODCs and whether they are designated according to WAC 173-303-070;

(d) A total mass balance of the trial PODCs in the waste;

(e) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in WAC 173-303-670 (4)(a);

(f) If the HCl emission rate exceeds 1.8 kilograms of HCl per hour (4 pounds per hour), a computation of HCl removal efficiency in accordance with WAC 173-303-670 (4)(c)(i);

(g) A computation of particulate emissions, in accordance with WAC 173-303-670 (4)(c)(ii);

(h) An identification of sources of fugitive emissions and their means of control;

(i) A measurement of average, maximum, and minimum temperatures, and combustion gas velocity;

(j) A continuous measurement of carbon monoxide in the exhaust gas;

(k) An identification of any existing air emission standards where a state or local air pollution control authority has established emission standards and such standards are applicable to the incinerator; and

(l) Such other information as the department may specify as necessary to ensure that the trial burn will determine compliance with the performance standard of WAC 173-303-670(4), and to establish the operating conditions required by WAC 173-303-670(6).

(8) Certification. The applicant must submit to the department a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and must submit the results of all determinations required by subsection (7) of this section. This submission must be made within thirty days of the completion of the trial burn, or later if approved by the department.

(9) Submission of data. All data collected during any trial burn must be submitted to the department following the completion of the trial burn.

(10) Signatures required. All submissions required under this section must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application under WAC 173-303-810(12).

(11) Based on the results of the trial burn, the department will set the operating requirements in the final permit according to WAC 173-303-670(6). The permit modification shall proceed according to WAC 173-303-830(4).

(12) Existing incinerators with interim status permits.

(a) The owner/operator of an existing incinerator currently operating under an interim status permit may, when required by the department (or when he chooses) to apply for a final facility permit, request the department to approve of a trial burn. The trial burn may be requested for the purposes of determining feasibility of compliance with the performance standards of WAC 173-303-670(4) and the operating conditions of WAC 173-303-670(6). If a trial burn is requested, the owner/operator must prepare and submit a trial burn plan and, upon approval by the department, perform a trial burn in accordance with subsections (2) through (10) of this section.

(b) If the department approves the trial burn, it will issue a notice of interim status modification granting such approval and specifying the conditions applicable to the trial burn. The notice of modification will be a condition of the interim status permit. Note: The national emission standards for hazardous air pollutants may require review for a notice of construction. Owners and operators should consult chapter 173-400 WAC or local air pollution control agency regulations for applicability.

(c) If the trial burn is approved before submitting a final facility permit application, the owner/operator must complete the trial burn and submit the information described in subsection (7) of this section, with Part B of the permit application. If completion of this process conflicts with the date set for submission of Part B of the final facility permit application, the owner/operator must contact the department to extend the date for submitting the Part B or the trial burn results. If the applicant submits a trial burn plan with Part B of the final facility permit application, the department will specify in the notice of interim status modification issued under (b) of this subsection, a time period for conducting the

trial burn and submitting the results. Trial burn results must be submitted prior to the issuance of the permit.

(13) New incinerators and new wastes.

(a)(i) The owner/operator of a new incinerator may submit with Part B of a final facility permit application a request for approval of a trial burn. This request must include a statement of why the trial burn is desirable, and a trial burn plan prepared in accordance with subsection (2) of this section.

(ii) The department will proceed to issue a final facility permit in accordance with WAC 173-303-806. The permit will include the trial burn plan, and will establish operating conditions for the trial burn including but not limited to those described in WAC 173-303-670(6). The time period for conducting the trial burn and submitting the results will also be specified in the permit.

(iii) After the trial burn has been completed and the results submitted to the department, the final facility permit will be modified in accordance with WAC 173-303-830(4) to establish the final operating requirements and performance standards for the incinerator.

(b) The owner/operator of an incinerator with a final facility permit who wishes to burn new wastes not currently included in his permit may request approval of a trial burn for the new wastes. The request and approval will be handled in the same way as described in (a) of this subsection, except that in lieu of issuing an entirely new final facility permit the department will modify the existing final facility permit in accordance with WAC 173-303-830.

(14) For the purpose of determining feasibility of compliance with the performance standards of WAC 173-303-670(4) and of determining adequate operating conditions under WAC 173-303-670(6), the applicant for a permit for an existing dangerous waste incinerator must prepare and submit a trial burn plan and perform a trial burn in accordance with WAC 173-303-806 (4)(f) and subsections (2) through (5) and (7) through (10) of this section or, instead, submit other information as specified in WAC 173-303-806 (4)(f)(iii). The department must announce its intention to approve the trial burn plan in accordance with the timing and distribution requirements of subsection (6) of this section. The contents of the notice must include: The name and telephone number of a contact person at the facility; the name and telephone number of a contact office at the department; the location where the trial burn plan and any supporting documents can be reviewed and copied; and a schedule of the activities that are required prior to permit issuance, including the anticipated time schedule for department approval of the plan and the time period during which the trial burn would be conducted. Applicants submitting information under WAC 173-303-806 (4)(f)(i) are exempt from compliance with WAC 173-303-670 (4) and (6) and, therefore, are exempt from the requirement to conduct a trial burn. Applicants who submit trial burn plans and receive approval before submission of a permit application must complete the trial burn and submit the results, specified in subsection (7) of this section, with Part B of the permit application. If completion of this process conflicts with the date set for submission of the Part B application, the applicant must contact the department to establish a later date for submission of the Part B application or the trial burn results. Trial burn results must be submitted prior to issuance of the permit. When the applicant submits a trial burn plan with Part B of the permit application, the department will specify a time period prior to permit issuance in which the trial burn must be conducted and the results submitted.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-807, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-807, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-807, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-807, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-807, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-807, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-807, filed 4/18/84.]

WAC 173-303-808 Demonstrations for dangerous waste land treatment final facility permits. (1) Purpose and applicability. This section is applicable to the owner/operator of a land treatment facility who must demonstrate that his proposed treatment will be successful. The purpose of this section is to allow the department to issue a land treatment demonstration permit.

(2) Permit issuance. The department may issue a land treatment demonstration permit either in advance of or as part of a final facility permit so that the owner/operator of a land treatment facility can make the demonstration required in WAC 173-303-655(3). If issued in advance of the final facility permit, the land treatment demonstration permit will be issued as described in subsection (3) of this section, as a demonstration permit only. If issued as part of the final facility permit, the land treatment demonstration and final facility permit will be issued as described in subsection (4) of this section, as a phased permit. The determination for which procedure to follow will be made by the department based on the information submitted by the owner/operator in Part B of the final facility permit application.

(3) Demonstration permit only.

(a) If the department finds that the Part B does not contain enough information regarding the proposed treatment to allow the department to establish permit conditions necessary for compliance with all requirements of WAC 173-303-655, it may issue a land treatment demonstration permit only. The demonstration permit will be issued in accordance with the decision-making procedures of WAC 173-303-840. The demonstration permit may be issued either as a treatment or disposal permit, will cover only the field test or laboratory analyses, will contain only those requirements necessary to meet the standards in WAC 173-303-655(3), and will provide a specific time period for the demonstration. The department may extend the demonstration period as a modification (or minor modification, if applicable) to the demonstration permit.

(b) Within thirty days (unless the department approves a later date) of the end of the treatment demonstration, the owner/operator must submit a revised Part B to the department containing the results of the field tests or laboratory analyses and all data developed during the demonstration period. The department will then use the information and Part B to determine whether or not there is adequate information to issue a final facility permit which will incorporate conditions sufficient to provide compliance with all requirements

of WAC 173-303-655. If the information is adequate, the department will proceed under WAC 173-303-806 to issue a final facility permit. If the information is not adequate, the department may, as the situation warrants, either issue a modification to the demonstration permit in accordance with the procedures of subsection (3)(a) of this section, or deny the final facility permit application.

(4) Phased permit.

(a) The department may issue a two-phase final facility permit if it finds that, based on information submitted in Part B of the permit application, substantial (although incomplete and inconclusive) information exists upon which to base the issuance of a final facility permit. The phased permit will be issued in the same manner as a final facility permit under WAC 173-303-806, except that it will contain a first phase for making a land treatment demonstration, and a second phase (to become effective after completion of the first phase) for establishing conditions for operation of the land treatment facility.

(b) If the department finds that a phased permit may be issued, it will establish, as requirements in the first phase of the facility permit, conditions for conducting the field tests or laboratory analyses. These permit conditions will include design and operating parameters (including the duration of the tests or analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone), monitoring procedures, post-demonstration cleanup activities, and any other conditions which the department finds may be necessary under WAC 173-303-655 (3)(c). The department will include conditions in the second phase of the facility permit to attempt to meet all WAC 173-303-655 requirements pertaining to unit design, construction, operation, and maintenance. The department will establish these conditions in the second phase of the permit based upon the substantial but incomplete or inconclusive information contained in the Part B application.

(i) The first phase of the permit will be effective as provided in WAC 173-303-840 (8)(b).

(ii) The second phase of the permit will be effective as provided in (d) of this subsection.

(c) When the owner or operator who has been issued a two-phase permit has completed the treatment demonstration, he must submit to the department a certification, signed by a person authorized to sign a permit application or report under WAC 173-303-810(12), that the field tests or laboratory analyses have been carried out in accordance with the conditions specified in phase one of the permit for conducting such tests or analyses. The owner or operator must also submit all data collected during the field tests or laboratory analyses within thirty days of completion of those tests or analyses unless the department approves a later date.

(d) If the department determines that the results of the field tests or laboratory analyses meet the requirements of WAC 173-303-655(3), it will modify the second phase of the permit to incorporate any requirements necessary for operation of the facility in compliance with WAC 173-303-655, based upon the results of the field tests or laboratory analyses.

(i) This permit modification may proceed under WAC 173-303-830(4) or otherwise will proceed as a modification under WAC 173-303-830 (3)(a)(ii). If such modifications are necessary, the second phase of the permit will become effective only after those modifications have been made.

(ii) If no modifications of the second phase of the permit are necessary, the department will give notice of its final decision to the permit applicant and to each person who submitted written comments on the phased permit or who requested notice of the final decision on the second phase of the permit. The second phase of the permit then will become effective as specified in WAC 173-303-840 (8)(b).

(iii) Reserve.

(e) If the department determines that the results of the field tests or laboratory analyses do not meet the requirements of WAC 173-303-655(3), the second phase of the permit will not become effective, and the department will, as the situation warrants, either:

(i) Modify the permit according to WAC 173-303-830 (3) to allow for additional field tests or laboratory analyses; or

(ii) Proceed to terminate the permit according to WAC 173-303-840.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-808, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-808, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-808, filed 4/18/84.]

WAC 173-303-809 Research, development and demonstration permits. (1) The department may issue a research, development, and demonstration permit for any dangerous waste treatment facility which proposes to utilize an innovative and experimental dangerous waste treatment technology or process for which permit standards for such experimental activity have not been promulgated under WAC 173-303-500 through 173-303-695. Any such permit will include such terms and conditions as will assure protection of human health and the environment. Such permits:

(a) Will provide for the construction of such facilities as necessary, and for operation of the facility for not longer than one year unless renewed as provided in subsection (4) of this section; and

(b) Will provide for the receipt and treatment by the facility of only those types and quantities of dangerous waste which the department deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment; and

(c) Will include such requirements as the department deems necessary to protect human health and the environment (including, but not limited to, requirements regarding monitoring, operation, financial responsibility, closure, and remedial action), and such requirements as the department deems necessary regarding testing and providing of information to the department with respect to the operation of the facility.

(2) For the purpose of expediting review and issuance of permits under this section, the department may, consistent with the protection of human health and the environment, modify or waive permit application and permit issuance requirements in WAC 173-303-800 through 173-303-840 except that there may be no modification or waiver of regula-

tions regarding financial responsibility (including insurance) or of procedures regarding public participation.

(3) The department may order an immediate termination of all operations at the facility at any time it determines that termination is necessary to protect human health and the environment.

(4) Any permit issued under this section may be renewed not more than three times. Each such renewal will be for a period of not more than one year.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-809, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-809, filed 6/26/87; 84-14-031 (Order DE 84-22), § 173-303-809, filed 6/27/84.]

WAC 173-303-810 General permit conditions. (1) Purpose and applicability. This section sets forth the general permit conditions that are applicable to all permits, except interim status permits and permits by rule, to assure compliance with this chapter. If the conditions of this section are incorporated in a permit by reference, a specific citation to this section must be given in the permit.

(2) Duty to comply. The permittee must comply with all conditions of his permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee need not comply with the conditions of his permit to the extent and for the duration such noncompliance is authorized in an emergency permit.

(3) Duty to reapply. If the permittee wishes to continue an activity regulated by the permit after its expiration date, the permittee must apply for and obtain a new permit.

(4) Duty to halt or reduce activity. A permittee who has not complied with his permit, and who subsequently is subject to enforcement actions, may not argue that it would have been necessary to halt or reduce the permitted activities in order to maintain compliance with the conditions of the permit.

(5) Duty to mitigate. The permittee must take all steps required by the department to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit.

(6) Proper operation and maintenance. The permittee must at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

(7) Permit actions. The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance, does not stay any permit condition.

(8) Effect of a permit.

(a) Compliance with a final facility permit during its term constitutes compliance for the purpose of enforcement with chapter 173-303 WAC except for permit modifications and those requirements not included in the permit that:

(i) Become effective by statute;

(ii) Are adopted under 40 CFR Part 268 restricting the placement of dangerous waste in or on the land;

(iii) Are adopted under WAC 173-303-650 through 173-303-665 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, CQA programs, monitoring, action leakage rates, and response action plans, and will be implemented through the procedures of WAC 173-303-830 Class *1 permit modifications; or

(iv) Are adopted under 40 CFR Subparts AA, BB, or CC which are incorporated by reference at WAC 173-303-400 (3)(a) limiting air emissions.

(b) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

(c) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local laws or regulations.

(9) Duty to provide information. The permittee must furnish to the department, within a reasonable time, any information which it may request to determine whether cause exists for modifying, revoking and reissuing, or terminating a permit, or to determine compliance with a permit. The permittee must also furnish to the department, upon request, copies of records required to be kept by the permit.

(10) Inspection and entry. The permittee must allow representatives of the department, upon the presentation of proper credentials, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and

(d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by chapter 173-303 WAC, any substances or parameters at any location.

(11) Monitoring and monitoring records.

(a) Reserve.

(b) Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

(c) The permittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, the certification required by WAC 173-303-380 (1)(q), and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the department at

any time. The permittee must maintain records from all ground water monitoring wells and associated ground water surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

(d) Records of monitoring information must include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(e) The permittee must maintain records from all ground water monitoring wells and associated ground water surface elevations for the active life of the facility, and for disposal facilities for the post-closure period as well.

(12) Signatory requirement. All applications, reports, or information submitted to the department must be signed in accordance with this subsection and must be certified according to subsection (13) of this section.

(a) Applications. When a dangerous waste facility is owned by one person, but is operated by another person, then the operator will be the permit applicant and responsible for developing the permit application and all accompanying materials, except that the owner must also sign and certify the permit application. Permit applications must be signed as follows:

(i) For a corporation: By a responsible corporate officer. For the purposes of this subsection, a responsible corporate officer means:

(A) A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(B) The manager of one or more manufacturing, production or operating facilities employing more than two hundred fifty persons or having gross annual sales or expenditures exceeding twenty-five million dollars (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(ii) For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

(iii) For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes:

(A) The chief executive officer of the agency; or

(B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(b) Reports. All reports required by permits and other information requested by the department must be signed by a person described in (a) of this subsection, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(i) The authorization is made in writing by a person described in (a) of this subsection;

(ii) The authorization specifies either an individual or a position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(iii) The written authorization is submitted to the department.

(c) Changes to authorization. If an authorization under (b) of this subsection is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) of this subsection must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

(13) Certification.

(a) Except as provided in (b) of this subsection, any person signing the documents required under (a) or (b) of subsection (12) of this section must make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(b) When a dangerous waste facility is owned by one person, but is operated by another person, then the permit application must be certified as follows:

(i) The operator must make the certification described under (a) of this subsection; and

(ii) The owner must make the following certification:

"I certify under penalty of law that I own the real property described in, and am aware of the contents of, this permit application, and that I have received a copy of this application. As owner of the real property, I understand that I am responsible for complying with any requirements of chapter 173-303 WAC with which only I am able to comply, and that there are significant penalties for failure to comply with such requirements."

(14) Reporting. The following reports must be provided:

(a) Planned changes. The permittee must give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. For a new TSD facility and for a facility being modified, the permittee may not treat, store, or dispose of dangerous waste in the new or modified portion of the facility until:

(i) The permittee has submitted to the department by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and either

(Note: In certifying construction or modification, the independent qualified registered professional engineer is responsible only for certifying those portions of the facility which are identified in chapter 173-303 WAC as specifically requiring certification by an independent registered professional engineer.)

(ii) The department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or

(iii) Within fifteen days of the date of submission of the letter, the permittee has not received notice from the department of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of dangerous waste.

(b) Anticipated noncompliance. The permittee must give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee may not treat, store, or dispose of dangerous waste; and for a facility being modified, the permittee may not treat, store, or dispose of dangerous waste in the modified portion of the facility except as provided in WAC 173-303-830(4).

(c) Transfers. The permit is not transferable to any person except after notice to the department. The department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.

(d) Monitoring reports. Monitoring results (including monitoring of the facility's impacts as required by the applicable sections of this chapter) must be reported at the intervals specified elsewhere in the permit.

(e) Compliance schedules. Reports of permit compliance or noncompliance or any progress reports on interim and final permit requirements contained in any compliance schedule must be submitted no later than fourteen days following each scheduled date.

(f) Immediate reporting. The permittee must immediately report any noncompliance which may endanger health or the environment. Information must be provided orally to the department as soon as the permittee becomes aware of the circumstances. A written submission must also be provided within five days of the time the permittee becomes aware of the circumstances provided that the department may waive the written submission requirement in favor of a written report, to be submitted within fifteen days. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Information which must be reported immediately must include:

(i) Release of dangerous waste that may cause an endangerment to drinking water supplies or ground or surface waters;

(ii) Any information of a release or discharge of dangerous waste, fire, or explosion from the permitted facility which could threaten the environment or human health outside the facility;

(iii) The following description of any such occurrence:

(A) Name, address, and telephone number of the owner or operator;

(B) Name, address, and telephone number of the facility;

(C) Date, time, and type of incident;

(D) Name and quantity of material(s) involved;

(E) The extent of injuries, if any;

(F) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

(G) Estimated quantity and disposition of recovered material that resulted from the incident.

(g) Other noncompliance. The permittee must report all instances of noncompliance not reported under (d), (e), and (f) of this subsection, at the time monitoring reports are submitted. The reports shall contain the information listed in (f) of this subsection.

(h) Other information. Where the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the department, he must promptly submit this information.

(i) Other reports. In addition, the following reports are required when appropriate:

(i) Manifest discrepancy report as required by WAC 173-303-370(4);

(ii) Unmanifested waste report as required by WAC 173-303-390(1); and

(iii) Annual report as required by WAC 173-303-390(2).

(15) Confidentiality.

(a) Information submitted by the owner/operator of a facility identified as confidential will be treated in accordance with chapter 42.17 RCW and RCW 43.21A.160.

(b) Proprietary information can be held confidential if:

(i) The processes are unique to the owner/operator's business or the owner/operator's competitive position may be adversely affected if the information is released to the public or to a competitor; and

(ii) The director determines that granting the owner/operator's request is not detrimental to the public interest and is in accord with the policies and purposes of chapter 43.21A RCW.

(c) Claims of confidentiality for permit application information must be substantiated at the time the application is submitted and in the manner prescribed in the application instructions. Claims of confidentiality for the name and address of any permit applicant will be denied.

(d) If a submitter does not provide substantiation, the department will notify the owner/operator by certified mail of the requirement to do so. If the department does not receive the substantiation within ten days after the submitter receives the notice, the department will place the unsubstantiated information in the public file.

(e) The department will determine if the owner/operator's request meets the confidential information criteria.

(16) General permit conditions. Information repository. The director may require the permittee to establish and maintain an information repository at any time, based on the factors set forth in WAC 173-303-281 (5)(b). The information repository will be governed by the provisions in WAC 173-303-281 (5)(c) through (f).

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-810, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-810, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-810, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-810, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-810, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and

RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-810, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-810, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-810, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-810, filed 2/10/82.]

WAC 173-303-811 Permits for boilers and industrial furnaces burning hazardous waste. The introductory paragraph of 40 CFR 270.66 is incorporated by reference. It applies to an owner or operator of a cement or lightweight aggregate kiln that demonstrates compliance with the air emission standards and limitations in 40 CFR part 63, subpart EEE.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-811, filed 11/30/04, effective 1/1/05.]

WAC 173-303-815 Facility-specific permit conditions. (1) **Requirements for recording and reporting of monitoring results.**

All permits must specify:

(a) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);

(b) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring;

(c) Applicable reporting requirements based upon the impact of the regulated activity and as specified in this chapter. Reporting must be no less frequent than specified in this chapter.

(2) **Establishing permit conditions.**

(a) In addition to conditions required in all permits (WAC 173-303-810 (1) through (14)), the director will establish conditions, as required on a case-by-case basis, in permits under WAC 173-303-806(11) (duration of permits), WAC 173-303-815(3) (Schedules of compliance), and WAC 173-303-815(1) (monitoring).

(b)(i) Each permit must include permit conditions necessary to achieve compliance with the Hazardous Waste Management Act chapter 70.105 RCW, this chapter and RCRA Subtitle C. In satisfying this provision, the director may incorporate applicable requirements of this chapter directly into the permit or establish other permit conditions that are based on this chapter.

(ii) Each permit issued under this chapter must contain terms and conditions as the director determines necessary to protect human health and the environment.

(iii) For a state-issued permit, an applicable requirement is a state statutory or regulatory requirement that takes effect prior to final administrative disposition of a permit. (Note: For a permit issued by EPA, an applicable requirement is a statutory or regulatory requirement (including any interim final regulation) which takes effect prior to the issuance of the permit (except as provided in 40 CFR Section 124.86(c) for RCRA permits being processed under Subpart E or F of part 124). 40 CFR Section 124.14 (reopening of comment period) provides a means for reopening EPA permit proceedings at the discretion of the director where new requirements become effective during the permitting process and are of sufficient magnitude to make additional proceedings desirable). For state and EPA administered programs, an applicable requirement is also any requirement that takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in WAC 173-303-830(3).

(iv) New or reissued permits, and to the extent allowed under WAC 173-303-830(3), modified or revoked and reissued permits, must incorporate each of the applicable requirements referenced in this subsection and in WAC 173-303-810(11).

(v) Incorporation. All permit conditions must be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements must be given in the permit.

(3) **Schedules of compliance.**

(a) The permit may, when appropriate, specify a schedule of compliance leading to compliance with this chapter.

(i) Time for compliance. Any schedules of compliance under this section require compliance as soon as possible.

(ii) Interim dates. Except as provided in (b)(i)(B) of this subsection, if a permit establishes a schedule of compliance which exceeds one year from the date of permit issuance, the schedule must set forth interim requirements and the dates for their achievement.

(A) The time between interim dates must not exceed one year.

(B) If the time necessary for completion of any interim requirement is more than one year and is not readily divisible into stages for completion, the permit must specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(iii) Reporting. The permit must be written to require that no later than fourteen days following each interim date and the final date of compliance, the permittee must notify the director in writing, of its compliance or noncompliance with the interim or final requirements.

(b) Alternative schedules of compliance. A dangerous waste permit applicant or permittee may cease conducting regulated activities (by receiving a terminal volume of hazardous waste and, for treatment and storage dangerous waste management facilities, closing pursuant to applicable requirements; and, for disposal dangerous waste management facilities, closing and conducting post-closure care pursuant to applicable requirements) rather than continue to operate and meet permit requirements as follows:

(i) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

(A) The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

(B) The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.

(ii) If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a sched-

ule leading to termination which will ensure timely compliance with applicable requirements.

(iii) If the permittee is undecided whether to cease conducting regulated activities, the director may issue or modify a permit to contain two schedules as follows:

(A) Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the decision is to continue conducting regulated activities;

(B) One schedule shall lead to timely compliance with applicable requirements;

(C) The second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements;

(D) Each permit containing two schedules shall include a requirement that after the permittee has made a final decision under (b)(iii)(A) of this subsection it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.

(iv) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the director, such as resolution of the board of directors of a corporation.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-815, filed 1/12/98, effective 2/12/98. Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-815, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-815, filed 2/10/82.]

WAC 173-303-820 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-820, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-820, filed 2/10/82.]

WAC 173-303-825 Reserved.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-825, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-825, filed 2/10/82.]

WAC 173-303-830 Permit changes. (1) Purpose and applicability. This section describes the types of permit changes that may be made to all permits issued by the director. This section does not apply to permits by rule or interim status permits.

(2) Transfer of permits.

(a) A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under (b) of this subsection or subsection (3) of this section) to identify the new permittee and incorporate such other requirements as may be necessary under the appropriate act.

(b) Changes in the ownership or operational control of a facility may be made as a Class 1 modification with prior written approval of the director in accordance with subsection (4) of this section. The new owner or operator must submit a revised permit application no later than ninety days prior to the scheduled change. A written agreement containing a specific date for transfer of permit responsibility between the current and new permittees must also be submitted to the director. When a transfer of ownership or operational control occurs, the old owner or operator must comply with the requirements of WAC 173-303-620 (Financial requirements) until the new owner or operator has demonstrated that he or she is complying with the financial requirements. The new owner or operator must demonstrate compliance with the financial requirements within six months of the date of the change of ownership or operational control of the facility. Upon demonstration to the director by the new owner or operator of compliance with the financial requirements, the director will notify the old owner or operator that he or she no longer needs to comply with the financial requirements as of the date of demonstration.

(3) Modification or revocation and reissuance of permits. When the director receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit, receives a request for revocation and reissuance, or conducts a review of the permit file), the director may determine whether or not one or more of the causes listed in (a) and (b) of this subsection for modification or revocation and reissuance or both exist. If cause exists, the director may modify or revoke and reissue the permit accordingly, subject to the limitations of (c) of this subsection, and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. All other aspects of the existing permit remain in effect for the duration of the unmodified permit. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. During any revocation and reissuance proceeding, the permittee must comply with all conditions of the existing permit until a new final permit is reissued. If cause does not exist under this subsection, the director will not modify or revoke and reissue the permit, except on request of the permittee. If a permit modification is requested by the permittee, the director will approve or deny the request according to the procedures of subsection (4) of this section. Otherwise, a draft permit must be prepared and public review provided in accordance with WAC 173-303-840.

(a) Causes for modification. The following are causes for modification, but not revocation and reissuance, of permits; the following may be causes for revocation and reissuance, as well as modification, when the permittee requests or agrees:

(i) Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;

(ii) Information. Permits may be modified during their terms if the director receives information that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance;

(iii) New statutory requirements or regulations. The standards or regulations on which the permit was based have been changed by statute, through adoption of new or amended

standards or regulations or by judicial decision after the permit was issued.

(iv) Compliance schedules. The director determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage, or other events over which the permittee has little or no control and for which there is no reasonably available remedy;

(v) Notwithstanding any other provision in this section, when a permit for a land disposal facility is reviewed by the director under 173-303-806 (11)(d), the director will modify the permit as necessary to assure that the facility continues to comply with the currently applicable requirements in this chapter.

(b) Causes for modification or revocation and reissuance. The following are causes to modify, or alternatively, revoke and reissue a permit:

(i) Cause exists for termination under WAC 173-303-830(5) for final facility permits, and the director determines that modification or revocation and reissuance is appropriate; or

(ii) The director has received notification of a proposed transfer of the permit.

(c) Reserve.

(4) Permit modification at the request of the permittee.

(a) Class 1 modifications.

(i) Except as provided in (a)(ii) of this subsection, the permittee may put into effect Class 1 modifications listed in Appendix I of this section under the following conditions:

(A) The permittee must notify the director concerning the modification by certified mail or other means that establish proof of delivery within seven calendar days after the change is put into effect. This notice must specify the changes being made to permit conditions or supporting documents referenced by the permit and must explain why they are necessary. Along with the notice, the permittee must provide the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(B) The permittee must send a notice of the modification to all persons on the facility mailing list, maintained by the director in accordance with WAC 173-303-840 (3)(e)(i)(D), and the appropriate units of state and local government, as specified in WAC 173-303-840 (3)(e)(i)(E). This notification must be made within ninety calendar days after the change is put into effect. For the Class 1 modifications that require prior director approval, the notification must be made within ninety calendar days after the director approves the request.

(C) Any person may request the director to review, and the director may for cause reject, any Class 1 modification. The director must inform the permittee by certified mail that a Class 1 modification has been rejected, explaining the reasons for the rejection. If a Class 1 modification has been rejected, the permittee must comply with the original permit conditions.

(ii) Class 1 permit modifications identified in Appendix I by an asterisk may be made only with the prior written approval of the director.

(iii) For a Class 1 permit modification, the permittee may elect to follow the procedures in (b) of this subsection for Class 2 modifications instead of the Class 1 procedures. The permittee must inform the director of this decision in the notice required in (b)(i) of this subsection.

(b) Class 2 modifications.

(i) For Class 2 modifications, listed in Appendix I of this section, the permittee must submit a modification request to the director that:

(A) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

(B) Identifies that the modification is a Class 2 modification;

(C) Explains why the modification is needed; and

(D) Provides the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(ii) The permittee must send a notice of the modification request to all persons on the facility mailing list maintained by the director and to the appropriate units of state and local government as specified in WAC 173-303-840 (3)(e)(i)(E) and must publish this notice in a major local newspaper of general circulation. This notice must be mailed and published within seven days before or after the date of submission of the modification request, and the permittee must provide to the director evidence of the mailing and publication. The notice must include:

(A) Announcement of a sixty-day comment period, in accordance with (b)(v) of this subsection, and the name and address of a departmental contact to whom comments must be sent;

(B) Announcement of the date, time, and place for a public meeting held in accordance with (b)(iv) of this subsection;

(C) Name and telephone number of the permittee's contact person;

(D) Name and telephone number of a departmental contact person;

(E) Location where copies of the modification request and any supporting documents can be viewed and copied; and

(F) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the department of ecology contact person."

(iii) The permittee must place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

(iv) The permittee must hold a public meeting no earlier than fifteen days after the publication of the notice required in (b)(ii) of this subsection and no later than fifteen days before the close of the sixty-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

(v) The public will be provided sixty days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the department of ecology contact identified in the public notice.

(vi)(A) No later than ninety days after receipt of the notification request, the director must:

(I) Approve the modification request, with or without changes, and modify the permit accordingly;

(II) Deny the request;

(III) Determine that the modification request must follow the procedures in (c) of this subsection for Class 3 modifications for the following reasons:

(AA) There is significant public concern about the proposed modification; or

(BB) The complex nature of the change requires the more extensive procedures of Class 3;

(IV) Approve the request, with or without changes, as a temporary authorization having a term of up to one hundred eighty days; or

(V) Notify the permittee that he or she will decide on the request within the next thirty days.

(B) If the director notifies the permittee of a thirty-day extension for a decision, the director must, no later than one hundred twenty days after receipt of the modification request:

(I) Approve the modification request, with or without changes, and modify the permit accordingly;

(II) Deny the request; or

(III) Determine that the modification request must follow the procedures in (c) of this subsection for Class 3 modifications for the following reasons:

(AA) There is significant public concern about the proposed modification; or

(BB) The complex nature of the change requires the more extensive procedures of Class 3.

(IV) Approve the request, with or without changes, as a temporary authorization having a term of up to one hundred eighty days.

(C) If the director fails to make one of the decisions specified in (b)(vi)(B) of this subsection by the one hundred twentieth day after receipt of the modification request, the permittee is automatically authorized to conduct the activities described in the modification request for up to one hundred eighty days, without formal departmental action. The authorized activities must be conducted as described in the permit modification request and must be in compliance with all appropriate standards of 40 CFR Part 265 (as referenced by WAC 173-303-400). If the director approves, with or without changes, or denies the modification request during the term of the temporary or automatic authorization provided for in (b)(vi)(A), (B), or (C) of this subsection, such action cancels the temporary or automatic authorization.

(D)(I) In the case of an automatic authorization under (b)(vi)(C) of this subsection, or a temporary authorization under (b)(vi)(A)(IV) or (B)(IV) of this subsection, if the director has not made a final approval or denial of the modification request by the date fifty days prior to the end of the temporary or automatic authorization, the permittee must within seven days of that time send a notification to persons on the facility mailing list, and make a reasonable effort to notify other persons who submitted written comments on the modification request, that:

(AA) The permittee has been authorized temporarily to conduct the activities described in the permit modification request; and

(BB) Unless the director acts to give final approval or denial of the request by the end of the authorization period, the permittee will receive authorization to conduct such activities for the life of the permit.

(II) If the owner/operator fails to notify the public by the date specified in (b)(vi)(D)(I) of this subsection, the effective date of the permanent authorization will be deferred until fifty days after the owner/operator notifies the public.

(E) Except as provided in (b)(vi)(G) of this subsection, if the director does not finally approve or deny a modification request before the end of the automatic or temporary authorization period or reclassify the modification as a Class 3, the permittee is authorized to conduct the activities described in the permit modification request for the life of the permit unless modified later under subsection (3) or (4) of this section. The activities authorized under this subsection (b)(vi)(E) must be conducted as described in the permit modification request and must be in compliance with all appropriate standards of 40 CFR Part 265 (as referenced by WAC 173-303-400).

(F) In making a decision to approve or deny a modification request, including a decision to issue a temporary authorization or to reclassify a modification as a Class 3, the director must consider all written comments submitted during the public comment period and must respond in writing to all significant comments in his or her decision.

(G) With the written consent of the permittee, the director may extend indefinitely or for a specified period the time periods for final approval or denial of a modification request or for reclassifying a modification as a Class 3.

(vii) The director may deny or change the terms of a Class 2 permit modification request under (b)(6)(i) through (iii) of this subsection for the following reasons:

(A) The modification request is incomplete;

(B) The requested modification does not comply with the appropriate requirements of WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680 or other applicable requirements; or

(C) The conditions of the modification fail to protect human health and the environment.

(viii) The permittee may perform any construction associated with a Class 2 permit modification request beginning sixty days after the submission of the request unless the director establishes a later date for commencing construction and informs the permittee in writing before day sixty.

(c) Class 3 modifications.

(i) For Class 3 modifications listed in Appendix I of this section, the permittee must submit a modification request to the director that:

(A) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

(B) Identifies that the modification is a Class 3 modification;

(C) Explains why the modification is needed; and

(D) Provides the applicable information required by WAC 173-303-805, 173-303-806, 173-303-807, and 173-303-808.

(ii) The permittee must send a notice of the modification request to all persons on the facility mailing list maintained by the director and to the appropriate units of state and local government as specified in WAC 173-303-840 (3)(e)(i)(D) and must publish this notice in a major local newspaper of general circulation. This notice must be mailed and published within seven days before or after the date of submission of the modification request, and the permittee must provide to

the director evidence of the mailing and publication. The notice must include:

(A) Announcement of a sixty-day comment period, and a name and address of an agency contact to whom comments must be sent;

(B) Announcement of the date, time, and place for a public meeting on the modification request, in accordance with (c)(4) of this subsection;

(C) Name and telephone number of the permittee's contact person;

(D) Name and telephone number of a departmental contact person;

(E) Location where copies of the modification request and any supporting documents can be viewed and copied; and

(F) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the department of ecology contact person."

(iii) The permittee must place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

(iv) The permittee must hold a public meeting no earlier than fifteen days after the publication of the notice required in (c)(ii) of this subsection and no later than fifteen days before the close of the sixty-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

(v) The public will be provided at least sixty days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the department of ecology contact identified in the notice.

(vi) After the conclusion of the sixty-day comment period, the director must grant or deny the permit modification request according to the permit modification procedures of WAC 173-303-840. In addition, the director must consider and respond to all significant written comments received during the sixty-day comment period.

(d) Other modifications.

(i) In the case of modifications not explicitly listed in Appendix I of this section, the permittee may submit a Class 3 modification request to the department, or he or she may request a determination by the director that the modification should be reviewed and approved as a Class 1 or Class 2 modification. If the permittee requests that the modification be classified as a Class 1 or 2 modification, he or she must provide the department with the necessary information to support the requested classification.

(ii) The director will make the determination described in (d)(i) of this subsection as promptly as practicable. In determining the appropriate class for a specific modification, the director will consider the similarity of the modification to other modifications codified in Appendix I and the following criteria:

(A) Class 1 modifications apply to minor changes that keep the permit current with routine changes to the facility or its operation. These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment. In the case of Class 1 modifications, the director may require prior approval.

(B) Class 2 modifications apply to changes that are necessary to enable a permittee to respond, in a timely manner, to:

(I) Common variations in the types and quantities of the wastes managed under the facility permit;

(II) Technological advancements; and

(III) Changes necessary to comply with new regulations, where these changes can be implemented without substantially changing design specifications or management practices in the permit.

(C) Class 3 modifications substantially alter the facility or its operation.

(e) Temporary authorizations.

(i) Upon request of the permittee, the director may, without prior public notice and comment, grant the permittee a temporary authorization in accordance with this subsection. Temporary authorizations must have a term of not more than one hundred eighty days.

(ii)(A) The permittee may request a temporary authorization for:

(I) Any Class 2 modification meeting the criteria in (e)(iii)(B) of this subsection; and

(II) Any Class 3 modification that meets the criteria in (e)(iii)(B)(I) or (II) of this subsection; or that meets the criteria in (e)(iii)(B)(III) through (V) of this subsection and provides improved management or treatment of a dangerous waste already listed in the facility permit.

(B) The temporary authorization request must include:

(I) A description of the activities to be conducted under the temporary authorization;

(II) An explanation of why the temporary authorization is necessary; and

(III) Sufficient information to ensure compliance with the standards in WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680.

(C) The permittee must send a notice about the temporary authorization request to all persons on the facility mailing list maintained by the director and to appropriate units of state and local governments as specified in WAC 173-303-840 (3)(e)(i)(D). This notification must be made within seven days of submission of the authorization request.

(iii) The director will approve or deny the temporary authorization as quickly as practical. To issue a temporary authorization, the director must find:

(A) The authorized activities are in compliance with the standards of WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680.

(B) The temporary authorization is necessary to achieve one of the following objectives before action is likely to be taken on a modification request:

(I) To facilitate timely implementation of closure or corrective action activities;

(II) To allow treatment or storage in tanks, containers, or in containment buildings in accordance with 40 CFR Part 268;

(III) To prevent disruption of ongoing waste management activities;

(IV) To enable the permittee to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or

(V) To facilitate other changes to protect human health and the environment.

(iv) A temporary authorization may be reissued for one additional term of up to one hundred eighty days provided that the permittee has requested a Class 2 or 3 permit modification for the activity covered in the temporary authorization, and:

(A) The reissued temporary authorization constitutes the director's decision on a Class 2 permit modification in accordance with (b)(vi)(A)(IV) or (B)(IV) of this subsection; or

(B) The director determines that the reissued temporary authorization involving a Class 3 permit modification request is warranted to allow the authorized activities to continue while the modification procedures of (c) of this subsection are conducted.

(f) Public notice and appeals of permit modification decisions.

(i) The director will notify persons on the facility mailing list and appropriate units of state and local government within ten days of any decision under this section to grant or deny a Class 2 or 3 permit modification request. The director will also notify such persons within ten days after an automatic authorization for a Class 2 modification goes into effect under (b)(vi)(C) or (E) of this subsection.

(ii) The director's decision to grant or deny a Class 2 or 3 permit modification request under this section may be appealed under the permit appeal procedures of WAC 173-303-845.

(iii) An automatic authorization that goes into effect under (b)(vi)(C) or (E) of this subsection may be appealed under the permit appeal procedures of WAC 173-303-845; however, the permittee may continue to conduct the activities pursuant to the automatic authorization until the appeal has been granted pursuant to WAC 173-303-845, notwithstanding the provisions of WAC 173-303-840 (8)(b).

(g) Newly regulated wastes and units.

(i) The permittee is authorized to continue to manage wastes listed or identified as dangerous under WAC 173-303-070, or to continue to manage dangerous waste in units newly regulated as dangerous waste management units, if:

(A) The unit was in existence as a dangerous waste facility with respect to the newly listed or identified waste or newly regulated waste management unit on the effective date of the final rule listing or identifying the waste, or regulating the unit;

(B) The permittee submits a Class 1 modification request on or before the date on which the waste or unit becomes subject to the new requirements;

(C) The permittee is in compliance with the applicable standards of 40 CFR Part 265 (as referenced in WAC 173-303-400) and Part 266 (as referenced in WAC 173-303-510);

(D) The permittee also submits a complete Class 2 or 3 permit modification request within one hundred eighty days of the effective date of the rule listing or identifying the waste, or subjecting the unit to management standards under this chapter; and

(E) In the case of land disposal units, the permittee certifies that each such unit is in compliance with all applicable requirements of 40 CFR Part 265 for ground water monitoring and financial responsibility (as referenced in WAC 173-303-400) on the date twelve months after the effective date of the rule identifying or listing the waste as dangerous, or regulating the unit as a dangerous waste management unit. If the owner or operator fails to certify compliance with all these requirements, he or she will lose authority to operate under this section.

(ii) New wastes or units added to a facility's permit under this subsection do not constitute expansions for the purpose of the twenty-five percent capacity expansion limit for Class 2 modifications.

(h) Military dangerous waste munitions treatment and disposal. The permittee is authorized to continue to accept waste military munitions notwithstanding any permit conditions barring the permittee from accepting off-site wastes, if:

(i) The facility was in existence as a dangerous waste facility, and the facility was already permitted to handle the waste military munitions, on the date when the waste military munitions became subject to dangerous waste regulatory requirements;

(ii) On or before the date when the waste military munitions become subject to dangerous waste regulatory requirements, the permittee submits a Class 1 modification request to remove or amend the permit provision restricting the receipt of off-site waste munitions; and

(iii) The permittee submits a complete Class 2 modification request within one hundred eighty days of the date when the waste military munitions became subject to dangerous waste regulatory requirements.

(i) Permit modification list. The director must maintain a list of all approved permit modifications and must publish a notice once a year in a statewide newspaper that an updated list is available for review.

(j) *Combustion facility changes to meet 40 CFR part 63 MACT standards*. (Note that 40 CFR part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). If you are subject to Part 63, you must get an air permit from ecology or the local air authority.) The following procedures apply to hazardous waste combustion facility permit modifications requested under Appendix I of this section, section L.9.

(i) Facility owners or operators must have complied with the Notification of Intent to Comply requirements of 40 CFR 63.1210 that were in effect prior to October 11, 2000 (see 40 CFR Part 63 revised as of July 1, 2000) in order to request a permit modification under this section.

(ii) If the department does not approve or deny the request within ninety days of receiving it, the request will be deemed approved. The director may extend this ninety-day deadline one time for up to thirty days by notifying the facility owner or operator.

APPENDIX I

Modifications	Class
A. General Permit Provisions	
1. Administrative and informational changes .	1
2. Correction of typographical errors	1
3. Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls)	1
4. Changes in the frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee:	

Modifications	Class
a. To provide for more frequent monitoring, reporting, sampling, or maintenance	1
b. Other changes	2
5. Schedule of compliance:	
a. Changes in interim compliance dates, with prior approval of the director	[1]1
b. Extension of final compliance date	3
6. Changes in expiration date of permit to allow earlier permit termination, with prior approval of the director	[1]1
7. Changes in ownership or operational control of a facility, provided the procedures of subsection (2)(b) of this section are followed	[1]1
8. Changes to remove permit conditions that are no longer applicable (i.e., because the standards upon which they are based are no longer applicable to the facility).	[1]1
B. General Facility Standards	
1. Changes to waste sampling or analysis methods:	
a. To conform with agency guidance or regulations	1
b. To incorporate changes associated with F039 (multisource leachate) sampling or analysis methods	[1]1
c. To incorporate changes associated with underlying dangerous constituents in ignitable or corrosive wastes	[1]1
d. Other changes	2
2. Changes to analytical quality assurance/control plan:	
a. To conform with agency guidance or regulations	1
b. Other changes	2
3. Changes in procedures for maintaining the operating record	1
4. Changes in frequency or content of inspection schedules	2
5. Changes in the training plan:	
a. That affect the type or decrease the amount of training given to employees	2
b. Other changes	1
6. Contingency plan:	
a. Changes in emergency procedures (i.e., spill or release response procedures)	2
b. Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed	1
c. Removal of equipment from emergency equipment list	2
d. Changes in name, address, or phone number of coordinators or other persons or agencies identified in the plan	1
7. Construction quality assurance plan:	
a. Changes that the CQA officer certifies in the operating record will provide equivalent or better certainty that the unit components meet the design specification	1
b. Other changes	2

Note: When a permit modification (such as introduction of a new unit) requires a change in facility plans or other general facility standards, that change will be reviewed under the same procedures as the permit modification.

C. Ground Water Protection	
1. Changes to wells:	
a. Changes in the number, location, depth, or design of upgradient or downgradient wells of permitted ground water monitoring system	2
b. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well	1
2. Changes in ground water sampling or analysis procedures or monitoring schedule, with prior approval of the director	[1]1
3. Changes in statistical procedure for determining whether a statistically significant change in ground water quality between upgradient and downgradient wells has occurred, with prior approval of the director	[1]1
4. Changes in point of compliance	[1]2
5. Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs):	
a. As specified in the ground water protection standard	3
b. As specified in the detection monitoring program	2
6. Changes to a detection monitoring program as required by WAC 173-303-645(9), unless otherwise specified in this appendix	2
7. Compliance monitoring program:	
a. Addition of compliance monitoring program as required by WAC 173-303-645 (9) and (10)	3
b. Changes to a compliance monitoring program as required by WAC 173-303-645(10), unless otherwise specified in this appendix	2
8. Corrective action program:	
a. Addition of a corrective action program as required by WAC 173-303-645 (10)(i)(ii) and (11)	3
b. Changes to a corrective action program as required by WAC 173-303-645 (11)(h), unless otherwise specified in this appendix	2
D. Closure	
1. Changes to the closure plan:	
a. Changes in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility, with prior approval of the director	[1]1
b. Changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period, with prior approval of the director	[1]1
c. Changes in the expected year of final closure, where other permit conditions are not changed, with prior approval of the director	[1]1
d. Changes in procedures for decontamination of facility equipment or structures, with prior approval of the director	[1]1

e. Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this appendix 2

f. Extension of the closure period to allow a landfill, surface impoundment, or land treatment unit to receive nondangerous wastes after final receipt of dangerous wastes under WAC 173-303-610 (4)(d) and (e) 2

2. Creation of a new landfill unit as part of closure 3

3. Addition of the following new units to be used temporarily for closure activities:

a. Surface impoundments 3

b. Incinerators 3

c. Waste piles that do not comply with WAC 173-303-660 (1)(c) 3

d. Waste piles that comply with WAC 173-303-660 (1)(c) 2

e. Tanks or containers (other than specified below) 2

f. Tanks used for neutralization, dewatering, phase separation, or component separation, with prior approval of the director . . . . . [1]1

g. Staging piles 2

E. Post-Closure

1. Changes in name, address, or phone number of contact in post-closure plan 1

2. Extension of post-closure care period 2

3. Reduction in the post-closure care period 3

4. Changes to the expected year of final closure, where other permit conditions are not changed 1

5. Changes in post-closure plan necessitated by events occurring during the active life of the facility, including partial and final closure 2

F. Containers

1. Modification or addition of container units:

a. Resulting in greater than 25% increase in the facility's container storage capacity, except as provided in F (1)(c) and F (4)(a) below 3

b. Resulting in up to 25% increase in the facility's container storage capacity, except as provided in F (1)(c) and F (4)(a) below 2

c. Or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), with prior approval of the director. This modification may also involve addition of new waste codes or narrative descriptions of wastes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) . . . . . [1]1

2:

a. Modification of a container unit without increasing the capacity of the unit 2

b. Addition of a roof to a container unit without alteration of the containment system 1

3. Storage of different wastes in containers:

a. That require additional or different management practices from those authorized in the permit, except as provided in F(4) below 3

b. That do not require additional or different management practices from those authorized in the permit 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

4. Storage or treatment of different wastes in containers:

a. That require addition of units or change in treatment process or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) . . . . . [1]1

b. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

G. Tanks

1:

a. Modification or addition of tank units resulting in greater than 25% increase in the facility's tank capacity, except as provided in G (1)(c), G (1)(d), and G (1)(e) below 3

b. Modification or addition of tank units resulting in up to 25% increase in the facility's tank capacity, except as provided in G (1)(d) and G (1)(e) below 2

c. Addition of a new tank that will operate for more than 90 days using any of the following physical or chemical treatment technologies: Neutralization, dewatering, phase separation, or component separation 2

d. After prior approval of the director, addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: Neutralization, dewatering, phase separation, or component separation . . . . . [1]1

e. Modification or addition of tank units or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), with prior approval of the director.

This modification may also involve addition of new waste codes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) . . . . . [1]1

2. Modification of a tank unit or secondary containment system without increasing the capacity of the unit 2

3. Replacement of a tank with a tank that meets the same design standards and has a capacity within +/- 10% of the replaced tank provided 1

-The capacity difference is no more than 1500 gallons,

-The facility's permitted tank capacity is not increased, and

-The replacement tank meets the same conditions in the permit.

4. Modification of a tank management practice 2

5. Management of different wastes in tanks:

a. That require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process from that authorized in the permit, except as provided in G (5)(c) below 3

b. That do not require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process than authorized in the permit, except as provided in G (5)(d) 2

c. That require addition of units or change in treatment processes or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii). The modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) . . . . . [1]1

(d) That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received waste of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

H. Surface Impoundments

1. Modification or addition of surface impoundment units that result in increasing the facility's surface impoundment storage or treatment capacity 3

2. Replacement of a surface impoundment unit 3

3. Modification of a surface impoundment unit without increasing the facility's surface impoundment storage or treatment capacity and without modifying the unit's liner, leak detection system, or leachate collection system 2

4. Modification of a surface impoundment management practice 2

5. Treatment, storage, or disposal of different wastes in surface impoundments:

a. That require additional or different management practices or different design of the liner or leak detection system than authorized in the permit . . . 3

b. That do not require additional or different management practices or different design of the liner or leak detection system than authorized in the permit 2

c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), and provided that the unit meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a unit that meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2), and provided further that the surface impoundment has previously received wastes of the same type (for example, incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

6. Modifications of unconstructed units to comply with WAC 173-303-650 (2)(j), (10), (11), and (4)(d) *1

7. Changes in response action plan:

a. Increase in action leakage rate 3

b. Change in a specific response reducing its frequency or effectiveness 3

c. Other changes 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

I. Enclosed Waste Piles. For all waste piles except those complying with WAC 173-303-660 (1)(c), modifications are treated the same as for a landfill. The following modifications are applicable only to waste piles complying with WAC 173-303-660 (1)(c).

1. Modification or addition of waste pile units:

a. Resulting in greater than 25% increase in the facility's waste pile storage or treatment capacity 3

b. Resulting in up to 25% increase in the facility's waste pile storage or treatment capacity 2

2. Modification of waste pile unit without increasing the capacity of the unit 2

3. Replacement of a waste pile unit with another waste pile unit of the same design and capacity and meeting all waste pile conditions in the permit 1

4. Modification of a waste pile management practice 2

5. Storage or treatment of different wastes in waste piles:

a. That require additional or different management practices or different design of the unit 3

b. That do not require additional or different management practices or different design of the unit 2

6. Conversion of an enclosed waste pile to a containment building unit 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

J. Landfills and Unenclosed Waste Piles

1. Modification or addition of landfill units that result in increasing the facility's disposal capacity . . . 3

2. Replacement of a landfill 3

3. Addition or modification of a liner, leachate collection system, leachate detection system, runoff control, or final cover system 3

4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, runoff control, or final cover system 2

5. Modification of a landfill management practice 2

6. Landfill different wastes:

a. That require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system 3

b. That do not require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system 2

c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8 (a)(2)(ii), and provided that the landfill unit meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

d. That are residues from wastewater treatment or incineration, provided that disposal occurs in a landfill unit that meets the minimum technological requirements stated in 40 CFR 268.5 (h)(2), and provided further that the landfill has previously received wastes of the same type (for example, incinerator ash). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028) 1

7. Modifications of unconstructed units to comply with WAC 173-303-660 (2)(j), (11), (12), (5)(c), 173-303-665 (2)(h), (8), (4)(c), and (9) *1

8. Changes in response action plan:

a. Increase in action leakage rate 3

b. Change in a specific response reducing its frequency or effectiveness. 3

c. Other changes 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

K. Land Treatment

1. Lateral expansion of or other modification of a land treatment unit to increase areal extent 3

2. Modification of run-on control system 2

3. Modify runoff control system 3

4. Other modifications of land treatment unit component specifications or standards required in permit 2

5. Management of different wastes in land treatment units:

a. That require a change in permit operating conditions or unit design specifications 3

b. That do not require a change in permit operating conditions or unit design specifications 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

6. Modification of a land treatment unit management practice to:

a. Increase rate or change method of waste application 3

b. Decrease rate of waste application 2

7. Modification of a land treatment unit management practice to change measures of pH or moisture content, or to enhance microbial or chemical reactions 2

8. Modification of a land treatment unit management practice to grow food chain crops, to add to or replace existing permitted crops with different food chain crops, or to modify operating plans for distribution of animal feeds resulting from such crops 3

9. Modification of operating practice due to detection of releases from the land treatment unit pursuant to WAC 173-303-655 (6)(g)(ii) 3

10. Changes in the unsaturated zone monitoring system, resulting in a change to the location, depth, number of sampling points, or replace unsaturated zone monitoring devices or components of devices with devices or components that have specifications different from permit requirements 3

11. Changes in the unsaturated zone monitoring system that do not result in a change to the location, depth, number of sampling points, or that replace unsaturated zone monitoring devices or components of devices with devices or components having specifications different from permit requirements 2

12. Changes in background values for hazardous constituents in soil and soil-pore liquid 2

13. Changes in sampling, analysis, or statistical procedure 2

14. Changes in land treatment demonstration program prior to or during the demonstration 2

15. Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the director's prior approval has been received 2

16. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the director 2

17. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration 3

18. Changes in vegetative cover requirements for closure 2

L. Incinerators, Boilers, and Industrial Furnaces

1. Changes to increase by more than 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

2. Changes to increase by up to 25% any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 2

3. Modification of an incinerator, boiler, or industrial furnace unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove HC1/$C1_2$, metals, or particulate from the combustion gases, or by changing other features of the incinerator, boiler, or industrial furnace that could affect its capability to meet the regulatory performance standards. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

4. Modification of an incinerator, boiler, or industrial furnace unit in a manner that would not likely affect the capability of the unit to meet the regulatory performance standards but which would change the operating conditions or monitoring requirements specified in the permit. The director may require a new trial burn to demonstrate compliance with the regulatory performance standards 2

5. Operating requirements:

a. Modification of the limits specified in the permit for minimum or maximum combustion gas temperature, minimum combustion gas residence time, oxygen concentration in the secondary combustion chamber flue gas carbon monoxide and hydrocarbon concentration, maximum temperature at the inlet to the particulate matter emission control system, or operating parameters for the air pollution control system. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

b. Modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls . . 3

c. Modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit 2

6. Burning different wastes:

a. If the waste contains a POHC that is more difficult to burn than authorized by the permit or if burning of the waste requires compliance with different regulatory performance standards than specified in the permit. The director will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means 3

b. If the waste does not contain a POHC that is more difficult to burn than authorized by the permit and if burning of the waste does not require compliance with different regulatory performance standards than specified in the permit 2

Note: See (g) of this subsection for modification procedures to be used for the management of newly listed or identified wastes.

7. Shakedown and trial burn:

a. Modification of the trial burn plan or any of the permit conditions applicable during the shakedown period for determining operational readiness after construction, the trial burn period, or the period immediately following the trial burn 2

b. Authorization of up to an additional 720 hours of waste burning during the shakedown period for determining operational readiness after construction, with the prior approval of the director . . . . . [1]1

c. Changes in the operating requirements set in the permit for conducting a trial burn, provided the change is minor and has received the prior approval of the director . . . . . [1]1

d. Changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided the change is minor and has received the prior approval of the director . . . . . [1]1

8. Substitution of an alternate type of nondangerous fuel that is not specified in the permit 1

9. Technology changes needed to meet standards under 40 CFR part 63 (subpart EEE-National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), that are incorporated by reference at WAC 173-400-075 (5)(a) provided the procedures of WAC 173-303-830 (4)(j) are followed. [1]1

M. Containment Buildings

1. Modification or addition of containment building units:

a. Resulting in greater than 25% increase in the facility's containment building storage or treatment capacity. 3

b. Resulting in up to 25% increase in the facility's containment building storage or treatment capacity. 2

2. Modification of a containment building unit or secondary containment system without increasing the capacity of the unit. 2

3. Replacement of a containment building with a containment building that meets the same design standards provided:

a. The unit capacity is not increased. 1

b. The replacement containment building meets the same conditions in the permit. 1

4. Modification of a containment building management practice. 2

5. Storage or treatment of different wastes in containment buildings:

a. That require additional or different management practices. 3

b. That do not require additional or different management practices. 2

N. Corrective Action

1. Approval of a corrective action management unit pursuant to WAC 173-303-64640, 173-303-64650, 173-303-64660, and 173-303-64670 3

2. Approval of a temporary unit or time extension for a temporary unit pursuant to WAC 173-303-64680 2

3. Approval of a staging pile or staging pile operating term extension 2

4. Modification to incorporate a corrective action order issued pursuant to MTCA 3

5. Modification or amendment of a corrective action order issued pursuant to MTCA when the MTCA public participation requirements are met and order has already been incorporated by reference into the permit 1

[1]Class 1 modifications requiring prior Agency approval

(5) Permit termination. The director will follow the applicable procedures in WAC 173-303-840, procedures for decision making, in terminating any permit. The following are causes for terminating a permit during its term or for denying a permit renewal application:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

(c) A determination that the permitted activity endangers public health or the environment and can only be regulated to acceptable levels by permit modification or termination.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-830, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 03-07-049 (Order 02-03), § 173-303-830, filed 3/13/03, effective 4/13/03. Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.-007. 00-11-040 (Order 99-01), § 173-303-830, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-830, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-830, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-830, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-830, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-830, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-830, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-830, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-830, filed 2/10/82.]

WAC 173-303-840 Procedures for decision making. (1) Application and completeness.

(a) The department will not begin the processing of a permit until the applicant has fully complied with the application requirements for the permit. Permit applications must comply with the signature and certification requirements of WAC 173-303-810 (12) and (13).

(b) The department will review for completeness each application for a permit under this chapter. Each application for a permit should be reviewed for completeness within sixty days of its receipt. Upon completing the review, the department will notify the applicant in writing whether or not the application is complete. If the application is incomplete, the department will list the information necessary to make the application complete, and will specify in the notice of deficiency a date for submitting the necessary information. After the application is completed, the department may request additional information from an applicant but only when necessary to clarify, modify, or supplement previously submitted material. Requests for such additional information will not render an application incomplete.

(c) If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied and appropriate enforcement actions may be taken under chapter 70.105 RCW.

(d) If the department decides that a site visit is necessary for any reason in conjunction with the processing of an application, then the department will notify the applicant and a date will be scheduled.

(e) The effective date of an application is the date on which the department notifies the applicant that the application is complete as provided in (b) of this subsection.

(2) Draft permits.

(a) A draft permit is a document prepared by the department indicating the tentative decision to issue, deny, modify, revoke and reissue, or terminate a permit.

(b) When an application is complete, the department will tentatively decide whether to prepare a draft permit, or to deny the application.

(c) If the department tentatively decides to deny the permit application, then the department will issue a notice of intent to deny. A notice of intent to deny the permit applica-

tion is a type of draft permit which follows the same procedures as any draft permit prepared under this subsection. If the department's final decision is that the tentative decision to deny was incorrect, then the department will withdraw the notice of intent to deny and proceed to prepare a draft permit under this subsection.

(d) If the department decides to prepare a draft permit, it will contain the following information:

(i) All conditions applicable to permits under WAC 173-303-810 and 173-303-815 including compliance and monitoring requirements;

(ii) Applicable conditions under WAC 173-303-830 and 173-303-815; and

(iii) All applicable standards for storage, treatment and disposal, and other permit conditions.

(e) All draft permits must be accompanied by a fact sheet that is supported by administrative record and made available for public comment.

(f) Fact sheet; statement of basis.

(i) A fact sheet will be prepared for every draft permit for a major dangerous waste management facility, and for every draft permit which the department finds is the subject of wide-spread public interest or raises major issues.

(ii) The fact sheet will briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The department will send this fact sheet to the applicant and, on request, to any other person.

(iii) The fact sheet will include, when applicable:

(A) A brief description of the type of facility or activity which is the subject of the draft permit;

(B) The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed, injected, emitted, or discharged;

(C) A brief summary of the basis for the draft permit conditions including supporting references;

(D) Reasons why any requested variances or alternatives to required standards do or do not appear justified; and

(E) A description of the procedures for reaching a final decision on the draft permit including:

(I) The beginning and ending dates of the comment period and the address where comments will be received;

(II) Procedures for requesting a hearing and the nature of that hearing;

(III) Any other procedures by which the public may participate in the final decision; and

(IV) Name and telephone number of a person to contact for additional information.

(iv) The department will prepare a statement of basis for every draft permit for which a fact sheet is not prepared. The statement of basis will briefly describe the derivation of the conditions of the draft permit and the reasons for them or, in the case of notices of intent to deny or terminate, reasons supporting the tentative decision. The statement of basis will be sent to the applicant and, on request, to any other person.

(3) Public notice and involvement.

(a) The department will give public notice that the following actions have occurred:

(i) A draft permit has been prepared or an application is tentatively being denied;

(ii) A hearing on a permit has been scheduled; or

(iii) An appeal on a permit has been filed with the pollution control hearings board.

Note: Additional public notice requirements for permitting at the preapplication and application stages are at WAC 173-303-281 (3) through (5).

(b) No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied. A written notice of the denial will be given to the person who requested the permit change and to the permittee.

(c) The public notice may describe more than one permit or permit action.

(d) Public notice of the preparation of a draft permit, including a notice of intent to deny a permit application will allow at least forty-five days for public comment. Public notice of a public hearing will be given at least thirty days before the hearing.

(e) Public notice of activities described in this subsection will be given by the following methods:

(i) By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this paragraph may waive his or her rights to receive notice for any classes and categories of permits):

(A) The applicant;

(B) Any other agency which the department knows has issued or is required to issue a permit for the same activity or facility;

(C) Federal and state agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management plans, the advisory council on historic preservation, state historic preservation officers, including any affected states (Indian tribes) (for purposes of this paragraph and in the context of the Underground Injection Control Program only, the term state includes Indian tribes treated as states);

(D) Persons on the mailing list developed by:

(I) Including those who request in writing to be on the list;

(II) Soliciting persons for an area list from participants in past permit proceedings in that area; and

(III) Notifying the public of the opportunity to be put on the mailing list through periodic publications in the public press and in appropriate publications of the department;

(E) Any unit of local government having jurisdiction over the area where the facility is proposed to be located, and each state agency having any authority under state law with respect to construction or operation of such facility;

(ii) For major permits, by publication of a notice in a daily or weekly newspaper within the area affected by the facility;

(iii) For all permits, by publication of notice in a daily or weekly major local newspaper of general circulation, and local radio broadcast of the public notice; and

(iv) By any other method reasonably calculated to give notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(4) Contents of the public notice.

(a) All public notices issued will contain the following minimum information:

(i) Name and address of the office processing the permit action for which notice is being given;

(ii) Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit;

(iii) A brief description of the business conducted at the facility or activity described in the permit application or the draft permit;

(iv) Name, address, and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit, fact sheet or statement of basis, and the application;

(v) A brief description of the comment procedures and the time and place of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision;

(vi) And any additional information considered necessary or proper.

(b) In addition to the general public notice described in (a) of this subsection, public notice of a hearing under subsection (5) of this section will contain the following information:

(i) Date, time, and place of the hearing;

(ii) Reference to the date of the previous public notice relating to the permit; and

(iii) A brief description of the nature and purpose of the hearing including the applicable rules and procedures.

(c) In addition to the general public notice all persons identified in WAC 173-303-840 (3)(e)(i)(A), (B), and (C) will be mailed a copy of the fact sheet, the permit application (if any), and the draft permit (if any).

(d) Public comments and request for public hearings. During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing must be in writing and must state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and will be answered according to WAC 173-303-840(9).

(5) Public hearings.

(a) The department will hold a public hearing whenever, on the basis of requests, there is a significant degree of public interest in a draft permit or there is written notice of opposition and the director receives a request for a hearing during the forty-five day comment period. The department also may hold a public hearing at its discretion, whenever, for instance, such a hearing might clarify one or more issues involved in the permit decision. Public notice of the hearing will be given as specified in WAC 173-303-840(3). Whenever possible, the department will schedule a public hearing under this subsection at a location convenient to the nearest population center to the proposed facility.

(b) Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. The public comment period under WAC 173-303-840(3) will automatically be extended to the close of any public hearing under this subsection. The hearing officer may also extend the comment period by so stating at the hearing.

(c) A tape recording or written transcript of the hearing will be made available to the public.

(6) Obligation to raise issues and provide information during the public comment period.

(a) All persons, including applicants, who believe any condition of a draft permit is inappropriate, or that the department's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position, including all supporting material, by the close of the public comment period (including any public hearing) under WAC 173-303-840(3).

(b) All supporting materials will be included in full and may not be incorporated by reference, unless they are already part of the administrative record in the same proceeding, or consist of state or federal statutes and regulations, documents of general applicability, or other generally available reference materials. Commenters must make supporting material not already included in the administrative record available to the department. A comment period longer than forty-five days will often be necessary in complicated proceedings to give commenters a reasonable opportunity to comply with the requirements of this subsection. Commenters may request a longer comment period.

(7) Reopening of the public comment period. If any data, information, or arguments submitted during the public comment period, including information or arguments required under subsection (6) of this section, appear to raise substantial new questions concerning a permit, the department may take one or more of the following actions:

(a) Prepare a new draft permit, appropriately modified;

(b) Prepare a revised statement of basis, a fact sheet or revised fact sheet, and reopen the comment period; or

(c) Reopen or extend the comment period to give interested persons an opportunity to comment on the information or arguments submitted.

Comments filed during the reopened comment period will be limited to the substantial new questions that caused its reopening. The public notice will define the scope of the reopening.

(8) Issuance and effective date of permit.

(a) After the close of the public comment period under WAC 173-303-840(5) on a draft permit, the department will issue a final permit decision (or a decision to deny a permit for the active life of a RCRA dangerous waste facility or unit under WAC 173-303-840). The department will notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. For purposes of this section, a final permit means a final decision to issue, deny, modify, revoke and reissue, or terminate a permit.

(b) A final permit decision will become effective thirty days after the service of notice of the decision, unless:

(i) A later effective date is specified in the decision; or

(ii) No comments requested a change in the draft permit, in which case the permit will become effective immediately upon issuance; or

(iii) Review is requested under chapter 43.21B RCW or an evidentiary hearing is requested under RCW 43.21B.160.

(9) Response to comments. At the time that any final permit is issued, the department will issue a response to comments. This response will specify which provisions, if any, of

the draft permit have been changed in the final permit decision and the reason for the change, and briefly describe and respond to all significant comments of the draft permit raised during the public comment period or during any hearing. The response to comments shall be available to the public.

(10) Decision-making procedure for modification, revocation and reissuance, or termination of permits.

(a) Permits may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the department's initiative. However, permits may only be modified or revoked and reissued for the reasons specified in WAC 173-303-830(3), or terminated for the reasons specified in WAC 173-303-805 or 173-303-830(5). All requests must be in writing and must contain facts or reasons supporting the request.

(b) If the department tentatively decides to modify or revoke and reissue a permit under WAC 173-303-830 (3) or (4)(c), it will prepare the draft permit under WAC 173-303-840(2), incorporating the proposed changes. The department may request additional information and, in the case of a modified permit, may require the submission of an updated permit application. In the case of revoked and reissued permits, the department will require the submission of a new application.

(c) In a permit modification under this subsection, only those conditions to be modified will be reopened when a new draft permit is prepared. All other aspects of the existing permit will remain in effect for the duration of the unmodified permit. When a permit is revoked and reissued under this section, the entire permit is reopened just as if the permit had expired and was being reissued. During any revocation and reissuance proceeding the permittee must comply with all conditions of the existing permit until a new final permit is reissued.

(d) "Class 1 and class 2 modifications" as defined in WAC 173-303-830 (4)(a) and (b) are not subject to the requirements of this subsection.

(e) If the department tentatively decides to terminate an interim status permit under WAC 173-303-805 or a final permit under WAC 173-303-806, it will issue a notice of intent to terminate. A notice of intent to terminate is a type of draft permit which follows the same procedures as any draft permit prepared under WAC 173-303-840(2).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-840, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-840, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-840, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-840, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 84-14-031 (Order DE 84-22), § 173-303-840, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-840, filed 2/10/82.]

WAC 173-303-841 Integration with maximum achievable control technology (MACT) standards. 40 CFR 270.235, Options for incinerators and cement and lightweight aggregate kilns to minimize emissions from startup, shutdown, and malfunction events, is incorporated by reference. The incorporated provision is 40 CFR Part 270 Subpart I, Integration with maximum achievable control technology (MACT) standards.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-841, filed 11/30/04, effective 1/1/05.]

WAC 173-303-845 Appeal of decision. Any person who is adversely affected by a decision of the department under chapter 173-303 WAC may appeal the decision to the pollution control hearings board pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-845, filed 2/10/82.]

WAC 173-303-900 Public involvement and participation. (1) Intent. Public involvement and participation plays a significant role in the decision making process. The department intends to foster public awareness, information and consultation, and to respond actively to public concerns. The department will inform the public of major issues, proposed projects, and regulatory changes, and will consult interested and affected segments of the public before making important decisions. The overall goal of the department is to provide knowledge to the public about dangerous waste issues that vitally affect the state, to encourage broader understanding of the public role in dangerous wastes and their proper management, and to promote an open dialogue between the public, industry, and government.

(2) Applicable requirements. In fulfilling the intent of public involvement and participation in the decision making process, the department will refer to and, where applicable, follow the requirements and guidance set forth in the following:

(a) Chapter 34.04 RCW, Administrative Procedure Act;

(b) Chapter 34.08 RCW, Washington State Register Act of 1977;

(c) Chapter 42.17 RCW, Public Records Act;

(d) Chapter 197-11 WAC, Guidelines interpreting and implementing the State Environmental Policy Act;

(e) 40 CFR Part 25, Public Participation in Programs Under the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Water Act; and

(f) Reserve.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-900, filed 1/12/98, effective 2/12/98; 94-01-060 (Order 92-33), § 173-303-900, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-900, filed 2/10/82.]

WAC 173-303-902 Citizen/proponent negotiations. (1) Intent and purpose. Successful siting of dangerous waste management facilities depends on public confidence, which requires affected communities to have opportunities to meet with owners/operators of proposed dangerous waste management facilities to resolve concerns about such facilities. RCW 70.105.260 authorizes the department to specify a procedure for conflict resolution activities for dangerous waste management facility proponents, host communities, citizens and citizen groups, and to expend funds to support such activities. The purpose of this section is to set forth a procedure for negotiations between affected communities and the proponent of a facility, and the eligibility criteria for financial assistance.

(2) Applicability.

(a) This section applies to local governments and citizens potentially affected by the siting and permitting of a dangerous waste management facility, owners and operators of proposed facilities, and owners and operators of facilities for which interim or final status permit applications have been submitted to the department prior to the effective date of this section. This section also applies to existing facilities with interim or final status for which the department receives an application for expansion. This section only applies to the expanded portion of the existing facility.

(b) A modified citizen/proponent negotiations (CPN) process will apply to lead local governments who are also proponents of the facility.

(c) This section does not apply to owners/operators of facilities or portions of facilities applying for research, development and demonstration permits, pursuant to section 3005(g) of the Resource Conservation and Recovery Act, codified in 40 CFR Part 270.65. In addition, this section does not apply to mobile facilities for on-site cleanup at treatment, storage, or disposal facilities undergoing closure, facilities operating under an emergency permit pursuant to WAC 173-303-804, or facilities for on-site cleanup of sites under the Comprehensive Environmental Response, Compensation, and Liability Act, or chapters 70.105, 90.48 RCW, and The Model Toxics Control Act.

(3) Relationship to other legislation and administrative rules.

(a) The lead local government receiving a grant under this section, must comply fully with all applicable federal, state, and local laws, orders, regulations, and permits.

(b) Nothing in this section will influence, affect, or modify department programs, regulations, or enforcement of applicable laws relating to dangerous waste management and disposal.

(c) All grants under this section will be subject to all existing accounting and auditing requirements of state laws and regulations applicable to the issuance of grant funds.

(4) Definitions. As used in this section:

(a) "Citizen/proponent negotiations (CPN)" means a communication process, as specified in these regulations and associated guidelines, between the proponent of a dangerous waste management facility and potentially affected citizens, to reach an agreement when there are shared and opposing interests.

(b) "Designated zone facility" means any facility that requires an interim or final status permit, located in a land use zone designated for handling hazardous substances and hazardous waste, and is not a preempted facility as defined in this section.

(c) "Environmental impact statement (EIS)" means an environmental document prepared according to the State Environmental Policy Act (SEPA), that provides decision makers and the public with an impartial discussion of probable significant environmental impacts, reasonable alternatives, and mitigation measures that would avoid impacts, minimize adverse impacts, or enhance environmental quality.

(d) "Existing facility," as defined by WAC 173-303-281, means a facility for which an interim or final status permit has been issued by the department pursuant to WAC 173-303-805 or 173-303-806.

(e) "Expansion," as defined by WAC 173-303-281, means the enlargement of the land surface area of an existing facility from that described in an interim status permit, the addition of a new dangerous waste management process, or an increase in the overall design capacity of existing dangerous waste management processes at a facility. However, a process or equipment change within the existing handling code (not to include "other") as defined under WAC 173-303-380 (2)(d) will not be considered a new dangerous waste management process.

(f) "Facilitator" means one who assists at a meeting or group discussion.

(g) "Grant applicant" means the lead local government requesting a citizen/proponent negotiations grant.

(h) "Lead local government" means the city or county in which all or a majority of the proposed dangerous waste management facility would be located, unless the lead local government is a proponent of the project.

(i) "Local negotiating committee" means a committee, appointed by the lead local government, whose membership consists of broad representation from city and county government, citizen groups, academia, business, industry, Indian tribes, and environmental groups potentially affected by the siting of a dangerous waste management facility.

(j) "Mediator" means a neutral person who is accepted voluntarily by opposing parties in a dispute to assist in reaching a settlement.

(k) "Notice of intent," as specified in WAC 173-303-281, means the notice provided by the owner/operator of a facility to the department, local communities, and the public stating that the siting of a dangerous waste management facility, or the expansion of an existing facility, is being considered.

(l) "Neutral convener" means a nonpartisan person hired by the lead local government to convene and preside over the official public meeting.

(m) "Preempted facility" means any facility that includes as a significant part of its activities any of the following operations: (i) Landfill, (ii) incineration, (iii) land treatment, (iv) surface impoundment to be closed as a landfill, or (v) waste pile to be closed as a landfill.

Local jurisdictions who fail to establish designated land use zones for handling hazardous substances and hazardous waste within eighteen months after the enactment of siting criteria in accordance with RCW 70.105.210 will be subject to preemptive provisions until such time as zone designations are completed and approved by the department.

(n) "Potentially affected area" means the area within a twenty-mile radius of a proposed dangerous waste management facility or a proposed expansion to an existing facility or, any area of impact larger or smaller than the twenty-mile radius as determined by the department.

(o) "Proponent" means any person applying to the department for a dangerous waste management facility permit or for the expansion of an existing permit under WAC 173-303-805 or 173-303-806.

(p) "Proposed facility" means a facility that does not have interim or final status on the effective date of this section, and for which the owner/operator applies for an interim or final status permit under WAC 173-303-805 or 173-303-806 after the effective date of this section.

(q) "SEPA" means the State Environmental Policy Act, chapter 43.21C RCW, and SEPA rules, chapter 197-11 WAC.

(5) Citizen/proponent negotiations procedures.

(a) Notice of intent. A proponent for a dangerous waste management facility must apply to the department for a dangerous waste management facility permit or for the expansion of an existing permit. In compliance with WAC 173-303-281, the proponent must submit a notice of intent to the department no less than one hundred fifty days prior to filing an application for a permit or permit revision.

(b) Notice letter.

(i) Within fourteen days of receipt of the notice of intent, the department will send, by registered mail, a copy of the notice of intent, a copy of the CPN regulation, associated guidelines, and a CPN grant application to the elected officials of the lead local government and all local governments within the potentially affected area.

(ii) The notice letter will alert all communities within the potentially affected area that a notice of intent to file was submitted to the department, the availability of a CPN grant, the procedures for applying for a CPN grant, and the procedures for conducting the CPN process.

(iii) Within thirty days of the effective date of this section, the department will send, by registered mail, a notice letter to all local governments potentially affected by facilities for which the department has already received a permit application. The notice letter will contain a copy of the CPN regulation, associated guidelines, and a CPN grant application.

(iv) If the lead local government is also a proponent of the facility, responsibility for CPN will be deferred to a committee comprised of representatives from all incorporated cities and towns, and all the counties in the potentially affected area. This committee must decide, among the government entities represented, who will be the lead local government for the purposes of applying for and administering the CPN grant and selecting members to the negotiating committee as set forth in subsection (6) of this section.

(c) Selection of the neutral convener. Within sixty days of the notice letter, the lead local government and the facility proponent must jointly select a neutral convener, facilitator, or mediator to organize and preside over an official public meeting, assist in selecting the local negotiating committee, and mediate citizen/proponent negotiations.

(d) The public meeting. The purpose of the public meeting will be:

(i) To advise local citizens within the potentially affected area of the CPN procedures, the State Environmental Policy Act (SEPA) requirements, and the dangerous waste management permit process;

(ii) To allow the proponent to present elements of the proposal;

(iii) To take public testimony on whether to agree to participate in the CPN process.

(e) Expenditures by the lead local government for the initial costs of the neutral convener and the official public meeting will be reimbursed by the department through an interagency agreement with the lead local government.

(f) Decision notice. Within forty-five days of the public meeting the lead local government must decide whether to proceed with the negotiations process. The lead local government must forward notice of that decision to the department and the proponent of the facility. Notice to the department of an affirmative decision may include a completed grant application for financial assistance. If the lead local government decides to participate in the negotiations process for preempted facilities, then the proponent will be required to participate. Citizen/proponent negotiations at designated zone facilities will be voluntary for both parties.

(g) Appointment of local negotiating committee. Within thirty days of the decision notice to proceed with CPN, the lead local government and local governments within the potentially affected area must appoint members to a local negotiating committee, as set forth in subsection (6) of this section, and mail notice of those appointments to the department and to the facility proponent.

(h) Organizational meeting. Within twenty-one days of the committee appointments, the committee must hold an organizational meeting to establish the committee goals, set schedules, identify tasks, discuss funding, and identify issues to research.

(i) Negotiations process. The negotiations process may occur in two stages.

(i) Stage 1. Within thirty days of the organizational meeting, the local negotiating committee, with the assistance of the neutral convener, must initiate negotiations and public information and education activities. The local negotiating committee will have one hundred twenty days, or until completion of the SEPA process, to conduct public information and education activities on dangerous waste management and dangerous waste management facilities and to negotiate emerging issues and concerns.

(ii) Stage 2. Upon completion of the SEPA process, with the assistance of the neutral convener, the local negotiating committee may continue formal negotiations. If no environmental impact statement is required as part of the SEPA process, the local negotiating committee may negotiate for up to one hundred twenty days. If an environmental impact statement is required as part of the SEPA process, negotiations may take place until one hundred twenty days after the issuance of the final environmental impact statement. Upon completion of formal negotiations, all agreements should be submitted to the department for review for applicability to the operating permit.

(iii) Negotiations should focus on the mitigation of impacts identified by persons in the affected area and those impacts identified during the SEPA process, which may include but are not limited to:

(A) Technical aspects of the facility proposal;

(B) Emergency response;

(C) Economic impacts;

(D) Management of the facility;

(E) Site characteristics;

(F) Transportation;

(G) Compliance assurance.

(iv) During each stage of the negotiations process, the committee must, at a minimum:

(A) Arrange public forums at key points in the negotiations to solicit input from the local community and provide public education regarding the issues and elements of the proposed facility or facility expansion.

(B) Arrange smaller community gatherings with the whole committee or subgroups of the committee to supplement the larger meetings and to provide more opportunities for discussion with community members.

(C) Meet with key community leaders to solicit information and opinion.

(D) Prepare a draft of the completed local negotiating committee report and agreements. The draft must be submitted for review and comment to the proponent and local county, city, and town officials who made the committee appointments.

(E) Prepare the final local negotiating committee report and agreements. Final copies must be submitted to the department and distributed to the proponent and local county, city, and town officials who made the committee appointments.

(v) Negotiations may be reopened upon agreement by both parties as long as a draft permit has not been issued.

(j) Agreements. Any specific agreement reached between the local negotiating committee and the proponent, deemed valid and applicable by the department, may be incorporated in the operating permit issued by the department. Any agreements not applicable to the operating permit may be implemented by the proponent and local communities through a contract or other legal means.

(6) Local negotiating committee.

(a) Appointments to the local negotiating committee must be made as follows:

(i) Four members must be appointed by the lead local government.

If the lead local government is the county, committee appointments will be made by the county executive in charter counties or the board of county commissioners. If the lead local government is an incorporated town or city, committee appointments will be made by the mayor.

(ii) The mayor of each incorporated city or town in the potentially affected area, that is not a lead local government, must appoint one member to the committee.

(iii) The county executive or the board of county commissioners of each county in the potentially affected area, that is not a lead local government, must appoint one member to the committee.

(iv) Each federally-recognized Indian tribe located in the potentially affected area must appoint one member to the committee.

(v) If all or the majority of a facility is located wholly within city limits, the board of county commissioners or county executive of the potentially affected county must appoint two members to the citizen negotiating committee. If the facility is located wholly within the county, these appointments will not be made.

(b) Local negotiating committees must have broad representation including but not limited to representation from academia, business and industry, citizen organizations, environmental groups, agricultural groups, health professionals, emergency response organizations, and fire districts.

(c) After the initial committee appointments are made, the neutral convener must assess the group representation and determine which interest groups are not represented. The committee, with the aid of the neutral convener, will then select up to four additional members to serve on the local negotiating committee. These selections must be made from interest groups not already represented on the negotiating committee.

(d) Elected officials will not be members of the local negotiating committee.

(7) Modified CPN procedures. Modified CPN procedures apply to lead local governments who are also proponents of a dangerous waste management facility.

(a) Notice letter. Within fourteen days of the notice of intent or thirty days of the effective date of this section, the department will notify all local governments in the potentially affected area of applications for proposed facilities or expansions of existing facilities and of the opportunity for formal negotiations under CPN and the availability of a CPN grant.

(b) Decision notice. The local governments will have forty-five days to form a committee to:

(i) Determine whether they wish to participate in CPN;

(ii) Determine who will be the lead local government;

(iii) Select a neutral convener, facilitator, or mediator;

(iv) Notify the department and the proponent of those decisions; and

(v) Complete a grant application for financial assistance if a decision is made to proceed with CPN.

(c) Once the lead local government is determined, modified CPN procedures must follow CPN procedures set forth in subsections (5)(d) through (6)(d) of this section.

(8) Grant eligibility and eligible activities.

(a) Grant applicant eligibility and eligible activities are the same for CPN and modified CPN.

(b) Grant applicant eligibility. Grants up to fifty thousand dollars will be awarded to the lead local government and may be renewed once during the permitting process.

(c) Eligible costs. Eligible costs include direct costs of the activities of the negotiating process. These costs include:

(i) The local committee's expenses such as travel, office space or lodging, supplies, postage, report production costs, and meeting room costs;

(ii) Neutral convener's, facilitator's, or mediator's fees and expenses;

(iii) Technical assistance for the committee; and

(iv) Other costs determined necessary by the department.

(d) Ineligible costs. Grant funds may not be used by the grant applicant to support legal actions against the department, or facility owners/operators.

(9) Grant administration and funding.

(a) A grant application package will be sent to the lead local government with the notice letter. Grant application packages include grant application deadlines, grant guidelines, and application forms.

(b) Completed grant applications will be reviewed by the department. To receive a grant offer, successful applications must include all required elements as outlined in the guidelines.

(c) The obligation of the department to make grant awards and payments is contingent upon the availability of funds through legislative appropriation and allotment, and such other conditions not reasonably foreseeable by the department rendering performance impossible. When the grant crosses over bienniums, the obligation of the department is contingent upon the appropriation of funds during the next biennium.

(d) The department will fund up to fifty percent of the total grant amount or up to fifty thousand dollars for citizen/proponent negotiations and the proponent of a dangerous waste management facility must fund up to fifty percent of the total grant amount or up to fifty thousand dollars.

(e) Disbursement of funds. The department will be responsible for reimbursement of all eligible CPN costs incurred. The proponent must enter into a contract with the department for the proponent's share of the CPN grant. The department will be responsible for all eligible CPN costs incurred before the decision notice and its share of any eligible CPN costs incurred after the decision notice, up to fifty thousand dollars. The proponent will be responsible for its share of all remaining eligible CPN costs incurred after the decision notice and after an executed grant award is made to the lead local government, up to fifty thousand dollars.

(f) The department, on at least a biennial basis, will determine the amount of funding available for citizen/proponent negotiation grants.

(g) All grantees will be held responsible for payment of salaries, consultant's fees, and other overhead costs contracted under a grant awarded to the lead local government.

(h) To the extent that the Constitution and laws of the state of Washington permit, the grantee will indemnify and hold the department harmless from and against, any liability for any or all injuries to persons or property arising from the negligent act or omission of the grantee arising out of a grant contract, except for such damage, claim, or liability resulting from the negligent act or omission of the department.

(i) All grants under this chapter will be consistent with the provisions of "Financial Guidelines for Grant Management" WDOE 80-6, May 1980, Reprinted March 1982, or subsequent guidelines adopted thereafter.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-902, filed 10/19/95, effective 11/19/95. Statutory Authority: RCW 70.105.260 and 1989 c 2. 89-21-071 (Order 89-25), § 173-303-902, filed 10/17/89, effective 11/17/89.]

WAC 173-303-905 Response to requests for public records. RCW 42.17.320 requires that the department, when responding to requests for public records make such responses "promptly." The department often receives requests, submitted pursuant to chapter 42.17 RCW, for public records that exist because of the requirements of or actions mandated by this chapter (such public records are referred to as dangerous waste records). When the department receives requests for such dangerous waste records, then the department will respond promptly, as required by RCW 42.17.320, and in no event will the response occur later than twenty working days after receipt of the public request submitted pursuant to chapter 42.17 RCW.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-905, filed 10/19/95, effective 11/19/95. Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-905, filed 9/6/88.]

WAC 173-303-910 Petitions. (1) General petitions.

(a) Any person may petition the department to modify or revoke any provision in this chapter. This subsection sets forth general requirements which apply to all such petitions. The remaining subsections of this section describe additional requirements for specific types of petitions.

(b) Each petition must be submitted to the department by certified mail and must include:

(i) The petitioner's name and address;

(ii) A statement of the petitioner's interest in the proposed action;

(iii) A description of the proposed action, including (where appropriate) suggested regulatory language; and

(iv) A statement of the need and justification for the proposed action, including any supporting tests, studies, or other information.

(c) The department will make a tentative decision to grant or deny the petition and give public notice of the tentative decision in writing. The notice will be distributed to interested persons on a mailing list developed specifically for petitions and persons expressing interest in amendments to this chapter. The public comment period will be a minimum of twenty-one days.

(d) Upon the written request of any interested person, the director may, at his discretion, hold a conference to consider oral comments on the action proposed in the petition. A person requesting a conference must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The director may in any case decide on his own motion to hold a conference.

(e) After evaluating all public comments the department will make a final decision in accordance with RCW 34.05.330 or 34.05.240. The department will either deny the petition in writing (stating its reasons for denial), or grant the petition and, when appropriate, initiate rule-making proceedings in accordance with RCW 34.05.330.

(2) Petitions for equivalent testing or analytical methods.

(a) Any person seeking to add a testing or analytical method to WAC 173-303-110 may petition for a regulatory amendment under this section. To be successful, the person must demonstrate to the satisfaction of the department that the proposed method is equal to or superior to the corresponding method prescribed in WAC 173-303-110, in terms of its sensitivity, accuracy, and precision (i.e., reproducibility).

(b) Each petition must include, in addition to the information required by subsection (1) of this section:

(i) A full description of the proposed method, including all procedural steps and equipment used in the method;

(ii) A description of the types of wastes or waste matrices for which the proposed method may be used;

(iii) Comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in WAC 173-303-110;

(iv) An assessment of any factors which may interfere with, or limit the use of, the proposed method; and

(v) A description of the quality control procedures necessary to ensure the sensitivity, accuracy and precision of the proposed method.

(c) After receiving a petition for an equivalent testing or analytical method, the department may request any additional information on the proposed method which it may reasonably require to evaluate the proposal.

(d) If the department amends the regulations to permit use of a new testing method, the method will be incorporated in a document which will be available from the department.

(3) Petitions for exempting dangerous wastes from a particular generator.

(a) Any generator seeking to exempt his dangerous waste may petition the department for exemption from the requirements of WAC 173-303-070 through 173-303-100.

(b) To be successful, the generator must make the demonstrations required in WAC 173-303-072(3) and, where applicable, (4).

(c) Each petition must include, in addition to the information required by subsection (1) of this section:

(i) The name and address of the laboratory facility performing the sampling or tests of the waste;

(ii) The names and qualifications of the persons sampling and testing the waste;

(iii) The dates of sampling and testing;

(iv) The location of the generating facility;

(v) A description of the manufacturing processes or other operations and feed materials producing the waste and an assessment of whether such processes, operations, or feed materials can or might produce a waste that is not covered by the demonstration;

(vi) A description of the waste and an estimate of the average and maximum monthly and annual quantities of waste covered by the demonstration;

(vii) Pertinent data on and discussion of the factors delineated in WAC 173-303-072(3) and, where applicable, (4);

(viii) A description of the methodologies and equipment used to obtain the representative samples;

(ix) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization and preservation of the samples;

(x) A description of the tests performed (including results);

(xi) The names and model numbers of the instruments used in performing the tests and the date of the last calibration for instruments which must be calibrated according to manufacturer's instructions; and

(xii) The following statement signed by the generator of the waste or his authorized representative:

> I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(d) After receiving a petition for a dangerous waste exemption, the department may request any additional information which it may reasonably require to evaluate the petition.

(e) An exemption will only apply to the waste generated by the particular generator covered by the demonstration and will not apply to waste from any other generator.

(f) The department may exempt only part of the waste for which the demonstration is submitted where there is reason to believe that variability of the waste justifies a partial exemption.

(g) The department may (but will not be required to) grant a temporary exemption before making a final decision under subsection (1) of this section, whenever it finds that there is a substantial likelihood that an exemption will be finally granted.

(h) Any waste for which an exemption is sought will remain designated and be subject to the applicable requirements of this chapter until the generator of the waste is notified by the department that his waste is exempt.

(4) Petition for exclusion.

(a) Any generators seeking exclusion of a class of similar or identical wastes under WAC 173-303-071, excluded categories of waste, may petition the department for exclusion. To be successful, the generator(s) must make the demonstrations required in WAC 173-303-072(6) for all those wastes generated in the state which might be excluded pursuant to granting a petition submitted under this subsection. No class of wastes will be excluded if any of the wastes are regulated as hazardous waste under 40 CFR Part 261.

(b) Each petition for exclusion must include the information required by subsections (1) and (3)(c) of this section and any other information required by the department.

(c) After receiving a petition for exclusion, the department may request any additional information it deems necessary to evaluate the petition.

(5) Petition for designation change. The provisions of (a)(i) of this subsection do not apply to any dangerous waste which is also designated as a hazardous waste under 40 CFR Part 261 Subpart D.

(a) A generator may petition the department to change the designation of his waste as follows:

(i) A waste which is designated only for toxicity pursuant to WAC 173-303-100 but which is toxic solely because it is highly acidic or basic (i.e., due to high or low pH) may be subject only to the requirements for corrosive dangerous wastes, provided that the generator can demonstrate this fact to the department's satisfaction through information provided under (b) of this subsection; and

(ii) A waste which is designated EHW may be redesignated DW, provided that the generator can demonstrate that such redesignation is appropriate through information provided under (b) of this subsection.

(b) A petition under this subsection must include:

(i) The information required by subsections (1) and (3)(c) of this section; and

(ii) Such other information as required by the department.

(c) A designation change under this subsection will become effective only after the department has approved the change and notified the generator of such approval.

(6) Petitions to allow land disposal of a waste restricted under WAC 173-303-140.

(a) Any person seeking a land disposal restriction exemption allowed under WAC 173-303-140(6) must submit a petition to the department. The petition must include the following general information:

(i) The petitioner's name and address;

(ii) A statement of the petitioner's interest in the proposed action;

(iii) A description of the proposed action;

(iv) A statement of the need and justification for the proposed action;

(v) An identification of the specific waste and the specific land disposal unit for which the exemption is desired;

(vi) A waste analysis to describe fully the chemical and physical characteristics of the subject waste. All waste and environmental sampling, test, and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow; and

(vii) A quality assurance and quality control plan that addresses all sampling and testing aspects of the information provided in the petition.

(b) In addition to the general information requirements in subsection (a) of this section, the following specific information must be provided in the petition for individual case-by-case exemptions.

(i) Petition for land disposal exemption for treatment residuals. Petitions for exemption of treatment residuals, as allowed under WAC 173-303-140 (6)(a), must:

(A) Provide the type of waste management or treatment method applied to the waste and the rationale for selecting this method as the best achievable management method; and

(B) Document that the land disposal of the treatment residual would not pose a greater risk to public health and the environment than land disposal of the original wastes, including an analysis of the treatment residuals to fully describe their chemical and physical characteristics; and

(C) Provide the management alternatives for the treatment residuals and the factors which, if an exemption is not granted, would prevent the utilization of the best achievable management method for the original dangerous waste.

(ii) Petition for economic hardship exemption. Petitions for exemption on the basis of economic hardship, as allowed under WAC 173-303-140 (6)(b), must:

(A) Supply the current management costs and the projected management costs to comply with the requirements of WAC 173-303-140; and

(B) Provide the source of information utilized in determining the economic estimates; and

(C) Provide a discussion of how the projected compliance costs would impose an unreasonable economic burden.

(iii) Petition for leachable inorganic waste exemption. Petitions for exemption of leachable inorganic wastes, as allowed under WAC 173-303-140 (6)(c), must:

(A) Provide information demonstrating that the stabilization of the dangerous waste is less protective of public health and the environment than landfilling; or

(B) Provide a list of stabilization facilities that could accept the dangerous waste and information demonstrating that they do not have available capacity to stabilize the waste; or

(C) Provide information describing the types of stabilization utilized which did not reduce the solubility and mobility of the dangerous waste constituents and describe any other stabilization methods that have been considered but not utilized.

(iv) Petition for organic/carbonaceous waste exemption. Petitions for exemption of organic/carbonaceous wastes, as allowed under WAC 173-303-140 (6)(c), must:

(A) Provide information demonstrating that recycling, treatment and incineration facilities are unavailable for the waste, including a map marked both with the point of waste generation and the point(s) of the nearest treatment, recycling and incineration facility(s) that could manage the dangerous waste; or

(B) Provide information demonstrating that the alternative management methods for organic/carbonaceous waste are less protective of public health and the environment than stabilization and landfilling; or

(C) Provide information demonstrating that:

(I) Recycling and treatment facilities are unavailable for the waste, including a map marked both with the point of waste generation and the point(s) of the nearest treatment, recycling and incineration facility(s) that could manage the dangerous waste; and

(II) The organic/carbonaceous waste has a heat content less than 3,000 BTU/LB or a moisture content greater than sixty-five percent.

(c) Each petition must include the following statement signed by the petitioner or an authorized representative:

> I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(d) Each petition must be submitted to:

> Department of Ecology
> HWTR Program
> Attn Land Disposal Exemption
> PO Box 47600
> Olympia, WA 98504-7600

(e) After receiving a petition, the department may request any additional information that reasonably may be required to evaluate the petition and accompanying demonstration, such as a comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality. Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements.

(f)(i) The department will make a tentative decision to grant or deny the petition and give public notice of the tentative decision in writing. The notice will be distributed to interested persons on a mailing list developed specifically for petitions and persons expressing interest in amendments to this chapter. The public comment period will be a minimum of twenty-one days.

(ii) Upon the written request of any interested person, the department may, at its discretion, hold a conference to consider oral comments on the action proposed in the petition. A person requesting a conference must state the issues to be

raised and explain why written comments would not suffice to communicate the person's views. The department may in any case decide on its own motion to hold a conference.

(iii) After evaluating all public comments the department will make a final decision in accordance with RCW 34.04.-060 or 34.04.080. The department will either deny the petition in writing (stating its reasons for denial), or grant the petition.

(g) Prior to the department's decision, the applicant is required to comply with all restrictions on land disposal under WAC 173-303-140. The department should respond to a petition within ninety days.

(h) If an exemption is granted, the department may include specific conditions as deemed necessary by the department to protect public health and the environment.

(i) If granted, the exemption will apply to land disposal of the specific restricted waste at the individual disposal unit described in the petition and accompanying demonstration. The exemption will not apply to any other restricted waste at that disposal unit, nor will it apply to that specific restricted waste at any other disposal unit.

(j) If an exemption is granted, the department may withdraw the exemption on the following bases:

(i) If there is a threat to public health and the environment; or

(ii) If there is migration of dangerous waste constituents from the land disposal unit or site for as long as the waste remains dangerous; or

(iii) If the department finds reason to believe that the information submitted in a petition is inaccurate or has been falsified such that the petition should have been denied.

(k) The term of an exemption granted under this subsection will be established by the department at the time of issuance.

(l) Any exemption granted by the department does not relieve the petitioner of his responsibilities in the management of dangerous waste under chapter 173-303 WAC.

(m) The department may (but will not be required to) grant a temporary exemption before making a final decision, whenever it finds that there is a substantial likelihood that an exemption will be finally granted. Temporary exemptions will not be subject to the procedures of (f) of this subsection. Temporary exemptions will not be a cause of delaying final decision making on the petition request.

(7) Petitions to amend WAC 173-303-573 to include additional dangerous wastes.

(a) Any person seeking to add a dangerous waste or a category of dangerous waste to the universal waste regulations of WAC 173-303-573 may petition for a regulatory amendment under this section and WAC 173-303-573 (39) and (40).

(b) To be successful, the petitioner must demonstrate to the satisfaction of the department that regulation under the universal waste regulations of WAC 173-303-573: Is appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the dangerous waste program. The petition must include the information required by subsection (1) of this section. The petition should also address as many of the factors listed in WAC 173-303-573(40) as are appropriate for the waste or category of waste addressed in the petition.

(c) The department will grant or deny a petition using the factors listed in WAC 173-303-573(40). The decision will be based on the weight of evidence showing that regulation under WAC 173-303-573 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the dangerous waste program.

(d) The department may request additional information needed to evaluate the merits of the petition.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-910, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-910, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-910, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-910, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-910, filed 1/5/88, effective 2/5/88; 86-12-057 (Order DE-85-10), § 173-303-910, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-910, filed 6/27/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-910, filed 2/10/82.]

WAC 173-303-950 Violations and enforcement. Any violation of this chapter may be subject to the enforcement and penalty sanctions of chapter 70.105 RCW. Such violations include, but are not limited to:

(1) Offering or transporting dangerous waste to a facility which does not have a permit;

(2) Transferring, treating, storing, or disposing of dangerous waste without a permit; or

(3) Falsely representing information in any application, label, manifest, record, report, permit, petition, or other document filed, maintained or used for the purpose of compliance with this chapter.

[Statutory Authority: Chapter 70.105 RCW. 84-09-088 (Order DE 83-36), § 173-303-950, filed 4/18/84.]

WAC 173-303-960 Special powers and authorities of the department. Notwithstanding any other provision of this chapter, the department may direct the attorney general to bring actions for injunctive, declaratory, or other relief to enforce any requirement of this chapter, or to bring suit to immediately restrain or obtain such other relief as may be necessary against any person contributing to the handling, storage, treatment, transportation, recycling, or disposal of any dangerous waste or solid waste that may present an imminent and substantial endangerment to health or the environment.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-960, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-960, filed 6/3/86.]

WAC 173-303-9901 Flow chart for designating dangerous wastes. (Reserved.)

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-9901, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-9901, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9901, filed 2/10/82.]

WAC 173-303-9902 Narrative for designating dangerous wastes. (Reserved.)

[Statutory Authority: Chapter 70.105 RCW. 86-12-057 (Order DE-85-10), § 173-303-9902, filed 6/3/86. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-9902, filed 2/10/82.]

WAC 173-303-9903 Discarded chemical products list.

Discarded Chemical Products List

"P" Chemical Products

Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound is only listed for acute toxicity.

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicard sulfone
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H_3AsO_4
P012	1327-53-3	Arsenic oxide As_2O_3
P011	1303-28-2	Arsenic oxide As_2O_5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2, 2-dimethyl-, methylcarbamate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indo1-5-yl methylcarbamate ester (1:1)
P001	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P189	55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl- 1H-pyrazol-3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P022	75-15-0	Carbon disulfide
P189	55285-14-8	Carbosulfan
P095	75-44-5	Carbonic dichloride
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P191	644-64-4	Dimetilan
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha, 8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta, 8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta, 6beta,6aalpha,7beta, 7aalpha)-
P051	[1]72-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha, 6alpha,6abeta,7beta, 7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	[1]534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)-carbonyl]oxime
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride
P197	17702-57-7	Formparanate
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-
P196	15339-36-3	Manganese dimethyldithiocarbamate
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy] phenyl]-
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P199	2032-65-7	Methiocarb
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb
P128	315-18-4	Mexacarbate
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide $Ni(CN)_2$
P075	[1]54-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO_2
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194	23135-22-0	Oxamyl
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P048	51-28-5	Phenol, 2,4-dinitro-
P047	[1]534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P204	57-47-6	Physostigmine
P188	57-64-7	Physostigmine salicylate
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P203	1646-88-4	Propanal, 2-methyl-2-(methylsulfonyl)-, O-[(methylamino)carbonyl] oxime
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	[1]54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea

The "P" wastes and their corresponding Dangerous Waste Numbers are:

Dangerous Waste No.	Chemical Abstracts No.	Substance
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	[1]57-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	[1]57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl_2O_3
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P185	26419-73-8	Tirpate
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V_2O_5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	[1]81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram

FOOTNOTE: [1] CAS Number given for parent compound only.

"U" Chemical Products

Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U394	30558-43-1	A2213
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	[1]94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balpha)]-
U280	101-27-9	Barban
U278	22781-23-3	Bendiocarb
U364	22961-82-6	Bendiocarb phenol
U271	17804-35-2	Benomyl
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid,bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl- (I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	[1]81-07-2	1,2-Benzisothiazol-3(2H)-one,1,1-dioxide, & salts
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	189-55-9	Benzo[rst]pentaphene
U248	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-ylester, [1S-[1alpha(Z),7(2S*,3R*), 7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-,ethyl ester
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl] -1H-benzimidazol-2-yl]-, methyl ester
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	[1]111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U279	63-25-2	Carbaryl

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U372	10605-21-7	Carbendazim
U367	1563-38-8	Carbofuran phenol
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gammaisomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine,hydrochloride
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha, 6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	[1]94-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U395	5952-26-1	Diethylene glycol, dicarbamate
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U404	121-44-8	Ethanamine, N,N-diethyl-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thiobis[(methylimino) carbonyloxy]]bis-, dimethyl ester
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino) -N-hydroxy-2-oxo-, methyl ester
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	[1]111-54-6	Ethylenebisdithiocarbamic acid,salts & esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H_2S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I, T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one,1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid,3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U279	63-25-2	1-Naphthalenol, methylcarbamate
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-,phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-,methyl ester (I,T)
U373	122-42-9	Propham
U411	114-26-1	Propoxur
U387	52888-80-9	Prosulfocarb
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	[1]81-07-2	Saccharin, & salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS_2 (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TlCl

The "U" wastes and their corresponding Dangerous Waste Numbers are:

Hazardous Waste No.	Chemical Abstracts No.	Substance
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl-
U409	23564-05-8	Thiophanate-methyl
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U389	2303-17-5	Triallate
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl)phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
eU248	[1]81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations of 10%or less

FOOTNOTE: [1]CAS Number given for parent compound only.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-9903, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-9903, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9903, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9903, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-9903, filed 1/4/89; 86-12-057 (Order DE-85-10), § 173-303-9903, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-9903, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-9903, filed 2/10/82.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-303-9904 Dangerous waste sources list. The following Hazard Codes are used to indicate the basis EPA used for listing the classes or types of wastes listed in this section:

Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
Toxicity Characteristic Waste	(E)
Acute Hazardous Waste	(H)
Toxic Waste	(T)

DANGEROUS WASTE SOURCES LIST

Dangerous Waste No.	Sources
	Nonspecific Sources
Generic:	
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2 trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)
F003	The following spent nonhalogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above nonhalogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I)
F004	The following spent nonhalogenated solvents: Cresols and cresylic acid, nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)
F005	The following spent nonhalogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before

Dangerous Waste No.	Sources
	use, a total of ten percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I,T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. (T)
F007	Spent cyanide plating bath solutions from electroplating operations. (R,T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. (R,T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. (R,T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. (R,T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. (R,T)
F012	Quenching wastewater treatment sludges from metal heat-treating operations where cyanides are used in the process. (T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. (T)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.) (See footnote 1, below.) (H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives. (See footnote 1, below.) (H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions. (See footnote 1, below.) (H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri-and tetrachlorophenols. (See footnote 1, below.) (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.) (H)
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in this section.) (T)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (T)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions. (See footnote 1, below.) (H)

Dangerous Waste No.	Sources
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (See footnote 1, below.) (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.) (H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with nonspecific sources wastes F020, F021, F022, F023, F026 and F027. (T)
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with WAC 173-303-083 or potentially cross-contaminated wastes that are otherwise currently regulated as dangerous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
F037	Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: Oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in footnote 2, below (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under WAC 173-303-071 (3)(cc)(i), if those residuals are to be disposed of. (See footnote 2, below.) (T)
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: Induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in footnote 2, below (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing. (See footnote 2, below.) (T)

Dangerous Waste No.	Sources
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as dangerous under WAC 173-303-9903, 173-303-9904, and 173-303-9905. (Leachate resulting from the disposal of one or more of the following dangerous wastes, and no other dangerous wastes, retains its Dangerous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.) (T)
	Specific Sources
Wood Preservation:	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol. (T)
Inorganic Pigments:	
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments. (T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments. (T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments. (T)
K005	Wastewater treatment sludge from the production of chrome green pigments. (T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated). (T)
K007	Wastewater treatment sludge from the production of iron blue pigments. (T)
K008	Oven residue from the production of chrome oxide green pigments. (T)
Organic Chemicals:	
K009	Distillation bottoms from the production of acetaldehyde from ethylene. (T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene. (T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile. (R,T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile. (R,T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile. (T)
K015	Still bottoms from the distillation of benzyl chloride. (T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride. (T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin. (T)
K018	Heavy ends from the fractionation column in ethyl chloride production. (T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production. (T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production. (T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production. (T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene. (T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene. (T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene. (T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene. (T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene. (T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene. (T)
K026	Stripping still tails from the production of methyl ethyl pyridines. (T)
K027	Centrifuge and distillation residues from toluene diisocyanate production. (R,T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane. (T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane. (T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane. (T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane. (T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene. (T)
K083	Distillation bottoms from aniline production. (T)
K103	Process residues from aniline extraction from the production of aniline. (T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production. (T)
K085	Distillation of fractionation column bottoms from the production of chlorobenzenes. (T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes. (T)
K107	Column bottoms from product separation from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazines. (C,T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from the carboxylic acid hydrazides. (I,T)

Dangerous Waste No.	Sources
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. (T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. (T)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene. (C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine. (T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene. (T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. (T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. (T)
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.) (T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha-(or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha-(or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) (T)
K159	Organics from the treatment of thiocarbamate wastes. (T)
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (R,T)
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) They are disposed of in a hazardous waste or nonhazardous landfill licensed or permitted by the state or federal government; (ii) They are not otherwise placed on the land prior to final disposal; and (iii) The generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an offsite landfill. Respondents in any action brought to enforce the requirements of the Hazardous Waste Management Act or dangerous waste regulations must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the

Dangerous Waste No.	Sources
	landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met. (T)
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process. (T)
Explosives:	
K044	Wastewater treatment sludges from the manufacturing and processing of explosives. (R)
K045	Spent carbon from the treatment of wastewater containing explosives. (R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds. (T)
K047	Pink/red water from TNT operations. (R)
Inorganic Chemicals:	
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used. (T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production. (T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production. (T)
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide). (E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide). (T)
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process. (T)
Petroleum Refining:	
K048	Dissolved air flotation (DAF) float from the petroleum refining industry. (T)
K049	Slop oil emulsion solids from the petroleum refining industry. (T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry. (T)
K051	API separator sludge from the petroleum refining industry. (T)
K052	Tank bottoms (leaded) from the petroleum refining industry. (T)
K169	Crude oil storage tank sediment from petroleum refining operations. (T)
K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations. (T)
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I,T)
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I,T)
Iron and Steel:	
K061	Emission control dust/sludge from the primary production of steel in electric furnaces. (T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (NAICS codes 331111 and 332111). (C,T)
Pesticides:	
K031	Byproduct salts generated in the production of MSMA and cacodylic acid. (T)
K032	Wastewater treatment sludge from the production of chlordane. (T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. (T)
K035	Wastewater treatment sludges generated in the production of creosote. (T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton. (T)
K037	Wastewater treatment sludges from the production of disulfoton. (T)
K038	Wastewater from the washing and stripping of phorate production. (T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (T)
K040	Wastewater treatment sludge from the production of phorate. (T)
K041	Wastewater treatment sludge from the production of toxaphene. (T)
K098	Untreated process wastewater from the production of toxaphene. (T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T. (T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D. (T)
K099	Untreated wastewater from the production of 2,4-D. (T)

Dangerous Waste No.	Sources
K123	Process wastewater (including supernates, filtrates, and wastewaters) from the production of ethylenebisdithiocarbamic acid and its salts. (T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. (C,T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts. (T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts. (T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide. (C,T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide. (T)
Primary Aluminum:	
K088	Spent potliners from primary aluminum reduction. (T)
Secondary Lead:	
K069	Emission control dust/sludge from secondary lead smelting. (T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)
Veterinary Pharmaceuticals:	
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
Ink Formulation:	
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead. (T)
Coking:	
K060	Ammonia still-lime sludge from coking operations. (T)
K087	Decanter tank tar sludge from coking operations. (T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recover of coke by-products produced from coal.
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.
K147	Tar storage tank residues from coal tar refining.
K148	Residues from coal tar distillation, including but not limited to, still bottoms.

Footnotes

1	For wastes listed with the dangerous waste numbers F020, F021, F022, F023, F026, or F027 the quantity exclusion limit is 2.2 lbs. (1 kg) per month or per batch.
2	Listing Specific Definitions:
a	For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids.
b(i)	For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: Activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and (A) the units employs a minimum of 6 hp per million gallons of treatment volume; and either (B) the hydraulic retention time of the unit is no longer than 5 days; or (C) the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a dangerous waste by the Toxicity Characteristic.

(ii) Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities must maintain, in their operating or other on-site records, documents and data sufficient to prove that: (A) The unit is an aggressive biological treatment unit as defined in this subsection; and (B) the sludges sought to be exempted from the definitions of F037 and/or F038 were actually treated in the aggressive biological treatment unit.

c(i) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

(ii) For the purposes of the F038 listing,

(A) Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement and

(B) Floats are considered to be generated at the moment they are formed in the top of the unit.

State Sources

WPCB Discarded transformers, capacitors or bushings containing polychlorinated biphenyls (PCB) at concentrations of 2 parts per million or greater (except when drained of all free flowing liquid) and the following wastes generated from the salvaging, rebuilding, or discarding of transformers, capacitors or bushings containing polychlorinated biphenyls (PCB) at concentrations of 2 parts per million or greater: Cooling and insulating fluids and cores, including core papers. (Note—Certain PCB wastes are excluded from this listing under WAC 173-303-071 (3)(k). The generator should check that section to determine if their PCB waste is excluded from the requirements of chapter 173-303 WAC.)

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-9904, filed 11/30/04, effective 1/1/05; 00-11-040 (Order 99-01), § 173-303-9904, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-9904, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-9904, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9904, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9904, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-9904, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-9904, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-9904, filed 6/3/86; 85-09-042 (Order DE-85-02), § 173-303-9904, filed 4/15/85; 84-09-088 (Order DE 83-36), § 173-303-9904, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9904, filed 2/10/82.]

WAC 173-303-9905 Dangerous waste constituents list.

A2213 (Ethanimidothioic acid, 2- (dimethylamino) -N-hydroxy-2-oxo-, methyl ester)
Acetic Acid,2,4,5-trichlorophenoxy-, salts and esters (2,4,5-T, salts and esters)
Acetonitrile [Ethanenitrile]
Acetophenone (Ethanone, 1-phenyl)
-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts (Warfarin)
2-Acetylaminofluorene (Acetemide,N-9H- fluoren-2-yl)-)
Acetyl chloride (Ethanoyl chloride)
1-Acetyl-2-thiourea (Acetamide,N-(aminothioxomethyl)-)
Acrolein (2-Propenal)
Acrylamide (2-Propenamide)
Acrylonitrile (2-Propenenitrile)
Aflatoxins
Aldicarb sulfone (Propanal, 2-methyl-2-(methylsulfonyl) -, O-[(methylamino) carbonyl] oxime)
Aldrin (1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a,-hexahydro-endo,exo- 1,4:5,8-Dimethanonaphthalene)
Allyl alcohol (2-Propen-1-ol)
Allyl chloride (1-Propane, 3-chloro)
Aluminum phosphide
4-Aminobiphenyl ([1,1'-Biphenyl]-4-amine)
6-Amino-1,1a,2,8,8a,8b-hexahydro-8- (hydroxymethyl) -8a-methoxy-5-methyl- carbamate azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, (ester) (Mitomycin C) (Azirino[2'3':3,4]pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8
4-Aminopyridine(4-Pyridinamine)
Amitrole (1H-1,2,4-Triazol-3-amine)
Aniline (Benzenamine)
Antimony and compounds, N.O.S.*
Aramite (Sulfurous acid 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester)Arsenic and compounds, N.O.S.*
Barban (Carbamic acid, (3-chlorophenyl) -, 4-chloro-2-butynyl ester)
Barium and compounds, N.O.S.*
Barium cyanide
Bendiocarb (1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate)
Bendiocarb phenol (1,3-Benzodioxol-4-ol, 2,2-dimethyl-,)
Benomyl (Carbamic acid, [1- [(butylamino) carbonyl]-1H-benzimidazol-2-yl] -, methyl ester)
Benz[c]acridine (3,4-Benzacridine)
Benz[a]anthracene (1,2-Benzanthracene)
Benzene (Cyclohexatriene)
Benzenearsonic acid (Arsonic acid, phenyl-)
Benzene, 2-amino-1-methyl (o-Toluidine)
Benzene, 4-amino-1-methyl (p-Toluidine)
Benzene, dichloromethyl- (Benzal chloride)
Benzenethoil (Thiophenol)
Benzidine ([1,1'-Biphenyl]-4,4'diamine)
Benzo[b]fluoranthene (2,3-Benzofluoranthene)
Benzo(k)fluoranthene
Benzo[j]fluoranthene (7,8-Benzofluoranthene)
Benzo[a]pyrene (3,4-Benzopyrene)
p Benzoquinone (1,4-Cyclohexadienedione)
Benzotrichloride (Benzene, trichloromethyl-)
Benzyl chloride (Benzene, (chloromethyl)-)

Beryllium powder
Beryllium compounds, N.O.S.*
Bis(2-chloroethoxy)methane (Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-])
Bis(2-chloroethyl) ether (Ethane, 1,1'-oxybis[2-chloro-])
N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine)
Bis(2-chloroisopropyl) ether (Propane, 2,2'-oxybis[2-chloro-])
Bis(chloromethyl) ether (Methane, oxybis[chloro-])
Bis(2-ethylhexyl) phthalate (1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester)
Bis(pentamethylene)-thiuram tetrasulfide (Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-)
Bromoacetone (2-Propanone, 1-bromo-)
Bromomethane (Methyl bromide)
4-Bromophenyl phenyl ether (Benzene, 1-bromo-4-phenoxy-)
Brucine (Strychnidin-10-one, 2,3-dimethoxy-)
2-Butanone peroxide (Methyl ethyl ketone, peroxide)
Butyl benzyl phthalate (1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester)
2-sec-Butyl-4,6-dinitrophenol (DNBP) (Phenol, 2,4-dinitro-6-(1-methylpropyl)-)
Butylate (Carbamothioic acid, bis(2 methylpropyl)-, S-ethyl ester)
Cadmium and compounds, N.O.S.*
Calcium chromate (Chromic acid, calcium salt)
Calcium cyanide
Carbamic Acid, ethyl ester
Carbaryl (1-Naphthalenol methylcarbamate)
Carbendazim (Carbamic acid, 1H-benzimidazol-2-yl, methyl ester)
Carbofuran (7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate)
Carbofuran phenol (7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-)
Carbon disulfide (Carbon bisulfide)
Carbon oxyfluoride (Carbonyl fluoride)
Carbosulfan (Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester)
Chloral (Acetaldehyde, trichloro-)
Chlorambucil (Butanoic acid, 4-[bis(2-chloroethyl) amino]benzene-)
Chlordane (alpha and gamma isomers) (4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3,4,7,7a-tetrahydro-) (alpha and gamma isomers)
Chlorinated benzenes, N.O.S.*
Chlorinated ethane, N.O.S.*
Chlorinated fluorocarbons, N.O.S.*
Chlorinated naphthalene, N.O.S.*
Chlorinated phenol, N.O.S.*
Chloroacetaldehyde (Acetaldehyde, chloro-)
Chloroalkyl ethers, N.O.S.*
P-Chloroaniline (Benzenamine, 4-chloro-)
Chlorobenzene (Benzene, chloro-)
Chlorobenzilate (Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-,ethyl ester)
2-Chloro-1,3-butadiene
p-Chloro-m-cresol (Phenol, 4-Chloro-3-methyl)
1-Chloro-2,3-epoxypropane (Oxirane, 2-(chloromethyl)-)
2-Chloroethyl vinyl ether (Ethene, (2-chloroethoxy)-)
Chloroform (Methane, trichloro-)
Chloromethane (Methyl chloride)
Chloromethyl methyl ether (Methane, chloromethoxy-)
2-Chloronaphthalene (Naphthalene, beta-chloro-)
2-Chlorophenol (Phenol, o-chloro-)
1-(o-Chlorophenyl)thiourea (Thiourea, (2-chlorophenyl)-)
3-Chloropropene
3-Chloropropionitrile (Propanenitrile, 3-chloro-)Chromium and compounds, N.O.S.*
Chrysene (1,2-Benzphenanthrene)
Citrus red No. 2 (2-Naphthol, 1-[(2,5-dimethoxyphenyl)azo]-)
Coal tar creosote
Copper cyanide
Copper dimethyldithiocarbamate (Copper, bis(dimethylcarbamodithioato-S,S')-,)
Creosote
Cresols (Cresylic acid) (Phenol, methyl-)
Crotonaldehyde (2-Butenal)
m-Cumenyl methylcarbamate (Phenol, 3-(methylethyl)-, methyl carbamate)
Cyanides (soluble salts and complexes), N.O.S.*
Cyanogen (Ethanedinitrile)
Cyanogen bromide (Bromine cyanide)
Cyanogen chloride (Chlorine cyanide)
Cycasin (beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl-)
Cycloate (Carbamothioic acid, cyclohexylethyl-, S-ethyl ester)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-cyclohexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2,-Oxazaphosphorine, [bis(2-chloroethyl)amino]-tetrahydro-, 2-oxide)
Daunomycin (5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-)
Dazomet (2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl-)
DDD (Dichlorodiphenyldichloroethane) (Ethane, 1,1-dichloro-2,2-bis(p chlorophenyl)-)
DDE (Ethylene, 1,1-dichloro-2,2-bis(4-chlorophenyl)-)
DDT (Dichlorodiphenyltrichloroethane) (Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-)
Diallate (S-(2,3-dichloroallyl) diisopropylthiocarbamate)
Dibenz[a,h]acridine (1,2,5,6-Dibenzacridine)
Dibenz[a,j]acridine (1,2,7,8-Dibenzacridine)
Dibenz[a,h]anthracene (1,2,5,6-Dibenzanthracene)
7H-Dibenzo[c,g]carbazole (3,4,5,6-Dibenzcarbazole)
Dibenzo[a,e]pyrene (1,2,4,5-Dibenzpyrene)
Dibenzo[a,h]pyrene (1,2,5,6-Dibenzpyrene)
Dibenzo[a,i]pyrene (1,2,7,8-Dibenzpyrene)
1,2-Dibromo-3-chloropropane (Propane, 1,2-dibromo-3-chloro-)
1,2-Dibromoethane (Ethylene dibromide)
Dibromomethane (Methylene bromide)

Di-n-butyl phthalate (1,2-Benzenedicarboxylic acid, dibutyl ester)
o-Dichlorobenzene (Benzene, 1,2-dichloro-)
m-Dichlorobenzene (Benzene, 1,3-dichloro-)
p-Dichlorobenzene (Benzene, 1,4-dichloro-)
Dichlorobenzene, N.O.S.* (Benzene, dichloro-, N.O.S.*)
3,3'-Dichlorobenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-)
1,4-Dichloro-2-butene (2-Butene, 1,4-Butene, 1,4-dichloro-)
Dichlorodifluoromethane (Methane, dichlorodifluoro-)
1,1-Dichloroethane (Ethylidene dichloride)
1,2-Dichloroethane (Ethylene dichloride)
trans-1,2-Dichloroethene (1,2-Dichloroethylene)
Dichloroethylene, N.O.S.* (Ethene, dichloro-, N.O.S.*)
1,1-Dichloroethylene (Ethene, 1,1-dichloro-)
Dichloromethane (Methylene chloride)
2,4-Dichlorophenol (Phenol, 2,4-dichloro-)
2,6-Dichlorophenol (Phenol, 2,6-dichloro)
2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters (Acetic acid, 2,4-dichlorophenoxy-, salts and esters)
Dichlorophenylarsine (Phenyl dichloroarsine)
Dichloropropane, N.O.S.* (Propane, dichloro-, N.O.S.*)
1,2-Dichloropropane (Propylene dichloride)
Dichloropropanol, N.O.S.* (Propanol, dichloro-, N.O.S.*)
Dichloropropene, N.O.S.* (Propene, dichloro-, N.O.S.*)
1,3-Dichloropropene, (1-Propene, 1,3-dichloro-)
Dieldrin (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octa-hydro-endo, exo-1,4:5,8-Dimethanonaphthalene)
1,2:3,4-Diepoxybutane (2,2'-Bioxirane)
Diethylarsine (Arsine, diethyl-)
N,N'-Diethylhydrazine (Hydrazine, 1,2-diethyl)
O,O-Diethyl S-methyl ester of phosphorodithioic acid (Phosphorodithioic acid, O,O-diethyl S-methyl ester
O,O-Diethylphosphoric acid, O-p-nitrophenyl ester (Phosphoric acid, diethyl p-nitrophenyl ester)
Diethyl phthalate (1,2-Benzenedicarboxylic acid, diethyl ester)
O,O-Diethyl O-2-pyraxinyl phosphorothioate (Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
Diethylene glycol, dicarbamate (Ethanol, 2,2'-oxybis-, dicarbamate)
Diethylstilbesterol (4,4'-Stilbenediol, alpha,alpha-diethyl, bis(dihydrogen phosphate, (E)-)
Dihydrosafrole (Benzene, 1,2-methylenedioxy-4-propyl-)
3,4-Dihydroxy-alpha-(methylamino)methyl benzyl alcohol (1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-)
Diisopropylfluorophosphate (DFP) (Phosphorofluoridic acid, bis(1-methylethyl) ester)
Dimethoate (Phosphorodithioic acid, O,O-
dimethyl S-[2-(methylamino)-2-oxoethyl] ester
3,3'-Dimethoxybenzidine ([1,1'-Biphenyl]-4,4'diamine, 3-3'dimethoxy-)
p-Dimethylaminoazobenzene (Benzenamine, N,N-dimethyl-4-(phenylazo)-)
7,12-Dimethylbenz[a]anthracene (1,2-Benzanthracene, 7,12-dimethyl-)
3,3'Dimethylbenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-)
Dimethylcarbamoyl chloride (Carbamoyl chloride, dimethyl-)
1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl-)
1,2-Dimethylhydrazine (Hydrazine, 1,2-dimethyl-)
3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino) carbonyl]oxime (Thiofanox)
alpha,alpha-Dimethylphenethylamine (Ethanamine, 1,1-dimethyl-2-phenyl)
2,4-Dimethylphenol (Phenol, 2,4-dimethyl-)
Dimethyl phthalate (1,2-Benzenedicarboxylic, acid, dimethyl ester)
Dimethyl sulfate (Sulfuric acid, dimethyl ester)
Dimetilan (Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester)
Dinitrobenzene, N.O.S.* (Benzene, dinitro-, N.O.S.*
4,6-Dinitro-o-cresol and salts (Phenol, 2,4-dinitro-6-methyl-, and salts)
2,4-Dinitrophenol (Phenol, 2,4-dinitro-)
2,4-Dinitrotoluene (Benezene, 1-methyl-2,4-dinitro-)
2,6-Dinitrotoluene (Benzene,1-methyl-2,6-dinitro-)
Dinoseb (Phenol, 2-(1-methylpropyl)-4,6-dinitro-)
Di-n-octyl phthalate (1,2-Benzenedicarbozylic acid, dioctyl ester)
1,4-Dioxane (1,4-Diethylene oxide)
Diphenylamine (Benzenamine, N-Phenyl-)
1,2-Diphenylhydrazine (Hydrazine, 1,2-diphenyl-)
Di-n-propylmitrosamine (N-Nitroso-di-n-propylamine)
Disulfiram (Thioperoxydicarbonic diamide, tetraethyl)
Disulfoton (O,O-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate)
Dithiobiuret (Thioimidodicarbonic diamide [$(H_2N)C(S)]_2NH$)
EPTC (Carbamothioic acid, dipropyl-, S-ethyl ester)
Endosulfan (5-Norbornene, 2,3-dimethanol, 1,4,5,6,7,7-hexachloro-, cyclic sulfite)
Endrin and metabolites (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8-dimethanonaphthalene, and metabolites)
Ethyl carbamate (Urethan) (Carbamic acid, ethyl ester)
Ethyl cyanide (propanenitrile)
Ethyl ziram (Zinc, bis(diethylcarbamodithioato- S,S')-)
Ethylenebisdithiocarbamic acid, salts and esters (1,2-Ethanediylbiscarbamodithioic acid, salts and esters.
Ethylene glycol monoethyl ether (2-Ethoxyethanol)
Ethyleneimine (Aziridine)
Ethylene oxide (Oxirane)
Ethylenethiourea (2-Imidazolidinethione)
Ethylmethacrylate (2-Propenoic acid, 2-methyl-, ethyl ester)
Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester)
Ferbam (Iron, tris(dimethylcarbamodithioato- S,S')-)
Fluoranthene (Benzo[j,k]fluorene)
Fluorine
2-Fluoroacetamide (Acetamide, 2-fluoro-)
Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)

Formaldehyde (Methylene, oxide)
Formetanate hydrochloride (Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino) carbonyl]oxy]phenyl]-, monohydrochloride)
Formic acid (Methanoic acid)
Formparanate (Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino) carbonyl]oxy]phenyl]-)
Glycidylaldehyde (1-Propanol-2,3-epoxy)
Halomethane, N.O.S.*
Heptachlor (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-)
Heptachlor epoxide (alpha, beta, and gamma isomers) (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7-tetrahydro-, alpha, beta and gamma isomers)
Heptachlorodibenzofurans
Heptachlorodibenzo-p-dioxins
Hexachlorobenzene (Benzene, hexachloro-)
Hexachlorobutadiene (1,3-Butadiene, hexachloro-)
Hexachlorocyclohexane (all isomers) (Lindane and isomers)
Hexachlorocylopentadiene (1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-)
Hexachlorodibenzo-p-dioxins
Hexachlorodibenzofurans
Hexachloroethane (Ethane, hexachloro-)
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,endo-dimethanonphthalene (Hexachlorohexahydro-endo,endo-dimethanonaphthalene)
Hexachlorophene (2,2'-Methylenebis(3,4,6-trichlorophenol))
Hexachloropropene (Propene, hexachloro-)
Hexaethyl tetraphosphate (Tetraphosphoric acid, hexaethyl ester)
Hydrazine (Diamine)
Hydrocyanic acid (Hydrogen cyanide)
Hydrofluoric acid (Hydrogen fluoride)
Hydrogen sulfide (Sulfur hydride)
Hydroxydimethylarsine oxide (Cacodylic acid)
Indeno(1,2,3-cd)pyrene (1,10-(1,2-phenylene)pyrene)
3-Iodo-2-propynyl n-butylcarbamate (Carbamic acid, butyl-, 3-iodo-2- propynyl ester)
Iodomethane (Methyl iodide)
Isocyanic acid, methyl ester (Methyl isocyanate)Isobutyl alcohol (1-Propanol, 2-methyl-)
Isolan (Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester)
Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Kepone (Decachlorooctahydro-1,3,4-Methano-2H-cyclobuta[cd]pentalene-2-one)
Lasiocarpine (2-Butanoic acid, 2-methyl-,7-[(2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester)
Lead and compounds, N.O.S.*
Lead acetate (Acetic acid, lead salt)
Lead phosphate (Phosphoric acid, lead salt)
Lead subacetate (Lead, bis(acetato-O)tetrahydroxytri-)
Maleic anhydride (2,5-Furandione)
Maleic hydrazide (1,2-Dihydro-3,6-pyridazinedione)
Malononitrile (Propanedinitrile)
Manganese dimethyldithiocarbamate (Manganese, bis(dimethylcarbamodithioato-S,S')-,)
Melphalan (Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-,L-)
Mercury Fulminate (Fulminic acid, mercury salt)
Mercury and compounds, N.O.S.*
Metam sodium (Carbamodithioic acid, methyl-, monosodium salt)
Methacrylonitrile (2-Propenenitrile, 2-methyl-)
Methanethiol (Thiomethanol)
Methapyrilene (Pyridine, 2-[(2-dimethylamino)ethyl]-2-thenylamino-)
Methiocarb (Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate)
Metholonyl (Acetimidic acid, N-[(methylcarbamoyl) oxy]thio-,methyl ester
Methoxychior (Ethane, 1,1,1-trichloro-2,2'-bis(p-methoxyphenyl)-)
2-Methylaziridine (1,2-Propylenimine)
3-Methylcholanthrene (Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-)
Methyl chlorocarbonate (Carbonochloridic acid, methyl ester)
4,4'-Methylenebis(2-chloroaniline) (Benzenamine, 4,4'-methylenebis-(2-chloro-)
Methyl ethyl ketone (MEK) (2-Butanone)
Methyl hydrazine (Hydrazine, methyl-)
2-Methyllactonitrile (Propanenitrile, 2-hydroxy-2-methyl-)
Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)
Methyl methanesulfonate (Methanesulfonic acid, methyl ester)
2-Methyl-2-(methylthio)propionaldehyde-o-(methylcarbonyl) oxime
N-Methyl-N'-nitro-N-nitrosoguanidine (Guanidine, N-nitros-N-methyl-N'nitro-)
Methyl parathion (O,O-dimethyl O-(4-nitrophenyl) phosphorothioate)
Methylthiouracil (4-1H-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-)
Metolcarb (Carbamic acid, methyl-, 3-methylphenyl ester)
Mexacarbate (Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester))
Molinate (1H-Azepine-1-carbothioic acid,hexahydro-, S-ethyl ester)
Mustard gas (Sulfide, bis(2-chloroethyl)-)
Naphthalene
1,4-Naphthoquinone (1,4-Naphthalenedione)
1-Naphthylamine (alpha-Naphthylamine)
2-Naphthylamine (beta-Naphthylamine)
1-Naphthyl-2-thiourea (Thiourea, 1-naphthalenyl-)
Nickel and compounds, N.O.S.*
Nickel carbonyl (Nickel tetracarbonyl)
Nickel cyanide (nickel (II) cyanide)
Nicotine and salts, Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts)
Nitric oxide (Nitrogen (II) oxide)
p-Nitroaniline (Benzenamine, 4-nitro-)

Nitrobenzine (Benzene, nitro-) Nitrobenzene
Nitrogen dioxide (Nitrogen (IV) oxide)
Nitrogen mustard and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-
N-methyl-, and hydrochloride salt)
Nitrogen mustard N-Oxide and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, N-oxide, and hydro-chloride salt)
Nitroglycerine (1,2,3-Propanetriol, trinitrate)
4-Nitrophenol (Phenol, 4-nitro-)
2-Nitropropane (Propane 2-nitro)
4-Nitroquinoline-1-oxide (Quinoline, 4-nitro-1-oxide-)
Nitrosamine, N.O.S.*
N-Nitrosodi-n-butylamine (1-Butanamine, N-butyl-N-nitroso-)
N-Nitrosodiethanolamine (Ethanol, 2,2'-(nitrosoimino) bis-)
N-Nitrosodiethylamine (Ethanamine, N-Ethyl-N-nitroso-)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitroso-N-ethylurea (Carbamide, N-ethyl-N-nitroso-)
N-Nitrosomethylethylamine (Ethanamine, N-methyl-N-nitroso-)
N-Nitroso-N-methylurea (Carbamide, N-methyl-N-nitroso-)
N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl ester)
N-Nitrosomethylvinylamine (Ethenamine, N-methyl-N-nitroso-)
N-Nitrosomorpholine (Morpholine, N-nitroso-)
N-Nitrosonornicotine (Nornicotine, N-nitroso-)
N-Nitrosopiperidine (Pyridine, hexahydro-, N-nitroso-)
N-Nitrosopyrrolidine (pyrrole, tetrahydro-, N-nitroso-)
N-Nitrososacrosine (Sarcosine, N-nitroso-)
5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)
Octachlorodibenzo-p-dioxin (OCDD) 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin
Octachlorodibenzofuran (OCDF) 1,2,3,4,6,7,8,9-Octachlorodibenzofuran
Octamethylpyrophosphoramide (Diphosphoraminde, octamethyl-)
Osmium tetroxide (Osmium (VIII) oxide)
7-Ocabicyclo[2.2.1]heptane-2,3-dicarbonxylic acid (Endothal)
Oxamyl (Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester)
Paraldehyde (1,3,5-Trioxane, 2,4,6-trinethyl-)
Parathion (Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester
Pebulate (Carbamothioic acid, butylethyl-, S- propyl ester)
Pentachlorobenzene (Benzene, pentachloro-)
Pentachlorodibenzo-p-dioxins
Pentachlorodibenzofurans
Pentachloroethane (Ethane, pentachloro-)
Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-)
Pentachlorophenol (Phenol, pentachloro-)
Perchloromethyl mercaptan (Methanesulferryl chloride, trichloro-)
Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)
Phenol (Benzene, hydroxy-)
Phenylenediamine (Benzenediamine)
Phenylmercury acetate (Mercury, acetatophenyl-)
N-Phenylthiourea (Thiourea, phenyl-)
Phosgene (Carbonyl chloride)
Phosphine (Hydrogen phosphide)
Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester (Phorate)
Phosphorothioic acid, O,O-dimethyl O-[p-((dimethylamino)sulfonyl)phenyl] ester (Famphur)
Phthalic acid esters, N.O.S.* (Benzene, 1,2-dicarboxylic acid, esters, N.O.S.*
Phthalic anhydride (1,2-Benzenedicarboxylic acid anhydride)
Physostigmine (Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-,methylcarbamate (ester), (3aS-cis)-)
Physostigmine salicylate (Benzoic acid, 2-hydroxy-, compd. with (3aS-cis) —1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1).)
2-Picoline (Pyridine, 2-methyl-)
Polychlorinated biphenyl, N.O.S.*
Potassium cyanide
Potassium dimethyldithiocarbamate (Carbamodithioic acid, dimethyl, potassium salt)
Potassium n-hydroxymethyl-n-methyl- dithiocarbamate (Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt)
Potassium n-methyldithiocarbamate (Carbamodithioic acid, methyl- monopotassium salt)
Potassium pentachlorophenate (Pentachlorophenol, potassium salt)
Potassium silver cyanide (Argentate(1-), dicyano-, potassium)
Promecarb (Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate)
Pronamide (3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide)
1,3-Propanesultone (1,2-Oxathiolane, 2,2-dioxide)
Propham (Carbamic acid, phenyl-, 1-methylethyl ester)
Propionic acid, 2-(2,4,5-trichlorophenoxy), salts and esters (2,4,5-TP,Silvex, salts and esters)
Propoxur (Phenol, 2-(1-methylethoxy)-, methylcarbamate)
n-Propylamine (1-Propane)
Propylthiouracil (2,3 dihydro-6-propyl-2 thioxo-4(1H)-pyrimidinone)
2-Propyn-1-ol (Propargyl alcohol)
Prosulfocarb (Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester)
Pyridine
Reserpine (Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenxoyl)oxy]-, methyl ester)
Resorcinol (1,3-Benzenediol)
Saccharin and salts (1,2-Benzoisothiazolin-3-one, 1,1-dioxide, and salts)
Safrol (Benzene, 1,2-methylenedioxy-4-allyl-)
Selenious acid (Selenium dioxide)

Selenium and compounds, N.O.S.*
Selenium sulfide (Sulfur selenide)
Selenium, tetrakis (dimethyl-dithiocarbamate) (Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid)
Selenourea (Carbamimidoselenoic acid)
Silver and compounds, N.O.S.*
Silver cyanide
Sodium cyanide
Sodium dibutyldithiocarbamate (Carbamodithioic acid, dibutyl, sodium salt)
Sodium diethyldithiocarbamate (Carbamodithioic acid, diethyl-, sodium salt)
Sodium dimethyldithiocarbamate (Carbamodithioic acid, dimethyl-, sodium salt)
Sodium pentachlorophenate (Pentachlorophenol, sodium salt)
Streptozotocin (D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-)
Strychnine and salts (Strychnidin-10-one, and salts)
Sulfallate (Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester)
Tetrabutylthiuram disulfide (Thioperoxydicarbonic diamide, tetrabutyl)
1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro-)
Tetrachlorodibenzo-p-dioxins
Tetrachlorodibenzofurans
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) (Dibenzo-p-dioxin, 2,3,7,8-tetrachloro-)
Tetrachloroethane, N.O.S.* (Ethane, tetrachloro-, N.O.S.*)
1,1,1,2-Tetrachlorethane (Ethane, 1,1,1,2-tetrachloro-)
1,1,2,2-Tetrachlorethane (Ethane, 1,1,2,2-tetrachloro-)
Tetrachlorethylene (Ethene, 1,1,2,2-tetrachloro-)[1]
Tetrachloromethane (Carbon tetrachloride)
2,3,4,6-Tetrachlorophenol (Phenol,2,3,4,6-tetrachloro-)
2,3,4,6-Tetrachlorophenol, potassium salt
2,3,4,6-Tetrachlorophenol, sodium salt
Tetraethyldithiopyrophosphate (Dithiopyrophosphoric acid, tetraethyl-ester)
Tetraethyl lead (Plumbane, tetraethyl-)
Tetraethylpyrophosphate (Pyrophosphoric acid, tetraethyl ester)
Tetramethylthiuram monosulfide (Bis(dimethylthiocarbamoyl) sulfide)
Tetranitromethane (Methane, tetranitro-)
Thallium and compounds, N.O.S.*
Thallic oxide (Thallium (III) oxide)
Thallium (1) acetate (Acetic acid, thallium (I) salt)
Thallium (I) carbonate (Carbonic acid, dithallium (I) salt)
Thallium (I) chloride
Thallium (I) nitrate (Nitric acid, thallium (I) salt)
Thallium selenite
Thallium (I) sulfate (Sulfuric acid, thallium (I) salt)
Thioacetamide (Ethanethioamide)
Thiodicarb (Ethanimidothioic acid, N,N'-[thiobis [(methylimino) carbonyloxy]] bis-, dimethyl ester.)
Thiophanate-methyl (Carbamic acid, [1,2-phyenylenebis (iminocarbonothioyl)] bis-, dimethyl ester)
Thiosemicarbazide (Hydrazinecarbothioamide)
Thiourea (Carbamide thio-)
Thiuram (Bis(dimethylthioucarbamoyl) disulfide)
Tirpate (1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime.)
Toluene (Benzene, methyl-)
Toluenediamine, N.O.S. (Toluene, 2,5-diamine-)
2,4-Toluenediamine
2,6-Toluenediamine
3,4-Toluenediamine
o-Toluidine hydrochloride (Benzenamine, 2-methyl-, hydrochloride)
Tolylene diisocyanate (Benzene, 2,4- and 2,6-diisocyanato-methyl-)
Toxaphene (Camphene, octachloro-)
Triallate (Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester)
Tribromomethane (Bromoform)
1,2,4-Trichlorobenzene (Benzene, 1,2,4-trichloro-)
1,1,1-Trichloroethane (Methyl chloroform)
1,1,2-Trichloroethane (Ethane, 1,1,2-trichloro-)
Trichloroethene (Trichloroethylene)
Trichloromonofluoromethane (Methane, trichlorofluoro-)
2,4,5-Trichlorophenol (Phenol, 2,4,5-trichloro-)
2,4,6-Trichlorophenol (Phenol, 2,4,6-trichloro-)
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T, salts and esters) (Acetic acid, 2,4,5-trichlorophenoxy-, salts and esters)
2,4,5-Trichlorophenoxypropionic acid (Porpionoic acid, 2-(2,4,5-trichlorophenoxyl), salts and esters (2,4,5-TP, Silvex, salts and esters))
Trichloropropane, N.O.S.* (Propane, trichloro-, N.O.S.*
1,2,3-Trichloropropane (Propane, 1,2,3-trichloro-)
O,O,O-Triethyl phosphorothioate (Phosphorothioic acid, O,O,O-triethyl ester)
Triethylamine (Ethanamine, N,N-diethyl-)
sym-Trinitrobenzene (Benzene, 1,3,5-trinitro-)
Tris(1-aziridinyl) phosphine sulfide (Phosphine sulfide, tris(1-aziridinyl-)
Tris(2,3-dibromopropyl) phosphate (1-Propanol, 2,3-dibromo-, phosphate)
Trypan blue (2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl(1,1'-biphenyl)-4,4'-diyl)bis(azo)]bis(5-amino-4-hydroxy-, tetrasodium salt)
Undecamethylenediamine, N,N'-bis-(2-chloro-benzyl)-,dihydrochloride N,N'-Undecamethyl-enebis(2-chlorobenzylamine, dihydrochloride)
Uracil mustard (Uracil 5-[bis(2-chlorethyl)amino]-)
Vanadic acid, ammonium salt (ammonium vanadate)
Vanadium pentoxide (Vanadium (V) oxide)
Vernolate (Carbamothioic acid, dipropyl-,S-propyl ester)
Vinyl chloride (Ethane, chloro-)
Warfarin (2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3%)
Warfarin (2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3%)

Warfarin salts, when present at concentrations less than 0.3%

Warfarin salts, when present at concentrations greater than 0.3%

Zinc cyanide

Zinc phosphide

Ziram (Zinc, bis(dimethylcarbamodithioato-S,S')-, (T-4)-)

* The abbreviation N.O.S. signifies those members of the general class "not otherwise specified" by name in this listing.

[Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. 04-24-065 (Order 03-10), § 173-303-9905, filed 11/30/04, effective 1/1/05. Statutory Authority: Chapters 70.105 and 70.105D RCW. 98-03-018 (Order 97-03), § 173-303-9905, filed 1/12/98, effective 2/12/98; 95-22-008 (Order 94-30), § 173-303-9905, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9905, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. 89-02-059 (Order 88-24), § 173-303-9905, filed 1/4/89; 87-14-029 (Order DE-87-4), § 173-303-9905, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-9905, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-9905, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9905, filed 2/10/82.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-303-9906 Special waste bill of lading.

SPECIAL WASTE
BILL OF LADING
EXAMPLE

1) Receiving Facility Name: _____ phone: _____
   Address: _____ fax: _____
2) Customer Name: _____ phone: _____
   Address: _____ fax: _____
3) Property Owner Name
   (where waste originated): _____ phone: _____
   Address: _____ fax: _____
4) Hauler Name: _____ phone: _____
   Address: _____ fax: _____
5) Consultant Name: _____ phone: _____
   Address: _____ fax: _____
6) Amount of waste: _____
7) Original Location of Special Waste: _____
8) Activity Which Generated Waste: _____
9) Description of Waste. Include any Applicable Dangerous Waste Code: _____

_____

10) Does Waste Have Potential to Create Fugitive Dust? Yes_____ No_____
    If Yes, What is your Plan to Mitigate Dust?

_____

_____

11) Amount of wastes in pounds or tons: _____

SPECIAL WASTE WASTE ANALYSIS

Customer Must Initial the Appropriate Item.

_____1. Wastes were designated through testing

_____2. Wastes were designated by other means

Customer Certifies That:

1. The Waste sampled and intended for disposal under this Certification is special waste as defined in WAC 173-303-040.
2. The Waste has no free liquids per WAC 173-303-110 (3)(c)(i).

Signature _____ Date _____

_____

[Statutory Authority: Chapters 70.105 and 70.105D RCW. 95-22-008 (Order 94-30), § 173-303-9906, filed 10/19/95, effective 11/19/95; 94-01-060 (Order 92-33), § 173-303-9906, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9906, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-9906, filed 6/26/87. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9906, filed 2/10/82.]

WAC 173-303-9907 Reserved.

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. 00-11-040 (Order 99-01), § 173-303-9907, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. 94-01-060 (Order 92-33), § 173-303-9907, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 CFR Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). 91-07-005 (Order 90-42), § 173-303-9907, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-9907, filed 6/26/87. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-9907, filed 2/10/82.]

Chapter 173-304 WAC

MINIMUM FUNCTIONAL STANDARDS FOR SOLID WASTE HANDLING

WAC

173-304-010	Authority and purpose.
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173-304-012	Planning requirements for energy recovery or incineration facilities.
173-304-015	Applicability.
173-304-100	Definitions.
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173-304-405	General facility requirements.
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173-304-410	Transfer stations, baling and compaction systems, and drop box facilities.
173-304-420	Piles used for storage and treatment—Facility standards.
173-304-430	Surface impoundment standards.
173-304-440	Energy recovery and incinerator standards.
173-304-450	Landspreading disposal standards.
173-304-460	Landfilling standards.
173-304-461	Inert waste and demolition waste landfilling facility requirements.
173-304-462	Woodwaste landfilling facility requirements.
173-304-463	Problem waste landfills. (Reserved.)
173-304-467	Financial assurance for public facilities.
173-304-468	Financial assurance for private landfill disposal facilities.
173-304-470	Other methods of solid waste handling.
173-304-490	Ground water monitoring requirements.
173-304-600	Permit requirements for solid waste facilities.
173-304-700	Variances.
173-304-9901	Maximum contaminant levels for ground water.

WAC 173-304-010 Authority and purpose. This regulation is promulgated under the authority of chapter 70.95 RCW to protect public health, to prevent land, air, and water pollution, and conserve the state's natural, economic, and energy resources by:

(1) Setting minimum functional performance standards for the proper handling of all solid waste materials originating from residences, commercial, agricultural and industrial operations and other sources;

(2) Identifying those functions necessary to assure effective solid waste handling programs at both the state and local level;

(3) Following the direction set by the legislature for the management of solid waste in order of descending priority as applicable:

(a) Waste reduction;

(b) Waste recycling;

(c) Energy recovery or incineration;

(d) Landfill.

(4) Describing the responsibility of persons, municipalities, regional agencies, state and local government under existing laws and regulations related to solid waste;

(5) Requiring use of the best available technology for siting, and all known available and reasonable methods for designing, constructing, operating and closing solid waste handling facilities; and

(6) Establishing these standards as minimum standards for solid waste handling to provide a statewide consistency and expectation as to the level at which solid waste is managed throughout the state. Local ordinances setting standards for solid waste handling shall not be less stringent than these minimum standards, and shall be adopted not later than one year after the effective date of this regulation. Local ordinances need not adopt WAC 173-304-011, County planning requirements, but shall otherwise comply with the requirements of WAC 173-304-011. Solid waste regulations or ordinances adopted by counties, cities, or jurisdictional boards of health shall be filed with the department ninety days following adoption.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-010, filed 10/28/85.]

WAC 173-304-011 County planning requirements. The concept of "solid waste management" includes in addition to proper storage, collection, and disposal of discards, other management functions or operational activities including waste reduction, source separation, waste recycling, transportation, processing, treatment, resource recovery, energy recovery, incineration, and landfilling. Under the State Solid Waste Management Act, chapter 70.95 RCW, primary responsibility for managing solid waste is assigned to local government (RCW 70.95.020). The state, however, is responsible for assuring that effective local programs are established throughout Washington state. Therefore, state and local solid waste planning for the aforementioned activities is an essential part of proper solid waste management.

(1) State responsibility. As described in RCW 70.95.260, the department shall coordinate the development of a state solid waste management plan in cooperation with local government, the department of community development, and other appropriate state and regional agencies. The state plan shall be reviewed at two-year intervals, revised as necessary, and extended so that the plan shall look to the future for twenty years as a guide in carrying out a coordinated state solid waste management program.

(2) Local government responsibility. The overall purpose of local comprehensive solid waste planning is to determine the nature and extent of the various solid waste categories and to establish management concepts for their handling, utilization, and disposal consistent with the priorities established in RCW 70.95.010 for waste reduction, waste recycling, energy recovery and incineration, and landfill. Each local plan shall be prepared in accordance with RCW 70.95.-080, 70.95.090, 70.95.100, and 70.95.110. Additionally, the department has available "Guidelines for the development of local or regional solid waste management plans and plan revisions" to be followed by local government. RCW 70.95.-165 also requires counties to establish a local solid waste advisory committee to assist in the development of programs and policies concerning solid waste handling and disposal

and to review and comment upon proposed rules, policies, or ordinances prior to their adoption.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-011, filed 10/28/85.]

WAC 173-304-012 Planning requirements for energy recovery or incineration facilities. In order to implement the priorities and provide a basis for permit requirements established in chapter 70.95 RCW, each comprehensive solid waste management plan shall contain an analysis for waste reduction and recycling. The analysis will include a determination of levels of waste reduction and recycling which could occur for solid wastes that are proposed to be landfilled or incinerated. The analysis shall include: A description of markets for recycled material, a review of waste generation trends, a description of waste composition, a cost analysis of the impact of recycling or reduction programs on collection and disposal rates and a discussion and description of any additional programs needed to assist public and private sector recycling programs.

[Statutory Authority: Chapter 70.95 RCW. 87-15-049 (Order 87-3), § 173-304-012, filed 7/14/87.]

WAC 173-304-015 Applicability. These regulations apply to solid wastes as that term is defined in WAC 173-304-100. These regulations shall not apply to the following solid wastes:

(1) Overburden from mining operations intended for return to the mine;

(2) Liquid wastes whose discharge or potential discharge is regulated under federal, state or local water pollution permits;

(3) Dangerous wastes as defined by chapter 70.105 RCW and chapter 173-303 WAC;

(4) Woodwaste used for ornamental, animal bedding, mulch and plant bedding, or roadbuilding purposes;

(5) Agricultural wastes, limited to manures and crop residues, returned to the soils at agronomic rates;

(6) Clean soils and clean dredge spoils as defined in WAC 173-304-100 or as otherwise regulated by section 404 of the Federal Clean Water Act (PL 95-217);

(7) Septage taken to a sewage treatment plant permitted under chapter 90.48 RCW;

(8) Radioactive wastes, defined by chapters 402-12 and 402-19 WAC; and

(9) Wood debris resulting from the harvesting of timber and whose disposal is permitted under chapter 76.04 RCW, the State Forest Practices Act.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-015, filed 10/28/85.]

WAC 173-304-100 Definitions. When used in this regulation, the following terms have the meanings given below.

(1) "Active area" means that portion of a facility where solid waste recycling, reuse, treatment, storage, or disposal operations are being, are proposed to be, or have been conducted. Buffer zones shall not be considered part of the active area of a facility.

(2) "Agricultural wastes" means wastes on farms resulting from the production of agricultural products including but not limited to manures, and carcasses of dead animals weighing each or collectively in excess of fifteen pounds.

(3) "Agronomic rates" means the rates of application of sludges, manures, or crop residues in accordance with rates specified by the appropriate fertilizer guide for the crop under cultivation.

(4) "Air quality standard" means a standard set for maximum allowable contamination in ambient air as set forth in chapter 173-400 WAC, General regulations for air pollution sources.

(5) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

(6) "Ashes" means the residue including any air pollution flue dusts from combustion or incineration of material including solid wastes.

(7) "Balefill" means a landfill which uses compacted bales of solid waste to form discrete lifts as the landfill is filled.

(8) "Buffer zone" means that part of a facility that lies between the active area and the property boundary.

(9) "Bulky waste" means large items of refuse, such as appliances, furniture, and other oversize wastes which would typically not fit into reusable or disposable containers.

(10) "Clean soils and clean dredge spoils" means soils and dredge spoils which are not dangerous wastes or problem wastes as defined in this section.

(11) "Closure" means those actions taken by the owner or operator of a solid waste site or facility to cease disposal operations and to ensure that all such facilities are closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period.

(12) "Collecting agency" means any agency, business or service operated by a person for the collecting of solid waste.

(13) "Compliance schedule" means a written schedule of required measures in a permit including an enforceable sequence leading to compliance with these regulations.

(14) "Composting" means the controlled degradation of organic solid waste yielding a product for use as a soil conditioner.

(15) "Container" means a device used for the collection, storage, and/or transportation of solid waste including but not limited to reusable containers, disposable containers, detachable containers and tanks, fixed or detachable.

(16) "Contaminate" means to allow to discharge a substance into ground water that would cause:

(a) The concentration of that substance in the ground water to exceed the maximum contamination level specified in WAC 173-304-9901, or

(b) A statistically significant increase in the concentration of that substance in the ground water where the existing concentration of that substance exceeds the maximum contaminant level specified in WAC 173-304-9901, or

(c) A statistically significant increase above background in the concentration of a substance which:

(i) Is not specified in WAC 173-304-9901, and

(ii) Is present in the solid waste, and

(iii) Has been determined to present a substantial risk to human health or the environment in the concentrations found at the point of compliance by the jurisdictional health depart-

ment in consultation with the department and the department of social and health services.

(17) "Cover material" means soil or other suitable material that has been approved by the jurisdictional health department as cover for wastes.

(18) "Dangerous wastes" means any solid waste designated as dangerous waste by the department under chapter 173-303 WAC.

(19) "Demolition waste" means solid waste, largely inert waste, resulting from the demolition or razing of buildings, roads and other man-made structures. Demolition waste consists of, but is not limited to, concrete, brick, bituminous concrete, wood and masonry, composition roofing and roofing paper, steel, and minor amounts of other metals like copper. Plaster (i.e., sheet rock or plaster board) or any other material, other than wood, that is likely to produce gases or a leachate during the decomposition process and asbestos wastes are not considered to be demolition waste for the purposes of this regulation.

(20) "Department" means the department of ecology.

(21) "Detachable containers" means reusable containers that are mechanically loaded or handled such as a "dumpster" or drop box.

(22) "Disposable containers" means containers that are used once to handle solid waste such as plastic bags, cardboard boxes and paper bags.

(23) "Disposal" or "deposition" means the discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water.

(24) "Disposal site" means the location where any final treatment, utilization, processing, or deposition of solid waste occurs. See also the definition of interim solid waste handling site.

(25) "Drop box facility" means a facility used for the placement of a detachable container including the area adjacent for necessary entrance and exit roads, unloading and turn-around areas. Drop box facilities normally serve the general public with loose loads and receive waste from off-site.

(26) "Energy recovery" means the recovery of energy in a useable form from mass burning or refuse derived fuel incineration, pyrolysis or any other means of using the heat of combustion of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

(27) "Existing facility" means a facility which is owned or leased, and in operation, or for which construction has begun, on or before the effective date of this regulation and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances. A facility has commenced construction if either:

(a) A continuous on-site physical construction program has begun; or

(b) The owner or operator has entered into contractual obligations which cannot be cancelled or modified without substantial financial loss for physical construction of the facility to be completed within a reasonable time.

Lateral extensions of a landfill's active area on land purchased and permitted by the jurisdictional health department for the purpose of landfilling before the effective date of this regulation shall be considered existing facilities.

(28) "Expanded facility" means a facility adjacent to an existing facility for which the land is purchased and approved by the jurisdictional health department after the effective date of this regulation. A vertical expansion approved and permitted by the jurisdictional health department after the effective date of this regulation shall also be considered an expanded facility.

(29) "Facility" means all contiguous land (including buffer zones) and structures, other appurtenances, and improvements on the land used for solid waste handling.

(30) "Facility structures" means buildings, sheds, utility lines, and drainage pipes on the facility.

(31) "Final treatment" means the act of processing or preparing solid waste for disposal, utilization, reclamation, or other approved method of use.

(32) "Free liquids" means any sludge which produces measurable liquids when the Paint Filter Liquids Test, Method 9095 of EPA Publication Number SW-846, is used.

(33) "One hundred-year flood plain" means any land area which is subject to one percent or greater chance of flooding in any given year from any source.

(34) "Garbage" means unwanted animal and vegetable wastes and animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food, swill and carcasses of dead animals, and of such a character and proportion as to be capable of attracting or providing food for vectors, except sewage and sewage sludge.

(35) "Ground water" means that part of the subsurface water which is in the zone of saturation.

(36) "Holocene fault" means a fracture along which rocks on one side have been displaced with respect to those on the other side and that has occurred in the most recent epoch of the quaternary period extending from the end of the pleistocene to the present.

(37) "Incineration" means reducing the volume of solid wastes by use of an enclosed device using controlled flame combustion.

(38) "Interim solid waste handling site" means any interim treatment, utilization or processing site engaged in solid waste handling which is not the final site of disposal. Transfer stations, drop boxes, baling and compaction sites, source separation centers, and treatment are considered interim solid waste handling sites.

(39) "Industrial solid wastes" means waste by-products from manufacturing operations such as scraps, trimmings, packing, and other discarded materials not otherwise designated as dangerous waste under chapter 173-303 WAC.

(40) "Inert wastes" means noncombustible, nondangerous solid wastes that are likely to retain their physical and chemical structure under expected conditions of disposal, including resistance to biological attack and chemical attack from acidic rainwater.

(41) "Jurisdictional health department" means city, county, city-county or district public health department.

(42) "Landfill" means a disposal facility or part of a facility at which solid waste is permanently placed in or on land and which is not a landspreading disposal facility.

(43) "Landspreading disposal facility" means a facility that applies sludges or other solid wastes onto or incorporates solid waste into the soil surface at greater than vegetative utilization and soil conditioners/immobilization rates.

(44) "Leachate" means water or other liquid that has been contaminated by dissolved or suspended materials due to contact with solid waste or gases therefrom.

(45) "Local fire control agency" means a public or private agency or corporation providing fire protection such as a local fire department, the department of natural resources or the United States Forest Service.

(46) "Lower explosive limits" means the lowest percentage by volume of a mixture of explosive gases which will propagate a flame in air at twenty-five degrees centigrade and atmospheric pressure.

(47) "Medical waste" means all the infectious, and injurious waste originating from a medical, veterinary, or intermediate care facility.

(48) "New facility" means a facility which begins operation or construction after the effective date of this regulation (see also definition of "existing facility").

(49) "Nonconforming site" means a solid waste handling facility which does not currently comply with the facility requirements of WAC 173-304-400 but does comply with a compliance schedule issued in a solid waste permit by the jurisdictional health department.

(50) "Nuisance" consists in unlawfully doing an act, or omitting to perform a duty, which act or omission either annoys, injures, or endangers the comfort, repose, health or safety of others, offends decency, or unlawfully interferes with, obstructs or tends to obstruct, any lake or navigable river, bay, stream, canal, or basin, or any public park, square, street or highway; or in any way renders other persons insecure in life, or in the use of property.

(51) "Open burning" means the burning of solid waste materials in an open fire or an outdoor container without providing for the control of combustion or the control of emissions from the combustion.

(52) "Performance standard" means the criteria for the performance of solid waste handling facilities.

(53) "Permeability" means the ease with which a porous material allows liquid or gaseous fluids to flow through it. For water, this is usually expressed in units of centimeters per second and termed hydraulic conductivity. Soils and synthetic liners with a permeability for water of 1×10^{-7} cm/sec or less may be considered impermeable.

(54) "Permit" means an authorization issued by the jurisdictional health department which allows a person to perform solid waste activities at a specific location and which includes specific conditions for such facility operations.

(55) "Person" means an individual, firm, association, copartnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatsoever.

(56) "Pile" means any noncontainerized accumulation of solid waste that is used for treatment or storage.

(57) "Plan of operation" means the written plan developed by an owner or operator of a facility detailing how a facility is to be operated during its active life and during closure and post-closure.

(58) "Point of compliance" means that part of ground water that lies beneath the perimeter of a solid waste facilities' active area as that active area would exist at closure of the facility.

(59) "Post-closure" means the requirements placed upon disposal sites after closure to ensure their environmental safety for at least a twenty-year period or until the site becomes stabilized (i.e., little or no settlement, gas production, or leachate generation).

(60) "Premises" means a tract or parcel of land with or without habitable buildings.

(61) "Problem wastes" means: (a) Soils removed during the cleanup of a remedial action site, or a dangerous waste site closure or other cleanup efforts and actions and which contain harmful substances but are not designated dangerous wastes, or (b) dredge spoils resulting from the dredging of surface waters of the state where contaminants are present in the dredge spoils at concentrations not suitable for open water disposal and the dredge spoils are not dangerous wastes and are not regulated by section 404 of the Federal Clean Water Act (PL 95-217).

(62) "Processing" means an operation to convert a solid waste into a useful product or to prepare it for disposal.

(63) "Putrescible waste" means solid waste which contains material capable of being decomposed by micro-organisms.

(64) "Pyrolysis" means the process in which solid wastes are heated in an enclosed device in the absence of oxygen to vaporization, producing a hydrocarbon-rich gas capable of being burned for recovery of energy.

(65) "Reclamation site" means a location used for the processing or the storage of recycled waste.

(66) "Reusable containers" means containers that are used more than once to handle solid waste such as garbage cans.

(67) "Runoff" means any rainwater, leachate or other liquid which drains over land from any part of the facility.

(68) "Run-on" means any rainwater or other liquid which drains over land onto any part of a facility.

(69) "Scavenging" means the removal of materials at a disposal site, or interim solid waste handling site without the approval of the owner or operator and the jurisdictional health department.

(70) "Septage" means a semisolid consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from a septic tank system.

(71) "Sludge" means a semisolid substance consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from a wastewater treatment plant or other source.

(72) "Sole source aquifer" means an aquifer designated by the Environmental Protection Agency pursuant to Section 1424e of the Safe Drinking Water Act (PL 93-523).

(73) "Solid waste" means all putrescible and nonputrescible solid and semisolid wastes, including but not limited to garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, and discarded commodities. This includes all liquid, solid and semisolid, materials which are not the primary products of public, private, industrial, commercial, mining, and agricultural operations. Solid waste includes but is not limited to sludge from wastewater treatment plants and septage, from septic tanks, woodwaste, dangerous waste, and problem wastes.

(74) "Solid waste handling" means the management, storage, collection, transportation, treatment, utilization, processing or final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery of energy resources from such wastes or the conversion of the energy in such wastes to more useful forms or combinations thereof.

(75) "Solid waste management" means the systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste.

(76) "Storage" means the holding of solid waste materials for a temporary period.

(77) "Twenty-five year storm" means a storm of a particular duration and of such an intensity that it has a four percent probability of being equalled or exceeded each year.

(78) "Twenty-four hour, twenty-five year storm" means a twenty-five year storm of twenty-four hours duration.

(79) "Stream" means the point at which any confined freshwater body of surface water reaches a mean annual flow of twenty cubic feet per second.

(80) "Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

(81) "Surface water" means all lakes, rivers, ponds, streams, inland waters, salt waters and all other water and water courses within the jurisdiction of the state of Washington.

(82) "Transfer station" means a permanent, fixed, supplemental collection and transportation facility, used by persons and route collection vehicles to deposit collected solid waste from off-site into a larger transfer vehicle for transport to a solid waste handling facility. Transfer stations may also include recycling facilities.

(83) "Treatment" means the physical, chemical or biological processing of solid waste to make such solid wastes safer for storage or disposal, amenable for energy or material resource recovery or reduced in volume.

(84) "Utilization" means consuming, expending, or exhausting by use, solid waste materials.

(85) "Vadose zone" means that portion of a geologic formation in which soil pores contain some water, the pressure of that water is less than atmospheric pressure, and the formation occurs above the zone of saturation.

(86) "Vector" means a living animal, insect or other arthropod which transmits an infectious disease from one organism to another.

(87) "Waste recycling" means reusing waste materials and extracting valuable materials from a waste stream.

(88) "Waste reduction" means reducing the amount or type of waste generated.

(89) "Water quality standard" means a standard set for maximum allowable contamination in surface waters as set forth in chapter 173-201 WAC, Water quality standards for waters of the state of Washington.

(90) "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, estuaries, and similar areas.

(91) "Woodwaste" means solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, handling and storage of raw materials and trees and stumps. This includes but is not limited to sawdust, chips, shavings, bark, pulp, hog fuel, and log sort yard waste, but does not include wood pieces or particles containing chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

(92) "Zone of saturation" means that part of a geologic formation in which soil pores are filled with water and the pressure of that water is equal to or greater than atmospheric pressure.

(93) "Buy-back recycling center" means any facility which collects, receives, or buys recyclable materials from household, commercial, or industrial sources for the purpose of accumulating, grading, or packaging recyclable materials for subsequent shipment and reuse, other than direct application to land.

(94) "Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater together with such industrial waste as may be present.

(95) "Industrial wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of industrial wastewater.

(96) "Liquid" means a substance that flows readily and assumes the form of its container but retains its independent volume.

(97) "Reserved" means a section having no requirements and which is set aside for future possible rule-making as a note to the regulated community.

(98) "Limited purpose landfills" means a landfill that receives solid waste of limited types, known and consistent composition, other than woodwastes, garbage, inert waste, and demolition waste.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-100, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-100, filed 10/28/85.]

WAC 173-304-130 Locational standards for disposal sites. (1) Applicability. These standards apply to all new and expanded disposal sites including landfills, landspreading disposal sites, and piles and surface impoundments that are to be closed as landfills. These standards do not apply to:

(a) Existing facilities or facilities that have engaged in closure and closed before the effective date of this regulation;

(b) Interim solid waste handling sites;

(c) Energy recovery and incineration sites;

(d) Piles and surface impoundments used for storage, unless otherwise referred to in WAC 173-304-400, Solid waste handling facility standards;

(e) Utilization of sludge and other waste on land;

(f) Inert wastes and demolition wastes as defined in WAC 173-304-100 unless otherwise referred to in WAC 173-304-400, Solid waste handling facility standards; and

(g) Problem wastes, as defined in WAC 173-304-100.

(2) Locational standards. All applicable solid waste facilities shall be subject to the following locational standards:

(a) Geology. No facility shall be located over a holocene fault, in subsidence areas, or on or adjacent to geologic features which could compromise the structural integrity of the facility.

(b) Ground water.

(i) No facility shall be located at a site where the bottom of the lowest liner is any less than ten feet above the seasonal high level of ground water in the uppermost aquifer, or five feet when a hydraulic gradient control system or the equivalent has been installed to control ground water fluctuations;

(ii) No landfill shall be located over a sole source aquifer; and

(iii) No facility's active area shall be located closer than one thousand feet to a down-gradient drinking water supply well, in use and existing at the time of the county's adoption of the comprehensive solid waste management plan unless the owner or operator can show that the active area is no less than ninety days travel time hydraulically to the nearest down-gradient drinking water supply well in the uppermost useable aquifer.

(c) Natural soils. See WAC 173-304-400, such as WAC 173-304-460 (3)(c)(i), landfill liners;

(d) Flooding. See WAC 173-304-400 such as WAC 173-304-460 (3)(d), landfill, floodplains;

(e) Surface water. No facility's active area shall be located within two hundred feet measured horizontally, of a stream, lake, pond, river, or salt water body, nor in any wetland nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4);

(f) Slope. No facility's active area shall be located on any hill whose slope is unstable;

(g) Cover material. See WAC 173-304-400, such as WAC 173-304-460 (3)(e), landfills, closure;

(h) Capacity. See WAC 173-304-400, such as WAC 173-304-460, Landfilling standards, (for standards that vary according to capacity);

(i) Climatic factors. See WAC 173-304-400 such as WAC 173-304-460(3) landfill standards, (for standards applicable to arid climates);

(j) Land use. No facility shall be located:

(i) Within ten thousand feet of any airport runway currently used by turbojet aircraft or five thousand feet of any airport runway currently used by only piston-type aircraft unless a waiver is granted by the federal aviation administration. This requirement is only applicable where such facility is used for disposing of garbage such that a bird hazard to aircraft would be created;

(ii) In areas designated by the United States Fish and Wildlife Service or the department of game as critical habitat for endangered or threatened species of plants, fish, or wildlife;

(iii) So that the active area is any closer than one hundred feet to the facility property line for land zoned as nonresidential, except that the active area may be no closer than two hundred and fifty feet to the property line of adjacent land zoned as residential existing at the time of the county's adoption of the comprehensive solid waste management plan;

(iv) So as to be at variance with any locally-adopted land use plan or zoning requirement unless otherwise provided by local law or ordinance; and

(v) So that the active area is any closer than one thousand feet to any state or national park.

(k) Toxic air emissions. See WAC 173-304-400 such as WAC 173-304-460 (2)(b), landfill performance standards.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-130, filed 10/28/85.]

WAC 173-304-190 Owner responsibilities for solid waste. The owner, operator, or occupant of any premise, business establishment, or industry shall be responsible for the satisfactory and legal arrangement for the solid waste handling of all solid waste accumulated by them on the property.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-190, filed 10/28/85.]

WAC 173-304-195 Permit required. After approval by the department of the comprehensive solid waste plan required by RCW 70.95.100, no solid waste disposal site or facility shall be maintained, established, substantially altered, expanded or improved until the county, city or other person operating or owning such site has obtained a permit from the jurisdictional health department pursuant to the provisions of WAC 173-304-600.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-195, filed 10/28/85.]

WAC 173-304-200 On-site containerized storage, collection and transportation standards for solid waste. (1) Applicability. These standards apply to all persons storing containerized solid waste generated on-site, and to all persons who are engaged in the collection and transportation of solid waste of more than one single family residence or single family farm including collection and transportation of septage and septic tank pumpings.

(2) On-site storage standards.

(a) The owner or occupant of any premises, business establishment, or industry shall be responsible for the safe and sanitary storage of all containerized solid wastes accumulated at that premises.

(b) The owner, operator, or occupant of any premises, business establishment, or industry shall store containerized solid wastes in containers that meet the following requirements:

(i) Disposable containers shall be sufficiently strong to allow lifting without breakage and shall be thirty-two gallons in capacity or less where manual handling is practiced;

(ii) Reusable containers, except for detachable containers, shall be:

(A) Rigid and durable;

(B) Corrosion resistant;

(C) Nonabsorbent and water tight;

(D) Rodent-proof and easily cleanable;

(E) Equipped with a close fitting cover;

(F) Suitable for handling with no sharp edges or other hazardous conditions; and

(G) Equal to or less than thirty-two gallons in volume where manual handling is practiced.

(iii) Detachable containers shall be durable, corrosion-resistant, nonabsorbent, nonleaking and having either a solid cover or screen cover to prevent littering.

(3) Collection and transportation standards.

(a) All persons collecting or transporting solid waste shall avoid littering, or the creation of other nuisances at the loading point, during transport and for the proper unloading of the solid waste at a permitted transfer station, or other permitted solid waste handling site.

(b) Vehicles or containers used for the collection and transportation of solid waste shall be tightly covered or screened where littering may occur, durable and of easily cleanable construction. Where garbage is being collected or transported, containers shall be cleaned as necessary to prevent nuisances, odors and insect breeding and shall be maintained in good repair.

(c) Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such manner that the contents will not fail, leak in quantities to cause a nuisance, or spill therefrom. Where such spillage or leakage does occur, the waste shall be picked up immediately by the collector or transporter and returned to the vehicle or container and the area otherwise properly cleaned.

(d) All persons commercially collecting or transporting solid waste shall inspect collection and transportation vehicles monthly, for repairs to containers such as missing or loose-fitting covers or screens, leaking containers, etc., and maintain such inspection records at the facility normally used to park such vehicles or such other location that maintenance records are kept. Such records shall be kept for a period of at least two years, and be made available upon the request of the jurisdictional health department.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-200, filed 10/28/85.]

WAC 173-304-300 Waste recycling facility standards. (1) Applicability.

(a) These standards apply to facilities engaged in recycling or utilization of solid waste on the land, including but not limited to:

(i) Noncontainerized composting in piles;

(ii) Utilization of sewage sludge, septage and other organic wastes on land for beneficial use;

(iii) Accumulation of wastes in piles for recycling or utilization.

(b) These standards do not apply to:

(i) Single family residences and single family farms engaged in composting of their own wastes;

(ii) Facilities engaged in the recycling of solid waste containing garbage, such as garbage composting, which are subject to WAC 173-304-400, Solid waste handling facility standards;

(iii) Facilities engaged in the storage of tires which are subject to WAC 173-304-400, Solid waste handling facility standards;

(iv) Problem wastes as defined in WAC 173-304-100;

(v) Facilities engaged in recycling of solid waste stored in surface impoundments which are subject to WAC 173-304-400, Solid waste handling facility standards; and

(vi) Woodwaste or hog fuel piles to be used as fuel or raw materials stored temporarily in piles being actively used so long as the criteria of WAC 173-304-300 (3)(c)(i) are met.

(c) These standards do not apply to any facility that recycles or utilizes solid wastes in containers, tanks, vessels, or in any enclosed building, including buy-back recycling centers.

(2) Effective dates. All existing facilities recycling solid waste not in conformance with this section shall be placed upon a compliance schedule under WAC 173-304-600(1) to assure compliance within two years of the effective date of this regulation.

(3) Waste recycling requirements.

(a) All applicable solid waste recycling facilities shall apply for and obtain a solid waste permit under WAC 173-304-600, permits.

(b) Applicable waste recycling facilities shall submit annual reports to the jurisdictional health department and the department by March 1 of the following year for which the data is collected on forms supplied by the department. The annual reports shall include quantities and types of waste recycled for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4). Such facilities may request and be assured of confidentiality for their reports in accordance with chapter 42.17 RCW and RCW 43.21A.160.

(c) All facilities storing solid waste in outdoor piles or surface impoundments for the purpose of waste recycling shall be considered to be storing or disposing of solid waste if:

(i) At least fifty percent of the material has not been shown to have been recycled in the past three years and any material has been on-site more than five years; or

(ii) Ground water or surface water, air, and/or land contamination has occurred or will likely occur under current conditions of storage or in case of fire, or flood.

Upon such a determination by the jurisdictional health department that (c)(i) or (ii) of this subsection are met, the jurisdictional health department may require a permit application and issuance of a permit under WAC 173-304-600 of these rules.

(d) Waste recycling facilities shall allow jurisdictional health department and department representatives entry for inspection purposes and to determine compliance with these rules at reasonable times.

(e) All applicable waste recycling facilities shall not conflict with the county comprehensive solid waste management plan required by WAC 173-304-011 of these rules.

(f) All waste recycling facilities shall comply with applicable local, state and federal laws and regulations, including but not limited to environmental regulations and laws.

(4) Sewage sludge utilization requirements.

In addition to the requirements of subsection (3) of this section, all facilities utilizing sewage sludge, including septage shall comply with the department's *Municipal and Domestic Sludge Utilization Guidelines* WDOE 82-11, dated September 1982 or as hereafter amended. Facilities utilizing sewage sludge on the land in a manner not consistent with nor

meeting the requirement of the guidelines are required to meet the landspreading disposal standards of WAC 173-304-450.

(5) Woodwaste and other organic sludge utilization requirements.

(a) Facilities utilizing woodwaste not otherwise excluded under WAC 173-304-015, shall comply with these recycling standards. Applying woodwaste and other primarily organic sludges such as pulp and paper mill treatment sludges to the land shall be in a manner consistent with the *Municipal and Domestic Sludge Utilization Guidelines* WDOE 82-11 dated September 1982 or as hereafter amended. Only agricultural or silvicultural sites where such sludges are demonstrated to have soil conditioning or fertilizer value shall be acceptable, provided that the woodwaste and other primarily organic sludges are applied as a soil conditioner or fertilizer in accordance with accepted agricultural and silvicultural practice. Facilities utilizing woodwaste or other primarily organic sludges on the land in a manner not consistent with nor meeting the requirement of the guidelines are required to meet the landspreading disposal standards of WAC 173-304-450.

(b) Facilities utilizing woodwaste or other primarily organic sludges shall also comply with the standards of subsection (3) of this section.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-300, filed 10/28/85.]

WAC 173-304-400 Solid waste handling facility standards. (1) Applicability. The standards of WAC 173-304-405 through 173-304-490 are the solid waste handling facility standards and apply to all solid waste handling facilities, except for:

(a) Waste recycling facilities, whose standards are spelled out in WAC 173-304-300;

(b) On-site containerized storage, collection and transportation facilities which are spelled out in WAC 173-304-200;

(c) Single family residences and single family farms whose year round occupants engage in solid waste handling of the single family's solid waste on-site;

(d) Problem wastes as defined in WAC 173-304-100;

(e) Solid waste handling facilities that have engaged in closure and closed before the effective date of this regulation; and

(f) Domestic wastewater facilities and industrial wastewater facilities otherwise regulated by federal, state, or local water pollution permits except for any portion that utilizes or engages in landspreading disposal sludges or solid residues directly on the land.

(2) Standards for permits. The standards of WAC 173-304-405 through 173-304-490 shall be used as the basis for permitting as required in WAC 173-304-600.

(3) Effective dates.

(a) All existing facilities not in conformance with the following sections of the facility standards shall be placed upon compliance schedules under WAC 173-304-600 (1)(c) to assure full compliance within eighteen months of the effective date of this regulation for:

(i) The general facility standards, WAC 173-304-405;

(ii) The transfer stations, baling and compaction standards, WAC 173-304-410;

(iii) Ground water monitoring required in WAC 173-304-490;

(iv) The landfill operating and maintenance standards, WAC 173-304-460(4);

(v) The tire pile standards of WAC 173-304-420(4); and

(vi) The landspreading disposal standards of WAC 173-304-450(5).

(b) All applicable solid waste facilities shall be in compliance with the general closure and post-closure standards of WAC 173-304-407 and the financial assurance standards of WAC 173-304-467 and 173-304-468 by twelve months after the effective date of WAC 173-304-407, 173-304-467, and 173-304-468, except for owners or operators of existing facilities that have a closure plan approved by the jurisdictional health department in a solid waste permit issued before the effective date of these amendments and are closing before November 27, 1989. Existing solid waste facilities shall be placed upon compliance schedules under WAC 173-304-600 (1)(c) to assure compliance by the effective date of this subsection.

(c) All existing solid waste facilities not in conformance with facility standards other than those in (a) and (b) of this subsection shall be placed upon compliance schedules under WAC 173-304-600 (1)(c) to assure full compliance within four years of the effective date of this regulation.

(d) All new and expanded facilities other than those in (b) of this subsection shall meet the facility standards of WAC 173-304-405 to 173-304-490 after the effective date of this regulation.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-400, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-400, filed 10/28/85.]

WAC 173-304-405 General facility requirements. (1) Applicability. All applicable solid waste handling facilities shall meet the requirements of this section.

(2) Plan of operation. Each owner or operator shall develop, keep and abide by a plan of operation approved as part of the permitting process in WAC 173-304-600. The plan shall describe the facilities' operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health officer. The facility must be operated in accordance with the plan or the plan must be so modified with the approval of the jurisdictional health department. Owners or operators of drop boxes may develop a generic plan of operation applicable to all such drop boxes, owned or operated.

Each plan of operation shall include:

(a) How solid wastes are to be handled on-site during its active life;

(b) How inspections and monitoring are conducted and their frequency;

(c) Actions to take if there is a fire or explosion;

(d) Actions to take if leaks are detected;

(e) Corrective action programs to take if ground water is contaminated;

(f) Actions to take for other releases (e.g. failure of runoff containment system);

(g) How equipment such as leachate collection and gas collection equipment are to be maintained;

(h) A safety plan or procedure; and

(i) Other such details as required by the jurisdictional health department.

(3) Recordkeeping. Each owner or operator shall maintain daily operating records on the weights (or volumes), number of vehicles entering and, if available, the types of wastes received. Major deviations from the plan of operation shall also be noted on the operating record.

(4) Reporting. Each owner or operator shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by March 1 of each year. The annual report shall cover facility activities during the previous year and must include the following information:

(a) Name and address of the facility;

(b) Calendar year covered by the report;

(c) Annual quantity, in tons, or volume, in cubic yards, and estimated in-place density in pounds per cubic yard of solid waste handled, by type of solid waste if available, for each type of treatment, storage, or disposal facility, including applicable recycling facilities; and

(d) Results of ground water monitoring required in WAC 173-304-490.

(5) Inspections. The owner or operator shall inspect the facility to prevent malfunctions and deterioration, operator errors and discharges which may cause or lead to the release of wastes to the environment or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment. The owner or operator shall keep an inspection log or summary including at least the date and time of inspection, the printed name and the handwritten signature of the inspector, a notation of observations made and the date and nature of any repairs or corrective action. The log or summary must be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least three years from the date of inspection. Inspection records shall be available to the jurisdictional health department upon request.

(6) Recording with county auditor. Maps and a statement of fact concerning the location of the disposal site shall be recorded as part of the deed with the county auditor not later than three months after closure. Records and plans specifying solid waste amounts, location and periods of operation shall be submitted to the local zoning authority or the authority with jurisdiction over land use and be made available for inspection.

(7) State and local requirements. All solid waste disposal facilities shall comply with all state and local requirements such as zoning land use, fire protection, water pollution prevention, air pollution prevention, nuisance and aesthetics.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-405, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-405, filed 10/28/85.]

WAC 173-304-407 General closure and post-closure requirements. (1) Applicability. The requirements of subsections (2), (3), (4), and (5) of this section apply to all solid waste handling facilities. The requirements of subsections (6), (7), and (8) of this section apply to:

(a) Landfills subject to WAC 173-304-460 including limited purpose landfills under WAC 173-304-460(5);

(b) Surface impoundments under WAC 173-304-430 (2)(g) closed with waste remaining in place;

(c) Woodwaste landfills under WAC 173-304-462; and

(d) Landspreading disposal facilities under WAC 173-304-450(2).

(2) Effective dates. Existing facilities subject to the requirements of this section shall meet the applicable facility standards of this section within twelve months of the effective date of this regulation. All new or expanded facilities subject to the requirements of this section shall meet the applicable facility standards on the effective date of this regulation.

(3) Closure performance standard. Each owner or operator shall close their facility in a manner that:

(a) Minimizes the need for further maintenance;

(b) Controls, minimizes, or eliminates threats to human health and the environment from post-closure escape of solid waste constituents, leachate, landfill gases, contaminated rainfall or waste decomposition products to the ground, ground water, surface water, and the atmosphere; and

(c) Prepares the facility for the post-closure period.

(4) Closure plan and amendment(s). Closure as defined in WAC 173-304-100(11), includes but is not limited to grading, seeding, landscaping, contouring, and/or screening. For interim solid waste handling sites, closure includes waste removal and decontamination of the site.

(a) Each owner or operator shall develop, keep and abide by a plan of closure approved by the jurisdictional health department as part of the permitting process in WAC 173-304-600.

(b) The closure plan shall project time intervals at which sequential partial closure is to be implemented, and identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument.

(c) Each owner or operator shall not commence disposal operations in any part of a facility until a closure plan for the entire facility has been approved by the jurisdictional health department, and until a financial assurance instrument has been provided, as required by applicable laws and regulations.

(d) The jurisdictional health department shall approve, disapprove, or require amendment of the closure plan as part of the permitting process of WAC 173-304-600 in accordance with applicable laws and regulations.

(e) Each owner and operator shall close the facility in accordance with the approved closure plan and all approved amendments.

(5) Closure procedures.

(a) Each owner and operator shall notify the jurisdictional health department and where applicable, the financial assurance instrument trustee, of the intent to implement the closure plan in part or whole, no later than one hundred eighty days prior to the projected final receipt of waste at the entire facility unless otherwise specified in the closure plan.

(b) The owner or operator shall commence implementation of the closure plan in part or whole within thirty days after receipt of the final volume of waste and/or attaining the final landfill elevation at part of or at the entire facility as

identified in the approved facility closure plan unless otherwise specified in the closure plan.

(c) Waste shall not be accepted for disposal or for use in closure except as identified in the closure plan approved by the jurisdictional health department, as required in subsection (3)(a) of this section.

(d) When facility closure is completed in part or whole, each owner and operator shall submit the following to the jurisdictional health department:

(i) Facility closure plan sheets signed by a professional engineer registered in the state of Washington and modified as necessary to represent as-built changes to final closure construction as approved in the closure plan;

(ii) Certification by the owner or operator, and a professional engineer registered in the state of Washington that the site has been closed in accordance with the approved closure plan.

(e) The jurisdictional health department shall notify the owner or operator and the department of ecology of the date when the facility post-closure period has begun, which period shall commence when the jurisdictional health department has verified the facility has been closed in accordance with the specifications of the approved closure plan and the closure requirements of this section.

(6) Post-closure performance standard. Each owner or operator shall provide post-closure activities to allow for continued facility maintenance and monitoring of air, land, and water as long as necessary for the facility to stabilize and to protect human health and the environment.

(7) Post-closure plan and amendment. For disposal facilities; post-closure includes ground water monitoring; surface water monitoring; gas monitoring; and maintenance of the facility, facility structures, and monitoring systems for their intended use for a period of twenty years and any other activities deemed appropriate by the jurisdictional health department.

(a) Each owner or operator shall develop, keep and abide by a post-closure plan approved as a part of the permitting process in WAC 173-304-600. The post-closure plan shall address facility maintenance and monitoring activities for at least a twenty-year period or until the site becomes stabilized (i.e., little or no settlement, gas production or leachate generation), and monitoring of ground water, surface water, and gases can be safely discontinued.

(b) The post-closure plan shall project time intervals at which post-closure activities are to be implemented, and identify post-closure cost estimates and projected fund withdrawal intervals from the selected financial assurance instrument, where applicable, for the associated post-closure costs.

(c) Each owner or operator shall not commence disposal operations in any part of a facility until a post-closure plan for the entire facility has been approved by the jurisdictional health department, and until a financial assurance instrument has been provided where applicable, as required by WAC 173-304-467.

(d) Each owner or operator shall complete the post-closure activities in accordance with the approved post-closure plan and schedule. Facility post-closure activities shall be completed in accordance with the approved post-closure plan or the plan shall be so amended with the approval of the jurisdictional health department.

(e) The jurisdictional health department may determine that a facility post-closure plan is invalid and require an owner or operator to amend the facility post-closure plan.

(i) The health department may direct facility post-closure activities, in part or whole, to cease until the post-closure plan amendment has received written approval by the health department.

(ii) When the health department determines a facility post-closure amendment is required, the health department shall, after consultation with the owner/operator, designate a compliance schedule for submittal of the amendment and its review and approval by the department.

(8) Post-closure procedures.

(a) Each owner or operator shall commence post-closure activities after completion of closure activities outlined in subsection (5)(d)(i) and (ii) of this section. The jurisdictional health department may direct that post-closure activities cease until the owner or operator receives a notice to proceed with post-closure activities.

(b) When post-closure activities are complete, the owner or operator shall certify to the jurisdictional health department, signed by the owner or operator, and a professional engineer registered in the state of Washington stating why post-closure activities are no longer necessary (i.e., little or no settlement, gas production, or leachate generation).

(c) If the jurisdictional health department finds that post-closure monitoring has established that the facility is stabilized (i.e., little or no settlement, gas production, or leachate generation), the health department may authorize the owner or operator to discontinue post-closure maintenance and monitoring activities.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-407, filed 10/4/88.]

WAC 173-304-410 Transfer stations, baling and compaction systems, and drop box facilities. (1) Applicability. All transfer stations, baling and compaction systems and drop boxes receiving solid waste from off-site shall meet the requirements of this section. Facilities receiving solid waste from on-site shall meet the requirements of WAC 173-304-200.

(2) Transfer stations, baling and compacting systems standards. Transfer stations, baling and compaction systems shall be designed, constructed, and operated so as to:

(a) Be surrounded by a fence, trees, shrubbery, or natural features so as to control access and be screened from the view of immediately adjacent neighbors, unless the tipping floor is fully enclosed by a building;

(b) Be sturdy and constructed of easily cleanable materials;

(c) Be free of potential rat harborages, and provide effective means to control rodents, insects, birds and other vermin;

(d) Be adequately screened to prevent blowing of litter and to provide effective means to control litter;

(e) Provide protection of the tipping floor from wind, rain or snow other than below grade bins or detachable containers;

(f) Have an adequate buffer zone around the operating area to minimize noise and dust nuisances, and for transfer stations, baling, or compaction systems, a buffer zone of fifty

feet from the active area to the nearest property line in areas zoned residential;

(g) Comply with local zoning and building codes including approved local variances and waivers;

(h) Provide pollution control measures to protect surface and ground waters, including runoff collection and discharge designed and operated to handle a twenty-four hour, twenty-five year storm and equipment cleaning and washdown water;

(i) Provide all-weather approach roads, exit roads, and all other vehicular areas;

(j) Provide pollution control measures to protect air quality including a prohibition against all burning and the development of odor and dust control plans to be made a part of the plan of operation in WAC 173-304-405(2);

(k) Prohibit scavenging;

(l) Provide attendant(s) on-site during hours of operation;

(m) Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what constitutes materials not to be accepted and other necessary information posted at the site entrance;

(n) Have communication capabilities to immediately summon fire, police, or emergency service personnel in the event of an emergency; and

(o) Remove all wastes at closure, as defined in WAC 173-304-100, from the facility to a permitted facility.

(3) Drop box facility standards. Drop box facilities, as defined in WAC 173-304-100, shall:

(a) Be constructed of durable water tight materials with a lid or screen on top that prevents the loss of materials during transport and access by rats and other vermin;

(b) Be located in an easily identifiable place accessible by all-weather roads;

(c) Be designed and serviced as often as necessary to ensure adequate dumping capacity at all times. Storage of solid waste outside the drop boxes is prohibited;

(d) Comply with subsection (2)(m) of this section, signs; and

(e) Remove all remaining wastes at closure, as defined in WAC 173-304-100, to a permitted facility, and remove the drop box from the facility.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-410, filed 10/28/85.]

WAC 173-304-420 Piles used for storage and treatment—Facility standards. (1) Applicability.

(a) This section is applicable to solid wastes stored or treated in piles as defined in WAC 173-304-100 where putrescible wastes (other than garbage) are in place for more than three weeks, other wastes not intended for recycling are in place for more than three months, and garbage is in place for more than three days. These standards are also applicable to composting or storing of garbage and sludge in piles, and to tire piles where more than eight hundred tires are stored at one facility.

(b) Other solid wastes stored or treated in piles prior to waste recycling including compost piles of vegetative waste, piles of woodwaste used for fuel or raw materials are subject to WAC 173-304-300.

(c) Waste piles stored in fully enclosed buildings are not subject to these standards, provided that no liquids or sludges with free liquids are added to the pile.

(d) Inert wastes and demolition wastes are not subject to these standards.

(2) Requirements. All owners and operators shall:

(a) Comply with the requirements of the General facility requirements, WAC 173-304-405;

(b) Design piles located in a one hundred-year flood plain to:

(i) Comply with local flood plain management ordinances and chapter 508-60 WAC, Administration of flood control zones; and

(ii) To avoid washout or restriction of flow; and

(c) Remove all solid wastes from the pile at closure to another permitted facility.

(3) Requirements for putrescible wastes or wastes likely to produce leachate.

(a) Waste piles shall be placed upon a surface such as sealed concrete, asphalt, clay or an artificial liner underlying the pile, to prevent subsurface soil and potential ground water contamination and to allow collection of runoff and leachate. The liner shall be designed of sufficient thickness and strength to withstand stresses imposed by pile handling vehicles and the pile itself;

(b) Runoff systems shall be installed, designed and maintained to handle a twenty-four hour, twenty-five year storm event;

(c) Waste piles having a capacity of greater than ten thousand cubic yards shall have either:

(i) A ground water monitoring system that complies with WAC 173-304-490; or

(ii) A leachate detection, collection and treatment system.

For purposes of this subsection, capacity refers to the total capacity of all putrescible or leachate-generating piles at one facility (i.e., two, five thousand cubic yard piles will subject the facility to the requirements of this subsection).

(d) Run-on prevention systems shall be designed and maintained to handle the maximum flow from a twenty-five year storm event; and

(e) A jurisdictional health department may require that the entire base or liner shall be inspected for wear and integrity and repaired or replaced by removing stored wastes or otherwise providing inspection access to the base or liner; the request shall be in writing and cite the reasons including valid ground water monitoring or leachate detection data leading the jurisdictional health department to request such an inspection, repair or replacement.

(4) Requirements for tire piles. Owners or operators shall:

(a) Control access to the tire pile by fencing;

(b) Limit the tire pile to a maximum of one-half acre in size;

(c) Limit the height of the tire pile to twenty feet;

(d) Provide for a thirty foot fire lane between tire piles; and

(e) Provide on-site fire control equipment.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-420, filed 10/28/85.]

WAC 173-304-430 Surface impoundment standards. (1) Applicability.

(a) These standards are applicable to solid wastes that are liquids or sludges containing free liquids as defined in WAC 173-304-100 and applicable under WAC 173-304-015(2) and are stored or treated in surface impoundments;

(b) These standards are also applicable to sludges and septage stored or treated in surface impoundments; and

(c) These standards are not applicable to:

(i) Surface impoundments whose facilities and discharges are otherwise regulated under federal, state, or local water pollution permits; and

(ii) Retention or detention basins used to collect and store stormwater runoff.

(2) Requirements. All surface impoundments must be designed, constructed, and operated so as to:

(a) Meet the performance standards of WAC 173-304-460(2);

(b) Have an inplace or imported soil liner of at least two feet of 1 x 10^{-7} cm/sec permeability or an equivalent combination of any thickness greater than two feet and a greater permeability to protect the underlying aquifers or a thirty mil reinforced artificial liner placed on top of a structurally stable foundation to support the liners and solid waste and to prevent settlement that would destroy the liner; natural soils shall be recompacted to achieve an equivalent permeability. Owners or operators shall be allowed to use alternative designs, operating practices and locational characteristics which prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection;

(c) Avoid washout including the use of an extended liner or dikes or restriction of flow in the one hundred year flood plain and to comply with local flood plain management ordinances and chapter 508-60 WAC, Administration of flood control zones;

(d) Have dikes designed with slopes so as to maintain the structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action;

(e) Have the freeboard equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation;

(f) Have either a ground water monitoring system, or a leachate detection, collection and treatment system, for surface impoundments having a capacity of more than two million gallons unless the jurisdictional health department and the department require either for smaller surface impoundments. For purposes of this subsection, capacity refers to the total capacity of all surface impoundments on-site (i.e., two, one million gallon surface impoundments on one site will trigger these monitoring requirements);

(g) Be closed in a manner which removes all solid wastes including liners, etc. to another permitted facility and the site returned to its original or acceptable topography except that surface impoundments closed with the waste remaining in place shall meet the requirements of WAC 173-304-407 and 173-304-130;

(h) A jurisdictional health department may require that the liner be inspected for wear and integrity and repaired or replaced by removing stored solid wastes or otherwise inspecting the liner or base at any time. The request shall be in writing and cite the reasons including valid ground water monitoring or leachate detection data leading to such an inspection and repair;

(i) Surface impoundments containing septage will also be subject to the department's "criteria for sewage works design" used to review plans for septage surface impoundments; and

(j) Surface impoundments that have the potential to impound more than ten acre-feet of waste measured from the top of the dike and which would be released by a failure of the containment dike shall be reviewed and approved by the dam safety section of the department.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-430, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-430, filed 10/28/85.]

WAC 173-304-440 Energy recovery and incinerator standards. (1) Applicability. These standards apply to all facilities designed to burn more than twelve tons of solid waste per day, except for facilities burning woodwaste or gases recovered at a landfill.

(2) Requirements for energy recovery facilities and incinerators.

(a) Incinerators and energy recovery facilities storing putrescible wastes shall be confined to storage compartments specifically designed to store wastes temporarily in piles, surface impoundments, tanks or containers. The storage facilities shall meet the facility standards of WAC 173-304-400. Storage of wastes other than in the specifically designed storage compartments is prohibited. Equipment and space shall be provided in the storage and charging areas, and elsewhere as needed, to allow periodic cleaning as may be required in order to maintain the plant in a sanitary and clean condition;

(b) All residues from energy recovery facilities or incinerator facilities shall be used, handled or disposed of as solid or dangerous wastes according to these standards or the standards of the dangerous waste regulation, chapter 173-303 WAC;

(c) Each owner or operator of an energy recovery facility or incinerator facility shall comply with WAC 173-304-405. The plan of operation shall address alternative storage, and/or disposal plans for all breakdowns that would result in overfilling of the storage facility;

(d) Energy recovery facilities and incinerators must be designed, constructed and operated in a manner to comply with appropriate state and local air pollution control authority emission and operating requirements;

(e) Each owner or operator shall close their energy recovery facility or incinerator by removing all ash, solid wastes and other residues to a permitted facility;

(f) Each owner or operator of an energy recovery facility or incinerator shall be required to provide recycling facilities in a manner equivalent to WAC 173-304-460 (4)(f); and

(g) Owners or operators of energy recovery facilities or incinerators shall not knowingly dispose of, treat, store or otherwise handle dangerous waste unless the requirements of chapter 173-303 WAC are met.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-440, filed 10/28/85.]

WAC 173-304-450 Landspreading disposal standards. (1) Applicability. These standards apply to facilities that engage in landspreading disposal of solid wastes. These standards do not apply to:

(a) Facilities utilizing sludge, woodwaste or other primarily organic sludges according to the *Municipal and Domestic Sludge Utilization Guidelines* WDOE 82-11, specified in WAC 173-304-300 (4) and (5);

(b) Agricultural solid wastes resulting from the operation of a farm including farm animal manure and agricultural residues; and

(c) Inert wastes and demolition wastes.

(2) Owners or operators of landspreading disposal facilities shall meet the minimum functional standards for performance of WAC 173-304-460(2) and the general facilities standards of WAC 173-304-405.

(3) Owners or operators of landspreading disposal facilities shall meet the locational standards of WAC 173-304-130.

(4) Minimum functional standard for design. Owners or operators of landspreading disposal facilities shall design landspreading facilities so as to:

(a) Provide interim waste storage facilities that meet the requirements of WAC 173-304-400 standards (i.e., for piles, surface impoundments, etc.);

(b) Collect and treat all runoff from a twenty-four hour, twenty-five year storm, and divert all run-on for the maximum flow of a maximum twenty-five year storm around the active area;

(c) Avoid standing water anywhere on the active area;

(d) Avoid slopes and other features that will lead to soil and waste erosion, unless contour plowing or other measures are taken to avoid erosion;

(e) Monitor ground water according to WAC 173-304-490; and

(f) Control access to site by fencing or other means and erect signs.

(5) Minimum functional standards for maintenance and operation. Owners or operators of landspreading disposal facilities shall maintain and operate the facilities so as to:

(a) Avoid any landspreading disposal of garbage or medical waste;

(b) Analyze solid wastes according to the requirements spelled out in the *Municipal and Domestic Sludge Utilization Guidelines* WDOE 82-11;

(c) Avoid applying wastes at rates greater than ten times agronomic rates using the proposed cover crop, or depths greater than would allow for discing the soil by tracked vehicles;

(d) Provide discing of soils during the growing season and after each application of waste to maintain aerobic soil conditions, minimize odors and lessen runoff;

(e) Avoid applying waste to any active area having standing water;

(f) Conform to the operating plan and the requirements of WAC 173-304-405;

(g) Avoid food chain crops during the active life of the facility and until demonstrated to be safe, after closure, according to the closure and post-closure plans filed with the plan of operation. Specific approval in writing from the jurisdictional health department is required for any landspreading disposal facility that is used to raise food crops after closure. Any new owner or operator of a closed landspreading disposal facility shall notify the jurisdictional health department within sixty days of the purchase; and

(h) Provide for a written contract between landowners, waste generators, waste haulers and waste operators requiring compliance with rules as a condition of the contract.

(6) Minimum functional standards for closure.

(a) All owners or operators of landspreading disposal facilities shall close in such a manner as to comply with WAC 173-304-407;

(b) Financial assurance. All owners or operators of landspreading disposal facilities shall have a written estimate, in current dollars, of the cost of closing the facility. The closure cost estimate must equal the cost of closure at the point in the operating life of the facility when the extent and manner of operation would make closure the most expensive, as indicated by the closure plan.

In addition, all facilities shall have a written post-closure estimate, in current dollars, the cost of post-closure monitoring and maintenance during the post-closure period.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-450, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-450, filed 10/28/85.]

WAC 173-304-460 Landfilling standards. (1) Applicability. These standards apply to facilities that dispose of solid waste in landfills except for:

(a) Inert wastes and demolition wastes landfills, that must meet WAC 173-304-461 standards; and

(b) Woodwaste landfills that must meet WAC 173-304-462 standards.

(2) Minimum functional standards for performance.

(a) Ground water. An owner or operator of a landfill shall not contaminate the ground water underlying the landfill, beyond the point of compliance. Contamination and point of compliance are defined in WAC 173-304-100.

(b) Air quality and toxic air emissions.

(i) An owner or operator of a landfill shall not allow explosive gases generated by the facility whose concentration exceeds:

(A) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding gas control or recovery system components);

(B) The lower explosive limit for the gases at the property boundary or beyond; and

(C) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures.

(ii) An owner or operator of a landfill shall not cause a violation of any ambient air quality standard at the property boundary or emission standard from any emission of landfill gases, combustion or any other emission associated with a landfill.

(c) Surface waters. An owner or operator of a landfill shall not cause a violation of any receiving water quality standard or violate chapter 90.48 RCW from discharges of surface runoff, leachate or any other liquid associated with a landfill.

(3) Minimum functional standards for design.

(a) Minimizing liquids. All owners or operators of landfills shall minimize liquids admitted to active areas of landfills by:

(i) Covering according to WAC 173-304-460 (4)(d);

(ii) Prohibiting the disposal of noncontainerized liquids or sludges containing free liquids in landfills unless approved by the jurisdictional health department;

(iii) Designing the landfill to prevent all the run-on of surface waters and other liquids resulting from a maximum flow of a twenty-five year storm into the active area of the landfill;

(iv) Designing the landfill to collect the runoff of surface waters and other liquids resulting from a twenty-four hour, twenty-five year storm from the active area and the closed portions of a landfill;

(b) Leachate systems. All owners or operators of landfills shall:

(i) Install a leachate collection system sized according to water balance calculations or using other accepted engineering methods either of which shall be approved by the jurisdictional health department;

(ii) Install a leachate collection system so as to prevent no more than two feet of leachate developing at the topographical low point of the active area; and

(iii) Install a leachate treatment, or a pretreatment system if necessary in the case of discharge to a municipal waste water treatment plant, to meet the requirements for permitted discharge under chapter 90.48 RCW and the Federal Clean Water Act (PL 95-217).

(c) Liner designs. All owners or operators of landfills shall use liners of one of the following designs:

(i) Standard design. The liner shall be constructed of at least a four feet thick layer of recompacted clay or other material with a permeability of no more than 1×10^{-7} cm/sec and sloped no less than two percent; or

(ii) Alternative design. The design shall have two liners:

(A) An upper liner of at least fifty mils thickness made of synthetic material; and

(B) A lower liner of at least two feet thickness of recompacted clay or other material with a permeability of no more than 1×10^{-6} cm/sec and sloped no less than two percent; or

(iii) Equivalent design. The design shall use alternative methods, operating practices and locational characteristics which will minimize the migration of solid waste constituents or leachate into the ground or surface water at least as effectively as the liners of (c)(i) and (ii) of this subsection; or

(iv) Arid design. This design will apply to locations having less than twelve inches of precipitation annually, and, in lieu of (c)(i), (ii), and (iii) of this subsection, shall consist of vadose zone moisture monitoring, provided that:

(A) Waste material is no less than ten feet above the seasonal high level of ground water in the uppermost aquifer; and

(B) Any evidence of leachate or waste constituents detected in the vadose zone that violates or could be expected to violate the performance standard of WAC 173-304-460(2) shall cause the owner or operator to:

(I) Take corrective action, and either

(II) Close the facility according to these rules, or

(III) For all future expansions at that facility, meet the liner requirement of (c)(i) or (ii) of this subsection.

(v) Small landfill designs. For a landfill whose design and permit allow a total capacity at closure of two hundred thousand cubic yards or less, the need for a liner and leachate collection system shall be determined on a case-by-case basis by the jurisdictional health department in consultation with the department.

(d) Flood plains. All owners or operators of landfills that are located in a one hundred-year flood plain shall:

(i) Comply with local flood plain management ordinances and chapter 508-60 WAC, Administration of flood control zones; and

(ii) Design the landfill so that the landfill entrance or exit roads or practices shall not restrict the flow of the base flood, reduce the temporary water storage capacity of the flood plain or result in washout of solid waste, so as to pose a hazard to human life, wildlife, land or water resources.

(e) Closure. All owners and operators shall design landfills so that at closure:

(i) At least two feet of 1×10^{-6} cm/sec or lower permeability soil or equivalent shall be placed upon the final lifts unless the landfill is located in an area having mean annual precipitation of less than twelve inches in which case at least two feet of 1×10^{-5} cm/sec or lower permeability soil or equivalent shall be placed upon the final lifts. Artificial liners may replace soil covers provided that a minimum of fifty mils thickness is used;

(ii) The grade of surface slopes shall not be less than two percent, nor the grade of side slopes more than thirty-three percent; and

(iii) Final cover of at least six inches of topsoil be placed over the soil cover and seeded with grass, other shallow rooted vegetation or other native vegetation.

(f) Gas control.

(i) All owners and operators shall design landfills, having a permitted capacity of greater than ten thousand cubic yards per year, so that methane and other gases are continuously collected, and

(A) Purified for sale;

(B) Flared; or

(C) Utilized for its energy value.

(ii) Collection and handling of landfill gases shall not be required if it can be shown that little or no landfill gases will be produced or that landfill gases will not support combustion; in such cases installation of vents shall be required.

(g) Other requirements. All owners and operators of landfills shall design landfills to:

(i) Be fenced at the property boundary or use other means to impede entry by the public and animals. A lockable gate shall be required at the entry to the landfill;

(ii) Monitor ground water according to WAC 173-304-490 using a design approved by the local jurisdictional health department with the guidance of the department. The jurisdictional health department may also require monitoring of:

(A) Surface waters, including runoff;

(B) Leachate;

(C) Subsurface landfill gas movement and ambient air; and

(D) Noise.

(iii) Weigh all incoming waste on scales for landfills having a permitted capacity of greater than ten thousand cubic yards per year or provide an equivalent method of measuring waste tonnage capable of estimating total annual solid waste tonnage to within plus or minus five percent;

(iv) Provide for employee facilities including shelter, toilets, hand washing facilities and potable drinking water for landfills having the equivalent of three or more full-time employees;

(v) Erect a sign at the site entrance that identifies at least the name of site, if applicable, the hours during which the site is open for public use, unacceptable materials and an emergency telephone number. Other pertinent information may be required by the jurisdictional health department;

(vi) Provide on-site fire protection as determined by the local and state fire control jurisdiction;

(vii) Prevent potential rat and other vectors (such as insects, birds, and burrowing animals) harborages in buildings, facilities, and active areas;

(viii) Provide the unloading area(s) to be as small as possible, consistent with good traffic patterns and safe operation;

(ix) Provide approach and exit roads to be of all-weather construction, with traffic separation and traffic control on-site, and at the site entrance; and

(x) Provide communication between employees working at the landfill and management offices on-site and off-site (such as telephones) to handle emergencies.

(4) Minimum functional standards for maintenance and operation.

(a) Operating plans. All owners or operators of landfills shall maintain and operate the facility so as to conform to the approved plan of operation.

(b) Operating details. All owners or operators of landfills shall operate the facility so as to:

(i) Control road dust;

(ii) Perform no open burning unless permitted by the jurisdictional air pollution control agency or the department under the Washington Clean Air Act, chapter 70.94 RCW. Garbage shall not be open burned.

(iii) Collect scattered litter as necessary to avoid a fire hazard or an aesthetic nuisance;

(iv) Prohibit scavenging;

(v) Conduct on-site reclamation in an orderly sanitary manner, and in a way that does not interfere with the disposal site operation;

(vi) Insure that at least two landfill personnel are on-site with one person at the active face when the site is open to the public for landfills with a permitted capacity of greater than fifty thousand cubic yards per year;

(vii) Control insects, rodents and other vectors; and

(viii) Insure that reserve operational equipment shall be available to maintain and meet these standards.

(c) Boundary posts. All owners or operators of landfills shall clearly mark the active area boundaries authorized in the permit, with permanent posts or using equivalent method clearly visible for inspection purposes.

(d) Compaction and daily cover. All owners or operators of landfills shall:

(i) Thoroughly compact the solid waste before succeeding layers are added; and

(ii) Cover compacted waste containing garbage fully with at least six inches of compacted cover material after each day of operation. The jurisdictional health department may allow less frequent covering by considering:

(A) The characteristics of the solid waste;

(B) The climatic and geologic setting;

(C) The size of the facility; and

(D) The potential for nuisance conditions.

(e) Monitoring systems. All owners and operators of landfills shall maintain the monitoring system required in subsection (3)(g)(ii) of this section.

(f) Recycling required.

(i) All owners or operators of landfills at which the general public delivers household solid waste shall provide the opportunity for the general public to recycle cans, bottles, paper and other material for which a market exists and brought to the landfill site:

(A) During the normal hours of operation;

(B) In facilities convenient to the public (i.e., near entrance to the gate).

(ii) Owners or operators may demonstrate alternative means to providing an opportunity to the general public to recycle household solid waste.

(g) Disposal of dangerous waste prohibited. Owners or operators of landfills shall not knowingly dispose, treat, store, or otherwise handle dangerous waste unless the requirements of the dangerous waste regulation, chapter 173-303 WAC are met.

(5) Limited purpose landfill standards.

(a) Limited purpose landfills shall meet the following requirements:

(i) The general facility standards of WAC 173-304-405;

(ii) The general closure and post-closure standards of WAC 173-304-407;

(iii) The performance standards of WAC 173-304-460(2);

(iv) The financial assurance standards of WAC 173-304-467 and 173-304-468; and

(v) The ground water monitoring standards of WAC 173-304-490.

(b) In addition, limited purpose landfills must meet all other standards of WAC 173-304-130 and 173-304-460 unless the owner or operator applies for relief from each of these requirements as part of his permit application and includes evidence or reasons why the nature of the waste, the disposal site and other factors can protect the environment and the public health.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-460, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-460, filed 10/28/85.]

WAC 173-304-461 Inert waste and demolition waste landfilling facility requirements. (1) Applicability. These standards apply to facilities that landfill more than two thousand cubic yards of inert wastes and demolition wastes, as defined in WAC 173-304-100, including facilities that use inert waste and demolition waste as a component of fill. Inert wastes and demolition wastes used as road building materials are excluded from this section. These standards do not apply to asbestos containing waste regulated under the federal 40

CFR Part 61 rules and the dangerous waste regulation, chapter 173-303 WAC.

(2) Inert wastes and demolition waste landfilling facilities shall not be subject to the Locational standards for disposal sites, WAC 173-304-130 except for WAC 173-304-130 (2)(f), slope.

(3) Owners or operators of inert waste and demolition waste landfill shall maintain a record of the weights or volumes and types of waste disposed of at each site.

(4) Owners or operators of inert wastes and demolition landfills shall employ measures to prevent emission of fugitive dusts, when weather conditions or climate indicate that transport of dust off-site is liable to create a nuisance. Preventative measures include watering of roads and covering.

(5) Timbers, wood and other combustible waste shall be covered as needed during the summer months to avoid a fire hazard.

(6) Owners or operators of inert wastes and demolition landfills shall close the facility by leveling the wastes to the extent practicable and shall fill any voids posing a physical hazard for persons after closure and to maintain an aesthetic appearance. A minimum of one foot of soil cover shall be used to close landfills.

(7) Owners or operators of inert waste and demolition waste landfills shall obtain a permit, as set forth in WAC 173-304-600 from the jurisdictional health department.

(8) Owners or operators of inert wastes and demolition landfills shall meet the requirements of WAC 173-304-405(7), recording with the county auditor.

(9) Owners or operators of inert waste or demolition waste landfills shall not accept any other form of waste except inert waste and demolition waste.

(10) Owners or operators of inert waste and demolition waste landfills shall prevent unauthorized disposal during off-hours by controlling entry (i.e., lockable gate or barrier) when the facility is not being used.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-461, filed 10/28/85.]

WAC 173-304-462 Woodwaste landfilling facility requirements. (1) Applicability. These requirements apply to facilities that landfill more than two thousand cubic yards of woodwaste including facilities that use woodwaste as a component of fill. Woodwaste is defined in WAC 173-304-100. These standards are not applicable to woodwaste landfills on forest lands regulated under the Forest Practices Act, chapter 76.09 RCW.

(2) Minimum functional standards.

(a) Woodwaste landfills are not subject to WAC 173-304-130 standards, Locational standards for disposal sites, except for WAC 173-304-130 (2)(e) surface water locational standards and WAC 173-304-130 (2)(b)(iii) down gradient drinking water supply wells. Woodwastes may be used as a component of fill within a shoreline and associated wetlands only if a demonstrated and proven technology to prevent ground and surface water contamination is used.

(b) Owners or operators of woodwaste landfills shall maintain a record of the weights or volumes of waste disposed of at each facility.

(c) Owners or operators of woodwaste landfills shall not accept any other wastes except woodwaste.

(d) Owners or operators of woodwaste landfills shall prevent run-on from a maximum twenty-five year storm.

(e) All wood waste landfills having a capacity of greater than ten thousand cubic yards at closure shall either:

(i) Have a ground water monitoring system that complies with WAC 173-304-490 and the woodwaste landfill meet the performance standards of WAC 173-304-460(2); or

(ii) Have a leachate collection and treatment system.

(f) Owners or operators of woodwaste landfills shall not deposit woodwaste in lifts to a height of more than ten feet per lift with at least one foot of cover material between lifts to avoid hot spots and fires in the summer and to avoid excessive build-up of leachate in the winter, and shall compact woodwaste as necessary to prevent voids.

(g) Owners or operators of woodwaste landfills shall prevent unauthorized disposal during off-hours by controlling entry (i.e., lockable gate or barrier), when the facility is not being used.

(h) Owners or operators of woodwaste landfills shall close the facility by leveling and compacting the wastes and applying a compacted soil cover of at least two feet thickness.

(i) Owners or operators of woodwaste landfills shall obtain a permit as set forth in WAC 173-304-600 from the jurisdictional health department.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-462, filed 10/28/85.]

WAC 173-304-463 Problem waste landfills. (Reserved.)

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-463, filed 10/28/85.]

WAC 173-304-467 Financial assurance for public facilities. (1) Applicability.

(a) These standards apply to all new and expanded landfill disposal facilities, and to existing landfill disposal facilities that have not been closed on or before November 27, 1989. Landfill disposal facilities include:

(i) All solid waste facilities operated as landfills under WAC 173-304-460, including limited purpose landfills under WAC 173-304-460(5);

(ii) Facilities operated as surface impoundments under WAC 173-304-430 that are closed with the waste remaining in place and therefore required to meet the requirements of WAC 173-304-407; and

(iii) Woodwaste landfills operated under WAC 173-304-462;

(b) For the purposes of this section, landfill disposal facilities are divided into the following ownership/use categories:

(i) A privately owned facility that accepts waste from the general public;

(ii) A publicly owned facility that accepts waste from the general public.

(c) For the purposes of this section, publicly owned or operated facilities may set up one account for both closure and post-closure care of each facility.

(2) Cost estimate for closure.

(a) Each owner or operator shall prepare a written closure cost estimate as part of the facility closure plan. The closure cost estimate shall be in current dollars and represent the

cost of closing the facility in accordance with the closure requirements in WAC 173-304-407.

(i) The cost estimate shall be based on a reasonable cost estimate for completing design, purchase, construction, and other activities as identified in the facility closure plan as required under WAC 173-304-407;

(ii) The closure plan shall project intervals for withdrawal of closure funds from the closure financial assurance instrument to complete the activities identified in the approved closure plan;

(iii) The closure cost estimate shall not be reduced by allowance for salvage value of equipment, waste, or the resale value of property or land;

(b) Each owner or operator shall prepare a new closure cost estimate in accordance with (a) and (c) of this subsection whenever:

(i) Changes in operating plans or facility design affect the closure plan;

(ii) There is a change in the expected year of closure that affects the closure plan; or

(iii) The jurisdictional health department directs the owner or operator to revise the closure plan or closure cost estimate.

(c) Each owner or operator shall review the closure cost estimate annually thirty days prior to the anniversary date of the first closure cost estimate. The review will examine all factors, including inflation, involved in estimating the closure cost. Any cost changes must be factored into a revised closure cost estimate and submit the revised cost estimate to the jurisdictional health department for review and approval.

(d) During the operating life of the facility, the owner or operator shall make the latest closure cost estimate prepared in accordance with (a) and (b) of this subsection, and when this estimate has been adjusted in accordance with (c) of this subsection, made available for review.

(3) Financial assurance account for closure. Each owner or operator of an applicable landfill disposal facility shall establish a financial assurance account in an amount that, over the life of the facility, will accumulate funds to be equal to the closure cost estimate prepared in accordance with subsection (2) of this section unless otherwise specified.

(a) Landfill disposal facilities that accept waste from the general public shall choose from the following options or combination of options for accounting for the financial assurance account:

(i) For landfill disposal facilities owned or operated by municipal corporations, the closure and post-closure reserve account shall be handled in one of the following ways:

(A) Cash and investments accumulated and restricted for closure with an equivalent amount of fund balance reserved in the fund accounting for solid waste activity; or

(B) The cash and investments held in a nonexpendable trust fund.

(C) Other approved method.

(ii) Closure trust fund established with an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. The wording of the trust agreement must be acceptable to the local health department. The purpose of the closure trust fund is to receive and manage any funds paid by the owner or operator and to disburse those funds only for closure activities as identified in the approved closure plan.

(b) For private disposal facilities that accept public waste, established closure financial assurance accounts shall not constitute an asset of the facility owner or operator.

(c) During the operating life of the facility, the owner or operator must review the closure cost estimate thirty days before each anniversary of the date on which the first closure cost estimate was prepared. The review shall examine all factors, including inflation, involved in estimating the closure cost estimate. Any changes in costs shall be factored into a revised closure cost estimate. The new estimate shall be submitted to the jurisdictional health department for review and approval.

(d) For disposal facilities of this section, any income in excess of the closure cost estimate accruing to the established closure financial assurance account will be at the owner's discretion as to the use of said funds.

(e) Excess moneys remaining in the closure financial assurance account after the completion of all identified closure activities will be released to the facility owner or operator.

(4) Cost estimate for post-closure.

(a) Each owner or operator shall prepare a written post-closure cost estimate as part of the facility post-closure plan. The post-closure cost estimate shall be in current dollars and represent the total cost of completing post-closure activities for the facility for at least a twenty-year post-closure period in accordance with the post-closure requirements in WAC 173-304-407.

(i) The post-closure cost estimate shall be based on a reasonable cost estimate for completing post-closure monitoring, maintenance, and other activities identified in the approved facility post-closure plan as required under WAC 173-304-407;

(ii) The post-closure plan shall project annual or other intervals for withdrawal of post-closure funds from the post-closure financial assurance instrument to complete the activities identified in the approved post-closure plan;

(iii) The post-closure cost estimate shall not be reduced by allowance for salvage, value of equipment, waste, or resale value of property or land.

(b) Each owner or operator shall prepare a new post-closure cost estimate for the remainder of the post-closure care twenty-year period in accordance with (a) and (c) of this subsection, whenever:

(i) Change in the post-closure plan increases or decreases the cost of post-closure care; or

(ii) The jurisdictional health department directs the owner or operator to revise the post-closure plan or post-closure cost estimate.

(c) During the operating life of the facility, the owner or operator shall review the post-closure cost estimate thirty days prior to each anniversary of the date on which the first post-closure cost estimate was prepared. The review shall examine all factors, including inflation, involved in estimating the post-closure cost estimate. Any changes in costs must be factored into a revised post-closure cost estimate. The new estimate must be submitted to the jurisdictional health department for approval.

(d) During the operating life of the facility, the owner or operator shall keep the latest post-closure cost estimate prepared in accordance with (a) and (b) of this subsection, available for review.

(5) Financial assurance account for post-closure. Each owner or operator of a landfill disposal facility shall establish a financial assurance account in an amount equal to the post-closure cost estimate prepared in accordance with subsection (4) of this section.

(a) Applicable landfill disposal facilities that accept waste from the general public shall choose from the following options or combinations of options for accounting for the financial assurance account:

(i) For landfill disposal facilities owned or operated by municipal corporations, the post-closure reserve shall be handled in one of the following ways:

(A) Cash and investments accumulated and restricted for post-closure with an equivalent amount of fund balance reserved in the fund accounting for solid waste activity;

(B) Cash and investments held in a nonexpendable trust fund.

(C) Other approved method.

(ii) Post-closure trust fund established with an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. The wording of the trust agreement must be acceptable to the department of ecology. The purpose of the post-closure trust fund is to receive and manage any funds paid by the owner or operator and to disburse those funds only for post-closure activities as identified in the approved post-closure plan.

(b) For disposal facilities as categorized in subsection (1)(b) of this section, established post-closure financial assurance accounts shall not constitute an asset of the facility owner or operator.

(c) For applicable disposal facilities of this section any income accruing to the established post-closure financial assurance account will be at the owner's discretion as to the use of said excess funds.

(d) Excess moneys remaining in the post-closure financial assurance account after the completion of all identified post-closure activities shall be released to the facility owner or operator.

(6) Closure/post-closure financial assurance account establishment and reporting.

(a) Closure and post-closure financial assurance funds shall be generated at each facility by transferring a percentage of the facility user fees to the selected financial assurance instrument at the schedule specified in the closure and post-closure plans, such that adequate closure and post-closure funds will be generated to ensure full implementation of the approved closure and post-closure plans.

(b) Each facility owner or operator must establish a procedure with the financial assurance instruments trustee for notification of nonpayment of funds to be sent to the jurisdictional health department and the department of ecology.

(c) Each owner or operator shall file with the department of ecology an annual audit of the financial assurance accounts established for closure and post-closure activities, and a statement of the percentage of user fees, as applicable, diverted to the financial assurance instruments.

(i) For landfill disposal facilities owned and operated by municipal corporations, the closure reserve account shall be audited according to the audit schedule of the office of state auditor and shall be filed with the department of ecology, including each of the post-closure care years.

(ii) For landfill disposal facilities not owned or operated by municipal corporations:

(A) Annual audits shall be conducted by a certified public accountant licensed in the state of Washington, and shall be filed with the department of ecology no later than March 31 of each year for the previous calendar year, including each of the post-closure care years.

(B) The audit shall also include calculations demonstrating the proportion of closure completed during the preceding year as specified in the closure and post-closure plans.

(d) Existing landfill disposal facilities may submit a written request with their annual audit to the department of ecology requesting a waiver from utilizing user fees to generate the moneys necessary for the closure and/or post-closure financial assurance account.

(i) The waiver request should provide documentation to demonstrate the facility user fees are prohibitively high, and include alternate method(s) for funding the facility's closure and/or post-closure financial assurance account;

(ii) The waiver request review procedure will be according to WAC 173-304-700.

(7) Authorization for financial assurance account fund withdrawal for closure and post-closure activities.

(a) Each owner or operator will withdraw funds from the closure and/or post-closure financial assurance instrument as specified in the approved closure/post-closure plans;

(b) If the withdrawal of funds from the financial assurance instrument exceeds by more than five percent the withdrawal schedule stated in the approved closure and/or post-closure plan, the closure and/or post-closure plan shall be amended.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-467, filed 10/4/88.]

WAC 173-304-468 Financial assurance for private landfill disposal facilities. (1) Applicability.

(a) For the purposes of this regulation private landfill disposal facilities are privately owned facilities that do not accept waste from the general public and dispose of only their own generated waste.

(b) These standards apply to all new and expanded landfill disposal facilities, and to existing landfill disposal facilities that have not been closed on or before November 27, 1989. Landfill disposal facilities include:

(i) Facilities operated as surface impoundments under WAC 173-304-430 that are closed with waste remaining in place and therefore required to meet the requirements of WAC 173-304-407; and

(ii) Woodwaste landfills operated under WAC 173-304-462.

(2) Cost estimates for closure and post-closure.

(a) Each owner or operator shall prepare separate written closure and post-closure cost estimates as part of the facility closure and post-closure plans. The cost estimates shall be in current dollars and represent the cost of closing or post-clo-

sure care of the facility for a period of twenty years in accordance with the closure requirements in WAC 173-304-407.

(i) The cost estimate shall be based on a reasonable cost estimate for completing design, purchase, construction, and other activities as identified in the facility closure or post-closure plan as required under WAC 173-304-407;

(ii) The closure and post-closure plans shall project intervals for withdrawal of funds from the closure or post-closure financial assurance instrument to complete the activities identified in the approved closure or post-closure plan;

(iii) The closure and post-closure cost estimate shall not be reduced by allowance for salvage value of equipment, waste, or the resale value of property or land.

(b) Each owner or operator shall prepare a new closure or post-closure cost estimate in accordance with (a) and (c) of this subsection whenever:

(i) Changes in operating plans or facility design affect the closure or post-closure plans;

(ii) There is a change in the expected year of closure that affects the closure plan; or

(iii) The jurisdictional health department directs the owner or operator to revise the closure or post-closure plan or closure or post-closure cost estimate.

(c) Each owner or operator shall review the closure and post-closure cost estimate thirty days prior to the anniversary date of the date on which the first closure and post-closure cost estimate was prepared. The review shall examine all factors, including inflation, involved in estimating the closure and post-closure cost. Any cost changes shall be factored into a revised closure or post-closure cost estimate and submit the revised cost estimate to the jurisdictional health department and the department of ecology.

(d) During the operating life of the facility, the owner or operator must keep the latest closure and post-closure cost estimate prepared in accordance with (a) and (b) of this subsection, and when this estimate has been adjusted in accordance with (c) of this subsection, available for review.

(e) The department of ecology will evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation.

(3) Financial assurance mechanism for closure and post-closure. Each owner or operator of an applicable landfill disposal facility shall establish financial assurance mechanisms in an amount equal to the closure cost estimate and post-closure cost estimate prepared in accordance with subsection (2) of this section.

(a) Applicable landfill disposal facilities shall provide one or more of the following financial assurance instruments:

(i) Closure and post-closure trust funds established with an entity which has authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. The wording of the trust agreement must be acceptable to the department of ecology. The purpose of the closure and post-closure trust funds is to receive and manage any funds paid by the owner or operator and to disburse those funds only for closure or post-closure activities as identified in the approved closure and post-closure plan;

(ii) Surety bond guaranteeing payment into a closure and post-closure trust fund issued by a surety company listed as acceptable in Circular 570 of the United States Treasury Department or as hereafter amended. The wording of the surety bond(s) must be acceptable to the department. A standby closure and post-closure trust fund must also be established by the permittee. The purpose of the standby closure or post-closure trust fund is to receive any funds that may be paid by the operator or surety company. The bond must guarantee that the permittee will either fund the standby closure or post-closure trust in an amount equal to the penal sum of the bond before the site stops receiving waste. The surety shall become liable on the bond obligation if the permittee fails to perform as guaranteed by the bond. The surety may not cancel the bond until at least one hundred twenty days after the notice of cancellation has been received by both the permittee and the local health department. If the permittee has not provided alternate financial assurance acceptable under this section within ninety days of the cancellation notice, the surety must pay the amount of the bond into the standby closure or post-closure trust account;

(iii) Surety bond guaranteeing performance of closure or post-closure issued by a surety company listed as acceptable in Circular 570 of the United States Treasury Department or as hereafter amended. The wording of the surety bond must be acceptable to the department of ecology. A standby closure and post-closure trust fund must also be established by the permittee. The purpose of the standby closure or post-closure trust fund is to receive any funds that may be paid by the surety company. The bond must guarantee that the permittee will perform final closure or post-closure activities. The surety shall become liable on the bond obligation if the permittee fails to perform as guaranteed by the bond. The surety may not cancel the bond until at least one hundred twenty days after the notice of cancellation has been received by the permittee and the local health department. If the permittee has not provided alternative financial assurance acceptable under this section within ninety days of the cancellation notice, the surety must pay the amount of the bond into the standby closure or post-closure trust account;

(iv) Closure or post-closure irrevocable letter of credit issued by an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency. The wording of the letter of credit must be acceptable to the department. Standby closure and post-closure trust funds must also be established by the permittee. The purpose of the standby trust funds is to receive any funds deposited by the issuing institution resulting from a draw on the letter of credit. The letter of credit must be irrevocable and issued for a period of at least one year unless the issuing institution notifies both the permittee and the local health department at least one hundred twenty days before the current expiration date. If the permittee fails to perform closure and post-closure activities according to the closure or post-closure plan and permit requirements, or if the permittee fails to provide alternate financial assurance acceptable to the department within ninety days after notification that the letter of credit will not be extended, the local health department may draw from the letter of credit;

(v) Closure and post-closure insurance policies issued by an insurer who is licensed to transact the business of insurance or is eligible as an excess or surplus lines insurer in one or more states. The working of the certificate of insurance must be acceptable to the department. Each insurance policy must guarantee that the funds will be available to complete

those activities identified in the approved closure and post-closure plans. The policy must also guarantee that the insurer will be responsible for paying out funds for activities identified in either the closure or post-closure plan. The policy must provide that the insurance is automatically renewable and that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. If there is a failure to pay the premium, the insurer may not terminate the policy until at least one hundred twenty days after the notice of cancellation has been received by both the permittee and the local health department. Termination of the policy may not occur and the policy must remain in full force and effect if: The local health department determines the facility has been abandoned; or closure has been ordered by the local health department or a court of competent jurisdiction, or the permittee has been named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C. (Bankruptcy); or the premium due is paid. The permittee is required to maintain the policy in full force and until an alternative financial assurance guarantee is provided or when the permit is terminated.

(vi) Financial test and corporate guarantee for closure and post-closure. A private corporation meeting the financial test may provide a corporate guarantee that closure and post-closure activities will be completed according to the approved closure and post-closure plans and permit requirements. To qualify, a private corporation must meet the criteria of either (a)(vi)(A) or (B) of this subsection:

(A) Financial test. To pass the financial test the permit must have:

(I) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; or a ratio of current assets to current liabilities greater than 1.5;

(II) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.

(B) Alternative financial test. To pass the alternative financial test, the permittee must have:

(I) A current rating of AAA, AA, A, or BBB as issued by *Standard and Poor's* or Aaa, Aa, A, or Bbb as issued by *Moody's*;

(II) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.

(C) The permittee shall demonstrate that it passes the financial test at the time the closure plan is filed and reconfirm that annually ninety days after the end of the corporation's fiscal year by submitting the following items to the department of ecology:

(I) A letter signed by the permittee's chief financial officer that provides the information necessary to document that the permittee passes the financial test; that guarantees that the funds to finance closure and post-closure activities according to the closure or post-closure plan and permit requirements are available; that guarantees that the closure and post-closure will be completed according to the closure or post-closure plan and permit requirements; that guarantees that within thirty days after written notification from the jurisdictional health department that the permittee no longer meets the criteria of the financial test the permittee shall provide an alternative form of financial assurance consistent with the requirements of this section; that guarantees that the permittee's chief financial officer will notify the jurisdictional health department within fifteen days any time that the permittee no longer meets the criteria of the financial test or is named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C. (Bankruptcy); and that acknowledges that the corporate guarantee is a binding obligation on the corporation and that the chief financial officer has the authority to bind the corporation to the guarantee;

(II) A copy of the independent certified public accountant's report on examination of the permittee's financial statements for the latest completed fiscal year;

(III) A special report from the permittee's independent certified public accountant (CPA) stating that the CPA has compared the data which the letter from the permittee's chief financial officer specifies as having been derived from the independently audited year end financial statements for the latest fiscal year with the amounts in such financial statement and that no matters came to the CPA's attention which caused the CPA to believe that the specified data should be adjusted;

(IV) The jurisdictional health department may, based on a reasonable belief that the permittee no longer meets the criteria of the financial test, require reports of the financial condition at any time from the permittee in addition to the annual report. If the jurisdictional health department finds, on the basis of such reports or other information that the permittee no longer meets the criteria of the financial test, the permittee shall provide an alternative form of financial assurance consistent with the requirements of this section, within thirty days after notification by the jurisdictional health department.

(b) For applicable disposal facilities of this section, any income in excess of the cost estimate(s) accruing to the established closure or post-closure financial assurance account will be at the owner's discretion as to the use of said surplus funds.

(c) A permittee may meet the requirements of this section by obtaining a written guarantee from the parent corporation of the permittee. The guarantor must meet one of the financial tests described in (a)(vi)(A) or (B) of this subsection, and must provide the documentation required by (a)(vi)(C) of this subsection. The terms of the guarantee must provide that:

(i) If the permittee fails to perform final closure and, where required, provide post-closure care of a facility covered by the guarantee in accordance with the approved closure and post-closure plans, the guarantor will do so or establish a trust fund as specified in (a)(i) of this subsection in the name of the permittee.

(ii) The guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the permittee, to the jurisdictional health department and to the department of ecology. Cancellation may not occur, however, during the one hundred twenty days beginning on the date of receipt of the notice of cancellation by both the permittee and the department of ecology, as evidenced by the return receipts.

(iii) If the permittee fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the jurisdictional health department or the department of ecology within ninety days after receipt by both the permittee, the jurisdictional health department, and the department of ecology of a notice of cancellation of the guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the permittee.

(4) Closure/post-closure trust fund account establishment and reporting.

(a) Each owner or operator shall file with the local health department an annual audit of the financial assurance accounts established for closure and post-closure activities.

(b) Annual audits shall be conducted by a certified public accountant licensed in the state of Washington, and shall be filed with the department of ecology no later than March 31 of each year for the previous calendar year, including each of the post-closure care years.

(c) The audit shall also include calculations demonstrating the proportion of closure completed during the preceding year as specified in the closure and post-closure plans.

(5) Authorization for financial assurance account fund withdrawal for closure and post-closure activities.

(a) Each owner or operator shall withdraw funds from the closure and/or post-closure financial assurance instrument as specified in the approved closure/post-closure plans;

(b) If the withdrawal of funds from the financial assurance instrument exceeds by more than five percent the withdrawal schedule stated in the approved closure and/or post-closure plan the closure and/or post-closure plan shall be amended.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-468, filed 10/4/88.]

WAC 173-304-470 Other methods of solid waste handling. (1) Applicability. This section applies to other methods of solid waste handling such as a material resource recovery system for municipal waste not specifically identified elsewhere in this regulation, nor excluded from this regulation.

(2) Requirements. Owners and operators of other methods of solid waste handling shall:

(a) Comply with the requirements in WAC 173-304-405;

(b) Obtain a permit under WAC 173-304-600 from the jurisdictional health department, by submitting an application containing information required in WAC 173-304-600 (3)(a), and such other information as may be required by the jurisdictional health department and the department, including:

(i) Preliminary engineering reports and plans and specifications; and

(ii) A closure plan.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-470, filed 10/28/85.]

WAC 173-304-490 Ground water monitoring requirements. (1) Applicability. These requirements apply to owners and operators of landfills, piles, landspreading disposal facilities, and surface impoundments that are required to perform ground water monitoring under WAC 173-304-400.

(2) Ground water monitoring requirements.

(a) The ground water monitoring system must consist of at least one background or upgradient well and three down gradient wells, installed at appropriate locations and depths to yield ground water samples from the upper most aquifer and all hydraulically connected aquifers below the active portion of the facility.

(i) Represent the quality of background water that has not been affected by leakage from the active area; and

(ii) Represent the quality of ground water passing the point of compliance. Additional wells may be required by the jurisdictional health department in complicated hydrogeological settings or to define the extent of contamination detected.

(b) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must allow collection of representative ground water samples. Wells must be constructed in such a manner as to prevent contamination of the samples, the sampled strata, and between aquifers and water bearing strata and in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of water wells.

(c) The ground water monitoring program must include at a minimum, procedures and techniques for:

(i) Decontamination of drilling and sampling equipment;

(ii) Sample collection;

(iii) Sample preservation and shipment;

(iv) Analytical procedures and quality assurance;

(v) Chain of custody control; and

(vi) Procedures to ensure employee health and safety during well installation and monitoring.

(d) Sample constituents.

(i) All facilities shall test for the following parameters:

(A) Temperature;

(B) Conductivity;

(C) pH;

(D) Chloride;

(E) Nitrate, nitrite, and ammonia as nitrogen;

(F) Sulfate;

(G) Dissolved iron;

(H) Dissolved zinc and manganese;

(I) Chemical oxygen demand;

(J) Total organic carbon; and

(K) Total coliform.

(ii) The jurisdictional health department in consultation with the department may specify additional or fewer constituents depending upon the nature of the waste; and

(iii) Test methods used to detect the parameters of (d)(i) of this subsection shall be EPA Publication Number SW-846, *Test Methods for Evaluating Solid Waste - Physical/Chemical Methods* except for total coliform which shall use the latest edition of *Standard Methods for the Examination of Water and Wastewater.*

(e) The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

(f) The owner or operator shall use a statistical procedure for determining whether a significant change over background has occurred. The jurisdictional health department will approve such a procedure with the guidance of the department.

(g) The owner or operator must determine ground water quality at each monitoring well at the compliance point at least quarterly during the life of an active area (including the closure period) and the post-closure care period. The owner or operator must express the ground water quality at each monitoring well in a form necessary for the determination of statistically significant increases.

(h) The owner or operator must determine and report the ground water flow rate and direction in the uppermost aquifer at least annually.

(i) If the owner or operator determines that there is a statistically significant increase for parameters or constituents at any monitoring well at the compliance point, the owner or operator must:

(i) Notify the jurisdictional health department of this finding in writing within seven days of receipt of the sampling data. The notification must indicate what parameters or constituents have shown statistically significant increases;

(ii) Immediately resample the ground water in all monitoring wells and determine the concentration of all constituents listed in the definition of contamination in WAC 173-304-100 including additional constituents identified in the permit and whether there is a statistically significant increase such that the ground water performance standard has been exceeded, and notify the jurisdictional health department within fourteen days of receipt of the sampling data.

(j) The jurisdictional health department may require corrective action programs including facility closure if the performance standard of WAC 173-304-460 (2)(a) is exceeded and, in addition, may revoke any permit and require reapplication under WAC 173-304-600.

(3) Corrective action program. An owner or operator required to establish a corrective action program under this section must, at a minimum with the approval of the jurisdictional health officer:

(a) Implement a corrective action program that reduces contamination and if possible prevents constituents from exceeding their respective concentration limits at the compliance point by removing the constituents, treating them in place, or other remedial measures;

(b) Begin corrective action according to a written schedule after the ground water performance standard is exceeded;

(c) Terminate corrective action measures once the concentrations of constituents are reduced to levels below the limits under WAC 173-304-460 (2)(a).

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-490, filed 10/28/85.]

WAC 173-304-600 Permit requirements for solid waste facilities. (1) Applicability.

(a) All facilities which are subject to the standards of WAC 173-304-130, 173-304-300, and 173-304-400 are required to obtain permits. Permits are not required for single family residences and single family farms dumping or depositing solid waste resulting from their own activities on to or under the surface of land owned or leased by them when such action does not create a nuisance, violate statutes, ordinances, or regulations, including this regulation.

(b) Permits are not required for corrective actions at solid waste handling facilities performed by the state and/or in conjunction with the United States Environmental Protection Agency to implement the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), or corrective actions taken by others to comply with a state and/or federal cleanup order provided that:

(i) The action results in an overall improvement of the environmental impact of the site;

(ii) The action does not require or result in additional waste being delivered to the site or increase the amount of waste or contamination present at the site;

(iii) The facility standards of WAC 173-304-400 are met; and

(iv) The jurisdictional health department is informed of the actions to be taken and is given the opportunity to review and comment upon the proposed corrective action plans.

(c) Effective dates. The effective dates are as follows:

(i) The permit requirements of this section apply to all existing waste handling facilities eighteen months after the effective date of this regulation.

(ii) Between the effective date of this regulation and eighteen months thereafter, existing facilities will operate under the terms and conditions of existing permits valid on the effective date of this regulation. Jurisdictional health departments shall incorporate compliance schedules into valid existing permits; such compliance schedules shall insure that existing facilities meet the effective dates of WAC 173-304-400(3).

(iii) New and expanded waste handling facilities shall meet the requirements of this section on the effective date of this regulation.

(2) Procedures for permits.

(a) Any owner or operator subject to the permit requirements who intends to operate a facility must apply for a permit with the jurisdictional health department. Filing shall not be complete until two copies of the application have been signed by the owner and operator and received by the jurisdictional health department, and the applicant has filed an environmental checklist required under the State Environmental Policy Act rules, chapter 197-11 WAC.

(b) Applications for a permit must contain the information set forth in subsection (3) of this section.

(c) Once the jurisdictional health department determines that an application for a permit is factually complete, it shall refer one copy to the appropriate regional office of the department for review and comment.

(d) The jurisdictional health department shall investigate every application to determine whether the facilities meet all applicable laws and regulations, conforms with the approved comprehensive solid waste handling plan and complies with all zoning requirements.

(e) The jurisdictional health department may establish reasonable fees for permits and renewal of permits. All permit fees collected by the health department shall be deposited

in the county treasury in the account from which the health department's operating expenses are paid.

(f) The department shall report to the jurisdictional health department its findings on each permit application within forty-five days of receipt of a complete application or inform the jurisdictional health department as to the status of the application. Additionally, the department shall recommend for or against the issuance of each permit by the jurisdictional health department.

(g) When the jurisdictional health department has evaluated all pertinent information, it may issue a permit. Every completed solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department or the applicant shall be informed as to the status of the application.

(h) Except for applications specified in subsection (3)(h) of this section every permit issued by a jurisdictional health department shall be on a format prescribed by the department and shall contain specific requirements necessary for the proper operation of the permitted site or facility including the requirement that final engineering plans and specifications be submitted for approval to the jurisdictional health department.

(i) All issued permits must be filed with the department no more than seven days after the date of issuance.

(j) The owner or operator of a facility shall apply for renewal of the facility's permit annually. The jurisdictional health department shall annually:

(i) Review the original application for compliance with these regulations and submit such additional information as spelled out in subsection (4) of this section;

(ii) Review information collected from inspections, complaints, or known changes in the operations;

(iii) Collect the renewal fee;

(iv) Renew the permit; and

(v) File the renewed permit with the department no more than seven days after the date of issuance. The department shall review and may appeal the renewal as set forth in RCW 70.95.185 and 70.95.190.

(3) Application contents for permits for new or expanded facilities.

(a) All permit applications except for inert waste, demolition waste, special purpose landfills, woodwaste landfill and recycling facilities applications, which are specified in (h) of this subsection, shall contain the following:

(i) A general description of the facility;

(ii) The types of waste to be handled at the facility;

(iii) The plan of operation required by WAC 173-304-405(2);

(iv) The form used to record weights or volumes required by WAC 173-304-405(3);

(v) An inspection schedule and inspection log required by WAC 173-304-405(5); and

(vi) Documentation to show that any domestic or industrial waste water treatment facility, such as a leachate treatment system, is being reviewed by the department under chapter 173-240 WAC.

(b) Application contents for permits for new or expanded landfill facilities. In addition to the requirements of (a) of this subsection, each landfill application for a permit must contain:

(i) A geohydrological assessment of the facility that addresses:

(A) Local/regional geology and hydrology, including faults, unstable slopes and subsidence areas on site;

(B) Evaluation of bedrock and soil types and properties;

(C) Depths to ground water and/or aquifer(s);

(D) Direction and flow rate of local ground water;

(E) Direction of regional ground water;

(F) Quantity, location and construction (where available) of private and public wells within a two thousand foot radius of site;

(G) Tabulation of all water rights for ground water and surface water within a two thousand foot radius of the site;

(H) Identification and description of all surface waters within a one-mile radius of the site;

(I) Background ground and surface water quality assessment, and for expanded facilities, identification of impacts of existing facilities of the applicant to date upon ground and surface waters from landfill leachate discharges;

(J) Calculation of a site water balance;

(K) Conceptual design of a ground water and surface water monitoring system, including proposed installation methods for these devices and where applicable a vadose zone monitoring plan;

(L) Land use in the area, including nearby residences; and

(M) Topography of the site and drainage patterns.

(ii) Preliminary engineering report/plans and specifications that address:

(A) How the facility will meet the locational standards of WAC 173-304-130;

(B) Relationship of facility to county solid waste comprehensive plan and the basis for calculating the facility's life;

(C) The design of bottom and side liners;

(D) Identification of borrow sources for daily and final cover, and soil liners;

(E) Interim/final leachate collection, treatment, and disposal;

(F) Landfill gas control and monitoring;

(G) Trench design, fill methods, elevation of final cover and bottom liner, and equipment requirements; and

(H) Closure/post-closure design, construction, maintenance, and land use.

(iii) An operation plan that addresses:

(A) Operation and maintenance of leachate collection, treatment, and disposal systems;

(B) Operation and maintenance of landfill gas control systems;

(C) Monitoring plans for ground water, surface water, and landfill gases to include sampling technique, frequency, handling, and analyses requirements;

(D) Safety and emergency accident/fire plans;

(E) Routine filling, grading, cover, and housekeeping;

(F) Record system to address records on weights (or volumes), number of vehicles and the types of waste received;

(G) Vector control plans; and

(H) Noise control.

(iv) Closure plan to address:

(A) Estimate of closure season/year;

(B) Capacity of site in volume and tonnage;

(C) Maintenance of active fill versus completed, final covered acreage;

(D) Estimated closure construction timing and notification procedures;

(E) Inspection by regulatory agencies.

(v) Post-closure plan to address:

(A) Estimated time period for post-closure activities;

(B) Site monitoring of landfill gas, ground water, and surface water;

(C) Deed clause changes, land use, and zoning restrictions;

(D) Maintenance activities to maintain cover and runoff systems; and

(E) Identification of final closure costs including cost calculations and the funding mechanism.

(c) Application contents for new or expanded transfer stations, drop box facilities, and baling and compaction systems requiring a permit. In addition to the requirements of (a) of this subsection, each applicable application for a permit must contain preliminary engineering report/plans and specifications that address:

(i) The proposed facility's zoning status;

(ii) The relationship to the county solid waste comprehensive plan and the area to be served by the facility; and

(iii) The facility design to address how the facility shall meet requirements of WAC 173-304-410, including closure.

(d) Application contents for new or expanded surface impoundments requiring a permit. In addition to the requirements of (a) of this subsection, each applicable application for a permit must contain:

(i) A geohydrological assessment of the facility that addresses all of the factors of (b)(i) of this subsection;

(ii) Preliminary engineering report/plans and specifications that address, where applicable:

(A) How the proposed facility will meet the locational standards of WAC 173-304-130;

(B) The relationship of facility to the county solid waste comprehensive plan;

(C) The design of liners and foundation to be incorporated in the facilities design including the design leachate of collection and treatment systems;

(D) The design of ground water monitoring;

(E) The design of dikes including calculations on dike stability analyses under conditions of liner failure;

(F) Other design details, including sludge cleanout and disposal, overfilling alarms and inlet design; and

(G) Closure/post-closure design, construction maintenance and land use.

(iii) An operation plan that addresses:

(A) Operation and maintenance of leachate collection system, or ground water monitoring;

(B) Operation and maintenance of overfilling equipment or details of filling and emptying techniques;

(C) Inspection of dikes and liners for integrity; and

(D) Safety and emergency plans.

(iv) A closure plan to address:

(A) Estimate of closure year and cost;

(B) Methods of removing wastes, liners and any contaminated soils, and location of final disposal;

(C) Closure timing and notification procedures; and

(D) Final inspection by regulatory agencies.

(e) Application contents for new or expanded piles requiring a permit. In addition to the requirements of (a) of this subsection, each application for a permit must contain:

(i) Preliminary engineering reports/plans and specifications that address:

(A) How the proposed facility will meet the locational standards of WAC 173-304-130;

(B) The relationship of the facility to the county solid waste comprehensive plan and zoning;

(C) The design of the liner or sealed surface upon which the liner rests, including an analysis of the liners ability to withstand the stress;

(D) The design of the run-on and runoff system;

(E) The design to avoid washout when the pile is located in a one hundred-year flood plain; and

(F) Maximum elevation and boundaries of the waste pile.

(ii) An operation plan that addresses:

(A) Methods of adding or removing wastes from the pile and equipment used;

(B) Inspection of the liner for integrity; and

(C) Safety and emergency plans.

(iii) A closure plan to address:

(A) Estimate of closure year and cost;

(B) Methods of removing wastes, liners and any contaminated soils, and location of final disposal;

(C) Closure timing and notification procedures; and

(D) Final inspection by regulatory agencies.

(f) Application contents for new or expanded energy recovery and incinerator facilities requiring a permit. In addition to the requirements of (a) of this subsection, each application for a permit must contain:

(i) Preliminary engineering reports/plans and specifications that address:

(A) The relationship of the facility to the county solid waste comprehensive plan and zoning;

(B) The design of the storage and handling facilities onsite for incoming waste as well as fly ash, bottom ash and any other wastes produced by air or water pollution controls; and

(C) The design of the incinerator or thermal treater, including changing or feeding systems, combustion air systems, combustion or reaction chambers, including heat recovery systems, ash handling systems, and air pollution and water pollution control systems. Instrumentation and monitoring systems design shall also be included.

(ii) An operation plan that addresses:

(A) Cleaning of storage areas as required by WAC 173-304-440 (2)(a);

(B) Alternative storage plans for breakdowns as required in WAC 173-304-440 (2)(c);

(C) Inspection to insure compliance with state and local air pollution laws and to comply with WAC 173-304-405(5). The inspection log or summary must be submitted with the application; and

(D) How and where the fly ash, bottom ash and other solid wastes will be disposed of.

(iii) A closure plan to address:

(A) Estimate of closure year and cost;

(B) Methods of closure and methods of removing wastes, equipment, and location of final disposal;

(C) Closure timing and notification procedures; and

(D) Final inspection by regulatory agencies.

(g) Application contents for new or expanded land-spreading disposal facilities requiring a permit. In addition to the requirements of (a) of this subsection, each application for a permit must contain:

(i) A geohydrological assessment of the facility that addresses all of the factors of (b)(i) of this subsection;

(ii) Preliminary engineering reports/plans and specifications that address:

(A) How the proposed facility will meet the locational standards of WAC 173-304-130;

(B) The relationship of the facility to the county solid waste comprehensive plan and the basis for calculating the facility's life;

(C) Waste analyses and methods to periodically sample and analyze solid waste;

(D) Design of interim waste storage facilities if such facilities are not otherwise permitted by the department;

(E) Design of run-on and runoff systems;

(F) A contour map of the active area showing contours to the nearest foot;

(G) A ground water and surface water monitoring program; and

(H) Access barriers such as fences, and warning signs.

(iii) An operation plan that addresses:

(A) Operation and maintenance of runoff and run-on systems;

(B) Methods of taking ground water samples and for maintaining ground water monitoring systems;

(C) Methods of applying wastes to meet the requirements of WAC 173-304-450 (2)(d):

(I) Estimated multiples of agronomic rates;

(II) Frequency of discing; and

(III) Avoidance of standing water.

(D) The written contract required between landowners, waste generators and waste operators.

(iv) Closure plan to address:

(A) Estimate of closure season/year;

(B) Capacity of site in volume and tonnage;

(C) Year-to-year maintenance of the active area versus completed, final covered acreage;

(D) Closure construction timing and notification procedures; and

(E) Final inspection by regulatory agencies.

(v) Post-closure plan to address:

(A) Estimated time period for post-closure activities;

(B) Site monitoring of ground water;

(C) Deed clause changes, land use, and zoning restrictions;

(D) Maintenance activities to maintain cover and runoff systems;

(E) Plans for food chain crops being grown on the active areas, after closure; and

(F) Identification of final closure costs including cost calculations and the funding mechanism.

(h) Application contents for new or expanded inert waste and demolition waste, special purpose landfill, woodwaste landfills, and recycling facilities.

Applications for permits subject to the standards of WAC 173-304-300, 173-304-460(5), 173-304-461, and 173-304-462 shall be on forms whose content shall be specified by the jurisdictional health department.

(4) Application contents for existing facilities renewing permits. All owners or operators of existing facilities shall renew permits or application forms specified in subsection (3) of this section. Previous information submitted to the jurisdictional health department may be referred to on the application forms. Changes in operating methods or other changes must be noted on the application in order to be authorized by permit.

(5) Inspections. As a minimum, annual inspections of all permitted solid waste facilities shall be performed by the jurisdictional health department. Any duly authorized officer, employee, or representative of the jurisdictional health officer or his designee having jurisdiction may enter and inspect any property, premises or place at any reasonable time for the purpose of determining compliance with this chapter, and relevant laws and regulations. Findings shall be noted and kept on file. A copy of the inspection report or annual summary shall be furnished to the site operator.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-600, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-600, filed 10/28/85.]

WAC 173-304-700 Variances. (1) Any person who owns or operates a solid waste facility may apply to the jurisdictional health officer for a variance from any section of this regulation. The application shall be accompanied by such information as the jurisdictional health department may require. The jurisdictional health department may grant such variance, but only after due notice or a public hearing if requested, if it finds that:

(a) The solid waste handling practices or location do not endanger public health, safety or the environment; and

(b) Compliance with the regulation from which variance is sought would produce hardship without equal or greater benefits to the public.

(2) No variance shall be granted pursuant to this section until the jurisdictional health department has considered the relative interests of the applicant, other owners of property likely to be affected by the handling practices and the general public.

(3) Any variance or renewal shall be granted within the requirements of subsection (1) of this section and for time period and conditions consistent with the reasons therefor, and within the following limitations:

(a) If the variance is granted on the ground that there is no practicable means known or available for the adequate prevention, abatement, or control of pollution involved, it shall be only until the necessary means for prevention, abatement or control become known and available and subject to the taking of any substitute or alternative measures that the jurisdictional health department may prescribe;

(b) The jurisdictional health department may grant a variance conditioned by a time table if:

(i) Compliance with the regulation will require spreading of costs over a considerable time period; and

(ii) The time table is for a period that is needed to comply with the regulation.

(4) Any variance granted pursuant to this section may be renewed on terms and conditions and for periods which

would be appropriate on initial granting of a variance. No renewal thereof shall be granted, unless following a public hearing on the complaint or due notice, the jurisdictional health department finds the renewal is justified. No renewal shall be granted except on application. Any such application shall be made at least sixty days prior to the expiration of the variance. Immediately upon receipt of an application for renewal, the jurisdictional health department shall give public notice of such application in accordance with rules and regulations of the jurisdictional health department.

(5) An application for a variance, or for the renewal thereof, submitted to the jurisdictional health department shall be approved or disapproved by the jurisdictional health department within ninety days of receipt unless the applicant and the jurisdictional health department agree to a continuance.

(6) No variance shall be granted by a jurisdictional health department except with the approval and written concurrence of the department prior to action on the variance by the jurisdictional health department.

(7) Variances granted by a jurisdictional health department will be accepted as variances under this regulation.

(8) Public notice shall be given by mailing a notice of the variance application to persons who have written to the jurisdictional health department asking to be notified of all variance requests.

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-700, filed 10/28/85.]

WAC 173-304-9901 Maximum contaminant levels for ground water. Maximum contaminant levels for ground water shall be those specified in chapter 248-54 WAC, as the primary drinking water standards. Analytical methods for these contaminants may be found in the Code of Federal Regulations 40 CFR Part 141. (These contaminant levels are to be considered interim levels for the purpose of regulating solid waste handling facilities and shall be used until such time as the department establishes ground water quality standards for all types of activities impacting ground water.)

[Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173-304-9901, filed 10/28/85.]

Chapter 173-305 WAC
HAZARDOUS WASTE FEE REGULATION

WAC

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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-305-060 Facility fees. [Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-060, filed 2/7/84.] Repealed by 92-10-043 (Order 92-09), filed 5/5/92, effective 6/5/92. Statutory Authority: Chapter 70.95E RCW.

173-305-070 Schedule of facility fees. [Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-070, filed 2/7/84.] Repealed by 92-10-043 (Order 92-09), filed 5/5/92, effective 6/5/92. Statutory Authority: Chapter 70.95E RCW.

173-305-080 Assessments for combined sites. [Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-080, filed 2/7/84.] Repealed by 92-10-043 (Order 92-09), filed 5/5/92, effective 6/5/92. Statutory Authority: Chapter 70.95E RCW.

173-305-090 Adjustment of fees and limits. [Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-090, filed 2/7/84.] Repealed by 92-10-043 (Order 92-09), filed 5/5/92, effective 6/5/92. Statutory Authority: Chapter 70.95E RCW.

PART A
GENERAL

WAC 173-305-010 Purpose. This rule implements the provisions of chapter 70.95E RCW, establishing a means for funding technical assistance and compliance education assistance to hazardous substance users and waste generators in this state. Technical assistance includes, but is not limited to, assistance in the preparation of plans and review of plans and related documents. The purpose of this chapter is to describe the methods by which the department of ecology will assess certain fees, to whom fees will be assessed, the amount of those fees, provisions for exemption from and enforcement of fee assessments, responsibilities of the department of ecology, and procedures for adjusting the fees. Copies of all rules and statutes cited in this chapter are available from Records Management, Department of Ecology, P.O. Box 47600, Olympia, WA, 98504-7600.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-010, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-010, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-010, filed 2/7/84.]

WAC 173-305-015 Applicability. The requirements of WAC 173-305-010 through 173-305-120 apply to all persons who are hazardous waste generators, including state and local entities as well as instrumentalities of the United States. The requirements of WAC 173-305-010 through 173-305-050 and 173-305-210 through 173-305-240 apply to all persons required to prepare plans under RCW 70.95C.200.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-015, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-015, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-015, filed 2/7/84.]

WAC 173-305-020 Definitions. Any terms not specifically defined in this section, for the purposes of this chapter, have the same meaning as given in WAC 173-303-040. The following terms are defined for the purposes of this chapter:

(1) "Additional fee" means the annual fee imposed under chapter 70.95E RCW against hazardous generators and hazardous substance users required to prepare plans;

(2) "Base fee" means the annual fee imposed under chapter 70.95E RCW against hazardous waste generators doing business in the state of Washington;

(3) "Business activities" means activities of any person who is "engaging in business" as the term is defined in chapter 82.04 RCW. Specifically, "engaging in business" means commencing, conducting, or continuing in business and also the exercise of corporate or franchise powers as well as liquidating a business when the liquidates thereof hold themselves out to the public as conducting such business;

(4) "Dangerous waste" means any discarded, useless, unwanted, or abandoned nonradioactive substances including, but not limited to, certain pesticides, or any residues or containers of those kinds of substances that are disposed of in a quantity or concentration that would pose a substantial present or potential hazard to human health, wildlife, or the environment because those wastes or constituents or combinations of those kinds of wastes:

(a) Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or

(b) Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.

"Dangerous wastes" specifically includes those wastes designated as dangerous by chapter 173-303 WAC;

(5) "Department" means the department of ecology;

(6) "Emissions" means the substances released to the environment that must be reported under toxic chemical release reporting, 40 CFR Part 372;

(7) "EPA/state identification number" means the number assigned by the environmental protection agency (EPA) or by the department of ecology to each generator or transporter or both, and to each treatment facility, or storage facility, or disposal facility, or a treatment, storage, and disposal facility;

(8) "Extremely hazardous waste" means any dangerous waste that:

(a) Will persist in a hazardous form for several years at a disposal site and which, in its persistent form:

(i) Presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic make-up of man or wildlife; and

(ii) Is highly toxic to man and wildlife;

(b) If disposed of at a disposal site in quantities that would present an extreme hazard to man or the environment.

"Extremely hazardous waste" specifically includes those wastes designated as extremely hazardous by chapter 173-303 WAC;

(9) "Facility" means any geographical area that has been assigned an EPA/state identification number or in the case of a hazardous substance user, means all buildings, equipment, structures, and other stationary items located on a single site or on contiguous or adjacent sites and owned or operated by the same person;

(10) "Generate" means any act or process that produces hazardous waste or first causes a hazardous waste to become subject to regulation;

(11) "Hazardous waste" includes all dangerous and extremely hazardous wastes but, for the purposes of this chapter, excludes all radioactive wastes or substances composed of both radioactive and hazardous components;

(12) "Hazardous waste generator" means all persons whose primary business activities are identified by the department to generate any quantity of hazardous waste in the calendar year for which the fee is imposed.

(13) "Interrelated facility" means multiple facilities owned or operated by the same person;

(14) "Person" means an individual, trust, firm, joint stock company, partnership, association, state, public or private or municipal corporation, commission, political subdivision of a state, interstate body, the federal government including any agency or officer thereof, and any Indian tribe or authorized tribal government;

(15) "Plan" means the plan provided for in RCW 70.95C.200;

(16) "Price deflator" means the United States Department of Commerce Bureau of Economic Analysis, "Implicit price deflator for gross national product for government purchases of goods and services for state and local government."

(17) "Primary business activity" means a business activity that accounts for more than fifty percent of a business' total gross receipts or in the case of more than two business activities, the activity which has the largest gross receipts. Where a business engages in multiple activities and one or more of those activities generate hazardous waste, the gross receipts from all waste generating activities will be combined to determine their ratio to the total gross receipts of the business.

(18) "Recycled for beneficial use" means the use of hazardous waste, either before or after reclamation, as a substitute for a commercial product or raw material, but does not include:

(a) Use constituting disposal;

(b) Incineration; or

(c) Use as a fuel.

(19) "Substantially similar processes" means processes that are essentially interchangeable, inasmuch as they use similar equipment and materials and produce similar products or services and generate similar wastes.

(20) "Waste generation site" means any geographical area that has been assigned an EPA/state identification number.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-020, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-020, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-020, filed 2/7/84.]

WAC 173-305-030 Penalty for failure to pay the fee. If a known or potential generator or a person required to prepare a plan fails to pay all or any part of a fee imposed under this chapter, the department of revenue shall charge a penalty of three times the amount of the unpaid fee. The department of revenue shall waive any penalty in accordance with RCW 82.32.105. Note: See WAC 458-20-228 for a discussion of the circumstances under which a penalty may be waived.

[Statutory Authority: Chapter 70.95E RCW. 91-08-040 (Order 90-56), § 173-305-030, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-030, filed 2/7/84.]

WAC 173-305-040 Adjustment of fees. On an annual basis, the department shall adjust the fees provided for by this chapter, including the maximum annual fee and the maximum total fees, by conducting the calculation in subsection (1) of this section and taking the actions set forth in subsection (2) of this section:

(1) In November of each year, the base fee and the additional fee, or the fees as subsequently adjusted by this section, must be multiplied by a factor equal to the most current quarterly "price deflator" available, and divided by the "price deflator" used in the numerator the previous year. However, the "price deflator" used in the denominator for the first adjustment must be divided by the second quarter "price deflator" for 1990.

(2) Each year by March 1, the schedule, as adjusted in subsection (1) of this section, will be published. The department will round the published fees to the nearest dollar.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-040, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-040, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-040, filed 2/7/84.]

WAC 173-305-050 General administrative provisions. With the exception of RCW 82.32.050 and 82.32.090, the review provisions contained in chapter 82.32 RCW, apply to the collection and enforcement of fees imposed under this chapter. Requests for administrative review should be directed to the State of Washington, Department of Ecology, P.O. Box 34050, Seattle, WA 98124-1050. The review provisions of chapter 43.21B RCW do not apply to the administration of these fees.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-050, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-050, filed 4/1/91, effective 5/2/91. Statutory Authority: Chapter 70.105A RCW. 84-05-012 (Order DE 83-38), § 173-305-050, filed 2/7/84.]

PART B
BASE FEE

WAC 173-305-110 Fees. (1) The fee imposed is a thirty-five dollar (or as adjusted by WAC 173-305-040) annual fee payable by hazardous waste generators. The fee for the 1990 fee period is due on October 1, 1990, for any hazardous waste generator operating in Washington after March 22, 1990. The fee for the 1991 calendar year, and the 1990 fee period for any hazardous waste generator who began business after October 1, 1990, is due February 28, 1992. The annual fee for calendar year 1992 and each calendar year thereafter is due on July 1 of the next succeeding year.

Table 1
Primary Business Activities of Potential Generators

Soil preparation services: Includes establishments primarily engaged in application of fertilizer, seed bed preparation, and other services for improving the soil for crop planting such as weed control.

Crop protecting services: Includes establishments primarily engaged in performing crop protecting services such as disease, weed, and insect control.

Metal mining: Includes establishments primarily engaged in mining, developing mines, or exploring for metallic minerals. These ores are valued chiefly for the metals contained, to be recovered for use as such or as constituents of alloys, chemicals, pigments, or other products. It also includes mills that crush, grind, wash, dry, sinter, calcine, or leach ore, or perform gravity separation or flotation operations.

General building contractors: Includes general contractors and operative builders primarily engaged in the construction of nonresidential buildings.

Heavy construction, excluding buildings: Includes general contractors primarily engaged in heavy construction other than building, such as highways and streets, bridges, sewers, railroads, irrigation products, flood control products, and marine construction. It also includes special trade contractors primarily engaged in activities of a type that are clearly specialized to that type of heavy construction and are not normally performed on buildings or building-related projects.

Painting: Includes special trade contractors primarily engaged in painting.

Floor laying and other floor work, not elsewhere classified: Includes special trade contractors primarily engaged in the installation of asphalt tile, linoleum, and resilient flooring, in laying, scraping, and finishing parquet and other hardwood flooring.

Beverages: Includes establishments primarily engaged in manufacturing:

- Malt beverages or malt byproducts;
- Wines, brandy, and brandy spirits including the blending of wines;
- Alcoholic liquors by distillation or by mixing liquors and other ingredients;
- Soft drinks and carbonated waters; and
- Flavoring extracts, syrups, powders, and related products.

Textile mill products: Includes establishments primarily engaged in performing any of the following operations:

- Preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage;
- Manufacturing broadwoven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn;
- Dyeing and finishing fiber, yarn, fabrics, and knit apparel;
- Coating, waterproofing, or otherwise treating fabrics;
- The integrated manufacture of knit apparel and other finished articles from yarn; and
- The manufacture of felt goods, lace goods, nonwoven fabrics, and miscellaneous textiles.

Sawmills and planing mills, general: Includes establishments primarily engaged in:

- Sawing rough lumber and timber from logs and bolts, or resawing cants and flitches into lumber, including box lumber and softwood cut stock;
- Planing mills combined with sawmills; and
- Separately operated planing mills that are engaged primarily in producing surfaced lumber and standard workings or patterns of lumber. This industry includes establishments

primarily engaged in sawing lath and railroad ties and in producing tobacco hogshead stock, wood chips, and snow fence lath.

Hardwood dimension and flooring mills: Includes establishments primarily engaged in manufacturing:

- Hardwood dimension lumber and workings therefrom;
- Other hardwood dimension, semifabricated or ready for assembly;
- Hardwood flooring; and
- Wood frames for household furniture.

Millwork: Includes establishments primarily engaged in manufacturing fabricated wood millwork, including wood millwork covered with materials such as metal and plastics. Planing mills primarily engaged in producing millwork are included in this industry.

Wood kitchen cabinets: Includes establishments primarily engaged in manufacturing wood kitchen cabinets and wood bathroom vanities, generally for permanent installation.

Hardwood veneer and plywood: Includes establishments primarily engaged in producing commercial hardwood veneer and those primarily engaged in manufacturing commercial plywood or prefinished hardwood plywood. This includes nonwood backed or faced veneer and nonwood faced plywood.

Softwood veneer and plywood: Includes establishments primarily engaged in producing commercial softwood veneer and plywood, from veneer produced in the same establishment or from purchased veneer.

Wood preserving: Includes establishments primarily engaged in treating wood, sawed or planed in other establishments, with creosote or other preservatives to prevent decay and to protect against fire and insects. This industry also includes the cutting, treating, and selling of poles, posts and piling, but establishments primarily engaged in manufacturing other wood products, which they may also treat with preservatives, are not included.

Reconstituted wood products: Includes establishments primarily engaged in manufacturing reconstituted wood products. Important products of this industry are hardboard, particleboard, insulation board, medium density fiberboard, waferboard, and oriented strandboard.

Wood products, not elsewhere classified: Includes establishments primarily engaged in manufacturing wood products, not elsewhere classified, and products from rattan, reed, splint, straw, veneer, veneer strips, wicker, and willow.

Furniture and fixtures: Includes establishments primarily engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures.

Paper and allied products: Includes establishments primarily engaged in the manufacture of:

- Pulps from wood and other cellulose fibers, and from rags;
- Paper and paperboard; and
- Paper and paperboard into converted products, such as paper coated off the paper machine, paper bags, paper boxes, and envelopes.

Also included are establishments primarily engaged in manufacturing bags of plastics film and sheet.

Printing and publishing: Includes establishments primarily engaged in printing by one or more common process, such as letterpress; lithography (including offset), gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding and platemaking. It also includes establishments engaged in publishing newspapers, books, and periodicals.

Chemicals and allied products: Includes establishments primarily engaged in producing basic chemicals, and establishments manufacturing products by predominantly chemical processes.

Petroleum refining and related industries: Includes establishments primarily engaged in petroleum refining, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials.

Rubber and miscellaneous plastic products: Includes establishments primarily engaged in manufacturing products from plastics resins and from natural, synthetic, or reclaimed rubber, gutta percha, balata, or butta siak.

Stone, clay, and glass products: Includes establishments primarily engaged in manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut stone, abrasive and asbestos products, and other products from materials taken principally from the earth in the form of stone, clay, and sand.

Primary metal industries: Includes establishments primarily engaged in:

- Smelting and refining ferrous and nonferrous metals from ore, pig, or scrap;
- Rolling, drawing, and alloying metals;
- Manufacturing castings and other basic metal products; and
- Manufacturing nails, spikes, and insulated wire and cable.

This group includes the production of coke.

Fabricated metal products: Includes establishments primarily engaged in fabricating ferrous and nonferrous metal products, such as:

- Metal cans,
- Tinware,
- Handtools,
- Cutlery,
- General hardware,
- Nonelectric heating apparatus,
- Fabricated structural metal products,
- Metal forgings,
- Metal stampings,
- Ordnance (except vehicles and guided missiles), and
- A variety of metal and wire products not elsewhere classified.

Industrial and commercial machinery and computer equipment: Includes establishments primarily engaged in manufacturing industrial and commercial machinery and equipment and computers.

Electronic and other electrical equipment and components, except computer equipment: Includes establishments primarily engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy. Included is the manufacturing of:

- Electricity distribution equipment;
- Electrical industrial apparatus;
- Household appliances;
- Electrical lighting and wiring equipment;
- Radio and television receiving equipment;
- Communications equipment;
- Electronic components and accessories; and
- Other electrical equipment and supplies.

Transportation equipment: Includes establishments primarily engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, guided missiles, and space vehicles, ships, boats, railroad equipment, and miscellaneous transportation equipment, such as motorcycles, bicycles, and snowmobiles.

Instruments; measuring, analyzing, and controlling photographic, medical, and optical goods; watches and clocks: Includes establishments primarily engaged in manufacturing:

- Instruments (including professional and scientific) for measuring, testing, analyzing, and controlling, and their associated sensors and accessories;
- Optical instruments and lenses;
- Surveying and drafting instruments;
- Hydrological, hydrographic, meteorological, and geophysical equipment;
- Search, detection, navigation, and guidance systems and equipment;
- Surgical, medical, and dental instruments, equipment, and supplies;
- Ophthalmic goods;
- Photographic equipment and supplies; and
- Watches and clocks.

Jewelry, silverware, and plated ware: Includes establishments primarily engaged in manufacturing:

- Jewelry and other articles made of precious metals with or without stones;
- Flatware, hollowware, ecclesiastical ware, trophies, trays, and related products made of:
  - Sterling silver;
  - Metal plated with silver, gold, or other metal;
  - Nickel silver;
  - Pewter; or
  - Stainless steel.

Toys and sporting goods: Includes establishments primarily engaged in manufacturing: Sporting and athletic goods such as fishing tackle, golf and tennis goods, skis and skiing equipment.

Signs and advertising specialties: Includes establishments primarily engaged in manufacturing electrical, mechanical, cutout, or plate signs and advertising displays, including neon signs, and advertising specialties.

Railroad transportation: Includes establishments furnishing transportation by line-haul railroad, and switching and terminal establishments.

Local and interurban passenger transit: Includes establishments primarily engaged in furnishing local and suburban passenger transportation.

Water transportation: Includes establishments primarily engaged in freight and passenger transportation on the open seas or inland waters, and establishments furnishing incidental services such as lighterage, towing, and canal operation. This major group also includes excursion boats, sightseeing boats, and water taxis.

Transportation by air: Includes establishments primarily engaged in furnishing domestic and foreign transportation by air and also those operating airports and flying fields and furnishing terminal services.

Electric services: Includes establishments primarily engaged in the generation, transmission, or distribution, or a combination thereof, of electric energy for sale.

Combination electric and gas, and other utility services: Includes establishments providing electric or gas services in combination with other services.

Sanitary services: Includes:

- Establishments primarily engaged in the collection and disposal of wastes conducted through a sewer system; and
- Establishments primarily engaged in the collection and disposal of refuse by processing or destruction or in the operation of incinerators, waste treatment plants, landfills, or other sites for disposal of those kinds of materials.

Motor vehicles, parts, and supplies: Includes establishments primarily engaged in the:

- Wholesale distribution of new and used passenger automobiles, trucks, trailers, and other motor vehicles, including motorcycles, motor homes, and snowmobiles;
- Wholesale distribution of motor vehicle supplies, accessories, tools, and equipment except tires and new motor vehicle parts;
- Distribution at wholesale or retail of used motor vehicle parts and those primarily engaged in dismantling motor vehicles for the purpose of selling parts.

Electrical apparatus and equipment, wiring supplies, and construction materials: Includes establishments primarily engaged in the wholesale distribution of:

- Electrical power equipment for the generation, transmission, distribution, or control of electric energy;
- Electrical construction materials for outside power transmission lines and for electrical systems; and
- Electric light fixtures and bulbs.

Machinery, equipment, and supplies: Includes establishments primarily engaged in the:

• Wholesale distribution of construction or mining cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries;

• Distribution of agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden;

• Distribution of dairy and other livestock equipment; and

• Wholesale distribution of industrial machinery and equipment.

Miscellaneous durable goods: Includes establishments primarily engaged in assembling, breaking up, sorting, and wholesale distribution of scrap and waste materials.

Chemicals and allied products: Includes establishments primarily engaged in the wholesale distribution of:

• Plastics materials, and of unsupported plastics film, sheets, sheeting, rods, tubes, and other basic forms and shapes;

• Chemicals and allied products, such as acids, industrial and heavy chemicals, dye stuffs, industrial salts, rosin, and turpentine.

Petroleum and petroleum products: Includes establishments primarily engaged in the wholesale distribution of:

• Crude petroleum and petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities;

• Petroleum and petroleum products, except those with bulk liquid storage facilities.

Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and its products at wholesale, but without bulk liquid storage facilities.

Farm supplies: Includes establishments primarily engaged in the wholesale distribution of fertilizers, agricultural chemicals, and pesticides.

New and used car dealers: Includes establishments primarily engaged in the retail sale of new automobiles or new and used automobiles. These establishments frequently maintain repair departments and carry stocks of replacement parts, tires, batteries, and automotive accessories.

Gasoline service stations: Includes gasoline service stations primarily engaged in selling gasoline and lubricating oils.

Laundry, cleaning, and garment services: Includes establishments primarily engaged in:

• Operating mechanical laundries with steam or other power;

• Linen supply;

• Coin-operated laundries and dry-cleaning;

• Dry-cleaning plants, except rug cleaning;

• Carpet and upholstery cleaning; and

• Industrial launderers.

Establishments that solely operate coin-operated washing machines and dryers and establishments that solely clean carpets or rugs are not included.

Disinfecting and pest control services: Includes establishments primarily engaged in disinfecting dwellings and other buildings, and in termite, insect, rodent, and other pest control, generally in dwellings or other buildings.

Truck rental and leasing, without drivers: Includes establishments primarily engaged in short-term rental or extended-term leasing of trucks, truck tractors, or semitrailers without drivers.

Automotive repair shops: Includes establishments primarily engaged in the:

• Repair of automotive tops, bodies, and interiors, or automotive painting and refinishing;

• Customizing automobiles, trucks, and vans except on a factory basis;

• Installation, repair, or sale and installation of automotive exhaust systems;

• Repairing and retreading of automotive tires;

• Installation, repair, or sales and installation of automotive transmissions;

• General automotive repair;

• Specialized automotive repair, such as fuel service (carburetor repair), brake relining, front end and wheel alignment, and radiator repair.

Miscellaneous repair shops and related services: Includes establishments primarily engaged in:

• General repair work by welding, including automotive welding;

• Rewinding armatures and rebuilding or repairing electric motors;

• Specialized repair services, such as bicycle repair, leather goods repair;

• Lock and gun repair, including the making of lock parts or gun parts to individual order;

• Musical instrument repair;

• Septic tank cleaning;

• Farm machinery repair;

• Furnace cleaning;

• Motorcycle repair;

• Tank truck cleaning;

• Taxidermists;

• Tractor repair; and

• Typewriter repair.

Hospitals: Includes establishments primarily engaged in providing:

• Diagnostic services, extensive medical treatment including surgical services, and other hospital services, as well as continuous nursing services;

• General medical and surgical services and other hospital services;

• Diagnostic medical services and inpatient treatment for the mentally ill;

• Diagnostic services, treatment, and other hospital services for specialized categories of patients, except mental.

Medical laboratories: Includes establishments primarily engaged in providing professional analytic or diagnostic services to the medical profession, or to the patient on prescription of a physician.

Colleges, universities, professional schools, and junior colleges: Colleges, universities, and professional schools furnishing academic courses and granting academic degrees; or junior colleges and technical institutes furnishing academic, or academic and technical, courses, and granting associate academic degrees, certificates, or diplomas.

Research and testing services: Includes establishments primarily engaged in:

• Commercial physical and biological research and development on a contract or fee basis; or

• Performing noncommercial research into and dissemination of, information for public health, education, or general welfare; or

• Providing testing services.

Environmental quality: Government establishments primarily engaged in:

• Regulation, planning, protection and conservation of air and water resources;

• Solid waste management;

• Water and air pollution control and prevention;

• Flood control;

• Drainage development, and consumption of water resources;

• Coordination of these activities at intergovernmental levels;

• Research necessary for air pollution abatement and control and conservation of water resources;

• Government establishments primarily engaged in regulation, supervision and control of land use, including recreational areas;

• Conservation and preservation of natural resources;

• Control of wind and water erosion;

• The administration and protection of publicly and privately owned forest lands, including pest control;

• Planning, management, regulation, and conservation of game, fish, and wildlife populations, including wildlife management areas and field stations; and

• Other matters relating to the protection of fish, game, and wildlife.

Establishments that only provide information and education services to others are not included.

National security: Includes establishments of the armed forces, including the National Guard, primarily engaged in national security and related activities.

(2) A hazardous waste generator must be exempt from the fee imposed under this section if the value of products, gross proceeds of sales, or gross income of the business, from all business activities of the hazardous waste generator, is less than twelve thousand dollars in the current calendar year.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-110, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-110, filed 4/1/91, effective 5/2/91.]

WAC 173-305-120 Responsibilities of the department of ecology. (1) The legislature has provided that the primary responsibilities of the department of ecology are:

(a) To provide a list of hazardous waste generators and to determine the primary business activities of hazardous waste generators.

(b) To collect the fees from hazardous waste generators as identified in (a) of this subsection.

(2) The department of ecology will periodically amend the list of primary business activities of hazardous waste generators by reviewing the most current verified information that is available to the department.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-120, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-120, filed 4/1/91, effective 5/2/91.]

PART C
HAZARDOUS WASTE PLANNING FEE

WAC 173-305-210 Imposition of fee. (1) The fee is imposed on hazardous waste generators and hazardous substance users required to prepare plans under RCW 70.95E.-030. The department may waive the fee for individual facilities when the amount owed is less than the estimated cost of collection. This provision does not waive the requirement to prepare a plan.

(2) The department will determine who, specifically, is required to pay the fee each year and the amount of the fee based on the most current verified information available to the department. Note: Information collected on toxic emissions will not be verified.

(3) The total fees collected under RCW 70.95E.030 may not exceed the department's cost of implementing RCW 70.95C.200.

(4) A person who develops a plan covering more than one interrelated facility as provided for in RCW 70.95C.200 must be assessed fees only for the number of plans prepared. In instances where a person has interrelated facilities without substantially similar processes, a single document may be prepared for the convenience of management but the document must contain separate detailed plans for each facility. In these cases, each detailed plan within the document must be assessed a fee.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-210, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-210, filed 4/1/91, effective 5/2/91.]

WAC 173-305-220 Hazardous waste planning fee. (1) The department shall calculate the adjusted fees, annual fee, and maximum total fees using the formula in subsection (3) of this section. The formula uses a risk factor of one for dangerous waste and emissions, and a multiplication factor of ten for extremely hazardous waste. For purposes of this section, hazardous waste reported on the annual dangerous waste generator report as having been either recycled on-site or recycled for beneficial use off-site, including initial amounts of hazardous substances introduced into a process and subsequently recycled for beneficial use, may not be used in the calculation of hazardous waste generated. A facility may petition the director to exclude hazardous wastes recycled for beneficial use even if they were not reported as such on the

annual dangerous waste generator report. Documentation from the hazardous waste handling facility that the hazardous waste was recycled for beneficial use must be submitted along with the petition.

(2) Fees in subsection (3) of this section are based on the following definitions:

(Note: The terms "dangerous waste" and "extremely hazardous waste" as used in this subsection use the same basic definition as in WAC 173-305-020, but are modified as follows for the fee calculation only.)

Dangerous waste is the number of pounds of dangerous waste reported that are not recycled for beneficial use, calculated so that wastewater discharged under permit by rule under WAC 173-303-802 is excluded.

Emissions is the number of pounds of emission reported under Toxic Chemical Release Reporting, 40 CFR Part 372, by a company. If emissions are reported in ranges, the middle value of the reported range will be used in the calculation.

Extremely hazardous waste is the number of pounds of extremely hazardous waste reported that are not recycled for beneficial use, calculated so that wastewater discharged under permit by rule under WAC 173-303-802 is excluded.

The price deflator is the "*Implicit price deflator for gross national product* for *government purchases of goods and services for state and local government*."

The total risk pounds for a facility or set of interrelated facilities is equal to ten times the number of pounds of extremely hazardous waste generated, plus the number of pounds of dangerous waste generated, plus the number of pounds of emission reported by that facility.

(3) The annual fee for a facility or set of interrelated facilities is equal to the rate per risk pound times the total risk pounds. The rate for the risk pounds must be calculated by the department so that the maximum total fee in (a) of this subsection can be obtained. The annual fee for each facility or set of interrelated facilities is subject to the limitations in (b) and (c) of this subsection.

(a) The maximum total fees collected must be determined based on the maximum total fee for the previous year, multiplied by the most current price deflator, and divided by the price deflator used in the numerator for the previous year. The price deflator used in the denominator for the first adjustment is the second quarter price deflator for 1990. The maximum total fees for 1990 must be one million dollars.

(b) The maximum fee for any facility or interrelated facility must be determined based on the maximum total fee for the previous year, multiplied by the most current price deflator, and divided by the price deflator used in the numerator for the previous year. The price deflator used in the denominator for the first adjustment is the second quarter price deflator for 1990. The maximum annual fee for 1990 must be ten thousand dollars.

(c) The maximum annual fee for a generator who generates between two thousand six hundred forty and four thousand pounds of dangerous and extremely hazardous waste must be determined based on the maximum total annual fee for the previous year, multiplied by the most current price deflator, and divided by the price deflator used in the numerator for the previous year. The price deflator used in the denominator for the first adjustment is the second quarter price deflator for 1990. The maximum annual fee for 1990 must be fifty dollars.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-220, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-220, filed 4/1/91, effective 5/2/91.]

WAC 173-305-230 Due dates. (1) Fees imposed by RCW 70.95E.030 are first due on July 1, 1991, for facilities that are required to prepare plans in 1992, on July 1, 1992, for facilities that are required to prepare plans in 1993, and on July 1, 1993, for facilities that are required to prepare plans in 1994. Fees for facilities that are required to prepare plans following 1994 are first due on July 1 of the year following the first year that they generate more than two thousand six hundred forty pounds of hazardous waste and/or are required to report under Section 313 of Title III of the Superfund Amendments and Reauthorization Act.

(2) If a facility pays a fee in anticipation of preparing a plan the following year, and circumstances change so that the facility is no longer required to prepare a plan, the facility may request, by letter, a refund of the fee from the department. Upon verification of the information submitted, the department shall grant the refund.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-230, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-230, filed 4/1/91, effective 5/2/91.]

WAC 173-305-240 Responsibilities of the department of ecology. (1) The legislature has provided that the primary responsibility of the department of ecology is to develop, by April 30 of each year, a list of persons subject to the fee and the amount of their fee. The fees must be calculated based on the formulas in WAC 173-305-220(3).

(2) The department of ecology shall collect the fees and subtract any overpayment of the fee in the previous year from the fee for the current year. The department shall also subtract any interest accrued on an overpayment from the fee for the current year if the overpayment was made due to an error which was the responsibility of the department or an over estimate of rate per risk pound for the prior year.

(3) If there are resubmissions of hazardous waste annual reports or toxic release inventory reports, or both, the department shall add any underpayment of the fee in previous years to the fee for the current year.

[Statutory Authority: Chapter 70.95E RCW. 00-16-103 (Order 99-16), § 173-305-240, filed 8/1/00, effective 9/1/00; 91-08-040 (Order 90-56), § 173-305-240, filed 4/1/91, effective 5/2/91.]

Chapter 173-306 WAC

SPECIAL INCINERATOR ASH MANAGEMENT STANDARDS

WAC

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173-306-500	Monitoring and sampling methods.
173-306-900	Variances.
173-306-9901	Maximum contaminant levels for ground water.

WAC 173-306-010 Authority and purpose. This chapter is adopted under the authority of chapter 70.138 RCW, Incinerator ash residue, to protect human health, the environment, and employees during the management and disposal of special incinerator ash. It is also the purpose of this chapter to enhance and encourage the higher waste management priorities as spelled out in chapter 70.138 RCW. This chapter is intended to establish consistent, enforceable management requirements for special incinerator ash that otherwise would be regulated as hazardous waste under chapter 70.105 RCW, the Hazardous Waste Management Act. This chapter is not intended to address ash residues that are classed as hazardous waste under federal rules, 40 CFR Part 261, unless the Environmental Protection Agency decides those wastes are not subject to Subtitle C of the Resource Conservation and Recovery Act.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-010, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-010, filed 4/30/90, effective 5/31/90.]

WAC 173-306-050 Applicability. This chapter applies to municipal solid wastes intended for incineration or energy recovery and special incinerator ash as those terms are defined in WAC 173-306-100. (Incinerator ash whose designation status is unknown must be considered special incinerator ash until data developed under WAC 173-306-500(4) is submitted to the department.) This chapter shall not apply to the following wastes:

(1) Solid waste as defined in WAC 173-306-100 that is not regulated as hazardous waste under chapter 70.105 RCW and that is not intended for incineration or energy recovery;

(2) Hazardous wastes regulated under the Federal Resource Conservation and Recovery Act, 42 U.S.C. sec. 6901 et seq.;

(3) Incinerator ash from the operation of incineration or energy recovery facilities burning only tires, woodwaste, infectious waste, sewage sludge, or any other single type of refuse other than municipal solid waste; and

(4) Incinerator ash from the operation of incineration or energy recovery facilities burning municipal solid waste at a rate of twelve tons of municipal solid waste per day or less.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-050, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-050, filed 4/30/90, effective 5/31/90.]

WAC 173-306-100 Definitions. Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

(1) "Active area" means that portion of a facility where ash disposal operations are being, are proposed to be, or have been conducted. Buffer zones are not considered part of the active area of a facility.

(2) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

(3) "Ash" means special incinerator ash.

(4) "Ash cell" or "cell" means an active disposal phase of the site which must be divided into a series of phases to minimize the active ash disposal area.

(5) "Beneficial use" means the water uses as defined by the water resources management program established by the Water Resources Act of 1971 and chapter 173-500 WAC.

(6) "Bottom ash" means ash residues remaining on the incineration or energy recovery facility grates or in the combustion chambers after combustion. Bottom ash may or may not be a special incinerator ash.

(7) "Buffer zone" means that part of a facility which lies between the active area and the property boundary.

(8) "Closure" means those actions taken by the owner or operator of an ash facility to cease disposal operations. A closure notice will be provided to the department with the exact date to ensure that all facilities are closed in conformance with applicable rules at the time of closure and to prepare the site for the post-closure period using best engineering practices.

(9) "Construction quality assurance plan" means a plan describing the methods by which the professional engineer in responsible charge of inspection of the project will determine that the facilities were constructed without significant change from the department approved plans and specifications.

(10) "Contaminate" means to discharge a substance into ground water that would cause:

(a) The concentration of that substance in the ground water to exceed the maximum contamination level specified in WAC 173-306-9901;

(b) A statistically significant increase in the concentration of that substance in the ground water where the existing concentration of that substance exceeds the maximum contaminant level specified in WAC 173-306-9901; or

(c) A statistically significant increase above background in the concentration of a substance which:

(i) Is not specified in WAC 173-306-9901; and

(ii) Is present in the ash; and

(iii) Has been determined to present a substantial risk to human health or the environment in the concentration found at the point of compliance by the department in consultation with the department of health.

(11) "Critical habitat" means habitat defined as critical by the Endangered Species Act of 1973 (P.L. 93-205).

(12) "Department" means the department of ecology.

(13) "Department's approval" means an approval letter by the director after the review of all engineering reports, plans and specifications, and any other engineering documents by a registered engineer.

(14) "Director" means the director of the department of ecology or the director's designee.

(15) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(16) "Dispose" or "disposal" means the treatment, utilization, processing, or final deposit of special incinerator ash.

(17) "Disposal facility" means all structures, other appurtenances, improvements and land used for recycling, storing, treating, or disposing of special incinerator ash.

(18) "Domestic water" means any water used for human consumption, other domestic activities, livestock watering or for any use for which a water right has been granted.

(19) "Energy recovery" means the recovery of energy in a usable form from mass burning, fluidized bed or refuse - derived fuel incineration, pyrolysis, or any other means of using the heat of combustion of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

(20) "Existing disposal facility" means a disposal facility that is owned or leased and in operation, or for which construction has begun, on or before the effective date of this chapter and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, rules, and ordinances.

(21) "Existing residential development" means any existing development of residential dwelling units with a density of at least one unit per acre and a total of more than ten dwellings at time of permit application.

(22) "Expanded disposal facility" means a disposal facility adjacent to an existing facility for which the land is purchased and approved by the department after the effective date of this chapter. The department shall consider a vertical expansion approved and permitted after the effective date of this chapter to be an expanded disposal facility.

(23) "Fault" means a fracture along which rocks or soils on one side have been displaced with respect to those on the other side.

(24) "Facility" means disposal facility.

(25) "Flyash" or "flyash/scrubber residue" means ash swept from the incineration or energy recovery facility combustion chamber and collected from the boilers, economizers, and air pollution control devices such as scrubbers, baghouses, and electro-static precipitators. Flyash or flyash/scrubber residues may or may not be special incinerator ash.

(26) "Generate" means any act or process that produces special incinerator ash or which first causes special incinerator ash to become subject to regulation.

(27) "Generator" means any incineration facility owner/operator who generates a special incinerator ash. An existing generator is any generator whose facility is in operation on the effective date of this chapter.

(28) "Holocene" means the most recent measure of geologic time period extending from the end of the Pleistocene period to the present.

(29) "Incineration" means reducing the volume of solid wastes by use of an enclosed device that uses controlled flame combustion.

(30) "Independent third party" means, for the purpose of liner construction, a person, approved by the department, with demonstrated experience in successful liner installation or inspection, who is financially and organizationally independent of:

(a) The generator or facility owner/operator;

(b) The raw material producer (such as the resin manufacturer or the bentonite producer);

(c) The liner manufacturer;

(d) The liner installer; or

(e) Any other person who might have a financial or organizational connection to the facility.

(31) "Land treatment" means the practice of applying ash waste onto or incorporating into the soil surface. If the waste will remain after the facility is closed, this practice is disposal.

(32) "Management" means the handling, storage, collection, transportation, and disposal of special incinerator ash.

(33) "Monofill" means a disposal facility or part of a facility, that is not a land treatment facility, at which only special incinerator ash is finally deposited in or on.

(34) "New disposal facility" means a facility that begins operation or construction after the effective date of this chapter.

(35) "One hundred-year flood" means a flood that has a one percent chance of being equalled or exceeded in any given year.

(36) "Perennial surface water bodies" are normally continuous bodies of water with natural flows throughout the year and includes lakes, rivers, ponds, irrigation canals, streams, reservoirs, inland waters, salt waters, and all other waters of the state (not to include man-made lagoons or impoundments for waste treatment or storage) within the jurisdiction of the state of Washington as defined by chapter 90.48 RCW, the Water Pollution Control Act.

(37) "Permeability" means the ability with which a porous material allows liquid or gaseous fluids to flow through it.

(38) "Permit" means a special incinerator ash disposal permit.

(39) "Person" means any person, firm, association, county, public, municipal, or private corporation, agency, or other entity whatsoever.

(40) "Pile" means any noncontainerized accumulation of ash that is used for treatment or utilization.

(41) "Plans and specifications" means the detailed drawings and specifications used in the construction or modification of ash disposal facilities.

(42) "Point of compliance" means that part of ground water which lies beneath the perimeter of a disposal facility's active area as that active area would exist at the closure of the facility.

(43) "Post-closure" means the requirements placed upon disposal facilities after closure to ensure their environmental safety for a thirty-year period or until the site becomes stabilized (i.e., cap integrity maintained, little or no settlement or leachate generation).

(44) "Processing" means an operation to convert ash into a useful product or to prepare it for disposal.

(45) "Reclamation" means to process an ash waste in order to recover usable products.

(46) "Utilization" means consuming, expending, exhausting or using an ash waste.

(47) "Sole source aquifer" means an aquifer designated by the Environmental Protection Agency under section 1424e of the Safe Drinking Water Act (P.L. 93-523).

(48) "Solid waste" means all putrescible and nonputrescible solid and semisolid wastes, including but not limited to garbage, rubbish, ashes, industrial wastes, swill, demolition

and construction wastes, abandoned vehicles or parts thereof, and recyclable commodities. This includes all liquid, solid, and semisolid materials that are not the primary products of public, private, industrial, commercial, mining, and agricultural operations. Solid waste includes, but is not limited to, sludge from wastewater treatment plants, septage from septic tanks, woodwaste, dangerous waste, and problem wastes.

(49) "Special incinerator ash" means ash residues that result from the operation of incineration or energy recovery facilities managing municipal solid waste from residential, commercial, and industrial establishments, if the ash residues (a) would otherwise be regulated as hazardous wastes under chapter 70.105 RCW; and (b) are not regulated as a hazardous waste under the Federal Resource Conservation and Recovery Act, 42 U.S.C. Sec 6901 et seq.

(50) "Spill" means any accidental discharges or overflow of fluids or processed water from contained areas or holding tanks to floor drains or a municipal sewer system.

(51) "Stabilization" or "solidification" means a technique that limits the solubility and mobility of waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes a waste by bonding or chemically reacting with the stabilizing material.

(52) "Storage" means the temporary holding (no longer than forty-five days from date of production) of a limited amount (not to exceed thirty days worth of daily production) of special incinerator ash.

(53) "Subsidence" means a sinking of the land surface due to the removal of solid mineral matter or fluids from the subsurface.

(54) "Surface impoundment" means a facility or part of a facility that is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling and aeration pits, ponds or lagoons, but does not include injection wells.

(55) "Treatment" means those engineered physical or chemical processes to make special incinerator ash safer for transport, amenable for energy or material resource recovery, amenable for storage or disposal, or reduced in volume.

(56) "Unstable slopes" means any area where the mass movement of earthen materials i.e., landslides, rockfalls, mudslides, slumps, earth flows, or debris flow is likely to occur.

(57) "Vadose zone" means that portion of a geologic formation in which soil pores contain some water, the pressure of that water is less than atmospheric pressure, and the formation occurs above the zone of saturation.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-100, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-100, filed 4/30/90, effective 5/31/90.]

WAC 173-306-150 Prohibition of surface impoundments, land treatment and municipal solid waste codisposal of ash. No person may manage any special incinerator ash in a surface impoundment, land treatment facility as defined in WAC 173-306-100, or codispose with municipal solid waste.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-150, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-150, filed 4/30/90, effective 5/31/90.]

WAC 173-306-200 Generator management plans. (1) Applicability. These standards apply to special incinerator ash generators that incinerate more than twelve tons of municipal solid waste per day. Existing generators shall meet the requirements of this section within six months after the effective date of this chapter.

(2) Management plans procedures.

(a) Before generating or managing any special incinerator ash, any generator subject to this section shall submit a generator management plan to the department for review and approval. The department may publish guidelines on the form and content of management plans consistent with this chapter. Within thirty days of receipt, the department shall determine whether the plan is factually complete and so notify the generator.

(b) Upon receipt of a complete generator management plan, the department shall give notice of its receipt of a proposed management plan to the public and to interested persons for public comment for thirty days after the date of publication.

(c) The department shall also perform the following additional public notification requirements:

(i) Mail the notice to persons who have expressed an interest in being notified;

(ii) Mail the notice to other state agencies and local governments with a regulatory interest in the proposal;

(iii) The public notice shall include a statement that any person may express their views in writing to the department within thirty days of the last date of publication;

(iv) Any person submitting written comment or any other person upon request, may obtain a copy of the department's final decision;

(v) The department shall add the name of any person, upon request, to a mailing list to receive copies of notices for all applications within the state or within a geographical area.

(d) The department shall review each generator management plan to determine whether the generator management plan complies with this chapter and chapter 70.138 RCW, including whether the necessary ash disposal permit has been or is likely to be issued.

(e) Within sixty days of receipt of a complete generator management plan, the department may approve, approve with conditions, or reject the submitted generator management plan. Approval may be conditioned upon additional requirements necessary to protect employees, human health, and the environment, including special management requirements such as waste and ash segregation, or treatment techniques such as neutralization, detoxification, and solidification or stabilization.

(f) All generators shall comply with their individual approved management plan. No generator may construct and operate an incineration or energy recovery facility without an approved management plan.

(g) Any generator operating under an approved generator management plan shall notify the department and the department may require resubmission of the generator management plan when there is a proposed material change in the

ash management of the special incinerator ash collection and/or handling system.

Upon receipt of the revised generator management plan, the department shall proceed according to subsection (2) of this section.

(3) Generator management plan requirements. Before managing special incinerator ash, all applicable generators shall develop generator management plans. Generator management plans shall show how the following requirements are met:

(a) Planning requirements:

(i) All generators shall demonstrate how the management of ash, including disposal, complies with the city and county comprehensive solid waste management plan of RCW 70.95.080, as applicable.

(ii) All generators shall demonstrate how ash management areas comply with or are a part of the spill prevention plans.

(b) Requirements for managing solid waste to reduce ash toxicity and ash quantity. All generators shall:

(i) Conduct annual municipal solid waste compositional studies to identify kinds and amounts of toxic metals, including cadmium and lead, other hazardous materials, halogenated plastics, and other substances that contribute to the toxicity of special incinerator ash;

(ii) Establish policies, procedures, incentives, and treatment methods to remove toxic metals in municipal solid waste before incineration or energy recovery;

(iii) Establish procedures to insure that dangerous wastes are not knowingly accepted at the incineration or energy recovery facility including developing lists of consumer or commercial items that may or may not be acceptable for incineration;

(iv) Establish a timetable for implementing (b)(i), (ii), and (iii) of this subsection, and a method for evaluating the effectiveness of the program in reducing the toxicity and volume of special incinerator ash.

(c) Collection and handling requirements.

(i) All incineration or energy recovery facilities must be designed and operated to prevent fugitive dust emissions and direct exposure of the ash to the weather. Special incinerator ash must be collected, stored, and handled in enclosed buildings or the equivalent (e.g., covered conveyors and transfer points). This requirement is not applicable to ferrous metal separated from bottom ash.

(ii) Floor or surface drains serving ash collection, storage, and handling areas must not be connected to uncontaminated storm water runoff drains. Spills and process waters must be handled in one or more of the following methods:

(A) Reused in the process;

(B) Discharged to surface waters under a National Pollution Discharge Elimination System Permit issued under chapter 173-220 WAC;

(C) Discharged to surface water, ground water, or a municipal sewer system under a state discharge permit issued under chapter 173-216 WAC;

(D) Injected through wells under an underground injection control permit issued under chapter 173-218 WAC; or

(E) Managed in another method approved by the department.

(iii) All incineration and energy recovery facilities must be designed and operated to comply with chapter 296-62 WAC, the general occupational health standards.

(iv) The percentage of carbon in bottom ash may not exceed six percent by weight, dry, as determined by ASTM D3178-84 or other methods approved by the department. Alternative carbon content limits may be established by the department, upon a demonstration by the owner or operator that methane generation and settlement does not exceed levels associated with bottom ash meeting the six percent carbon standard. Representative samples must be taken according to the guidelines established by the department.

(d) Storage requirements.

(i) Ash must be stored in totally-enclosed buildings, in leak-proof containers, or in tanks;

(ii) Storage may not exceed forty-five days from the date of generation of the ash, and/or the storage amount may not exceed thirty days of daily production;

(iii) Storage must be in an area served by the floor and surface drain requirements in (c)(ii) of this subsection.

(e) Ash from an incineration or energy recovery facility must be transported to an off-site or on-site disposal facility in covered and sealed vehicles or containers to avoid wind dispersal or fluid leakage. Owners and operators shall prevent ash trackout onto the site and the public right of way by employing tire washing or any equivalent means. Contaminated washwaters must be disposed of according to (c)(ii) of this subsection.

(f) Waste management accountability. All owners or operators of incineration or energy recovery facilities shall:

(i) Establish procedures acceptable to the department for tracking movements of special incinerator ash from the point of generation and/or handling to the site of final deposit or disposal. The tracking method may include inventory control and tracking systems, scale, ticket, and receipt tracking, gate logs, operating logs, or material balances;

(ii) File a report with the department if the owner or operator has not confirmed that an ash waste has been received at the intended destination within forty-five days of the date the waste was accepted by the transporter. The report must include:

(A) A legible copy of the shipping paper or manifest for which the owner or operator does not have confirmation of delivery; and

(B) A cover letter signed by the generator or his representative explaining the efforts taken to locate the waste and the results of these efforts.

(g) Other state and local requirements. All generators shall comply with all federal, state, and local environmental and industrial hygiene right-to-know laws and rules, including chapter 197-11 WAC, the State Environmental Policy Act rules; chapter 173-304 WAC, the Minimum functional standards for solid waste handling; and chapter 173-434 WAC, the air emission rules for incinerators.

(4) Annual report requirements. All generators shall submit annual reports to the department by March 1 of the following calendar year on forms specified by the department specifying:

(a) Annual amounts, in tons, of:

(i) Municipal solid waste incinerated;

(ii) Bottom ash generated; and

(iii) Flyash/scrubber residue generated.

(b) Disposal sites for all special incinerator ash. For multiple disposal sites, the amounts of disposal that are occurring in tons per year;

(c) Permittee's name, address, telephone number, date of permit issuance and expiration date for the disposal sites listed in (b) of this subsection;

(d) Designation test results. The results of testing bottom ash and flyash/scrubber residues separately and combined flyash and bottom ash on representative samples taken each quarter of the year and subjected to the criteria of WAC 173-303-100. Results of testing bottom ash quarterly for carbon residue according to subsection (3)(c)(iv) of this section must be included unless otherwise approved by the department. After one year of testing, the department may reduce this requirement if a less frequent program can provide adequate data to determine the effectiveness of an ash toxicity reduction program. Representative sampling methods shall follow guidelines specified by the department;

(e) Toxics separation test results. The results of testing bottom ash and flyash separately for toxic metals from samples taken in (d) of this subsection must be included, in order to judge the progress made in toxic metals separation and reduction;

(f) Special test results. The results of testing bottom ash and flyash separately for dioxins and dibenzofurans on a composite sample made from the eight quarterly samples taken in (d) of this subsection must be included; and

(g) Ambient lead and cadmium samples taken in the air and soil respectively at the property boundary must be included to demonstrate compliance with the performance standard of WAC 173-306-440 (2)(b) and (c). The samples must be taken annually for cadmium and quarterly for lead, unless otherwise approved by the department.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-200, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-200, filed 4/30/90, effective 5/31/90.]

WAC 173-306-300 Permit requirements for disposal facilities. (1) Applicability. The permit standards of WAC 173-306-300 through 173-306-330 apply to disposal facilities as defined in WAC 173-306-100. These standards do not apply to generators of special incinerator ash who only handle, store and collect ash on-site and transport ash off-site, nor to facilities specifically excluded under WAC 173-306-400 through 173-306-490.

(2) No disposal facility may be established, constructed, altered, expanded, or closed, until the owner or operator has obtained a permit issued under this chapter or a modified permit issued under WAC 173-306-310(3).

(3) Effective dates for permit requirements. The permit requirements of this section apply to all applicable existing, new or expanding disposal facilities within six months after the effective date of this chapter.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-300, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-300, filed 4/30/90, effective 5/31/90.]

WAC 173-306-310 Permit procedures. (1) Application procedures.

(a) Persons owning or operating new or expanded ash disposal facilities shall apply to the department for a permit, before accepting any special incinerator ash for disposal. These procedures apply to permit renewal. Monofill owners who have successfully complied with the requirements for Type B design in WAC 173-306-450 (4)(a)(i) during the eighteen-month demonstration period shall apply for a permit before using the Design B liner. Applicants shall file two copies of the application with the department that have:

(i) Been signed and notarized as correct by the owner and operator; and

(ii) Attached evidence of compliance with the requirements of chapter 197-11 WAC, the State Environmental Policy Act rules.

(b) Permit applications must contain the information set forth in WAC 173-306-330 in order to be considered complete. Upon receipt of a permit application, the department shall review the application for completeness and notify the permit applicant accordingly.

(c) Within thirty days of receipt of a complete application, the department shall give notice of its receipt of a proposed complete permit application to the public and to interested persons for public comment for thirty days after the date of publication.

(d) The department will perform the following additional public notification requirements:

(i) Mail the notice to persons who have expressed an interest in being notified;

(ii) Mail the notice to other state agencies and local governments with a regulatory interest in the proposal;

(iii) The public notice shall include a statement that any person may express his or her views in writing to the department within thirty days of the last date of publication;

(iv) Any person submitting written comment or any other person, upon request, may obtain a copy of the department's final decision; and

(v) The department shall add the name of any person, upon request, to a mailing list to receive copies of notices for all applications within the state or within a geographical area.

(2) Issuance procedures.

(a) The department shall review each completed application to determine:

(i) Whether the disposal facility meets the requirements of this chapter;

(ii) Whether the disposal facility has been adequately addressed in the city and county comprehensive solid waste management plan as applicable; and

(iii) Whether the disposal facility complies with other environmental laws and rules.

(b) The department may approve, deny, or conditionally approve a completed permit application within sixty days of receipt of the department's notice.

(c) The department may issue up to five-year term permits for ash disposal; applications for reissuance of permits must be made at least six months before permit expiration. The applicant and the department shall follow the procedures of WAC 173-306-310 (1) and (2) in applying for and reissuing permits.

(3) Modification and revocation procedures. When the department obtains any information justifying modification, or the applicant applies for modification of an existing per-

mit, the department may modify or revoke and reissue the permit according to the procedures of this section. An updated application may be requested if necessary. When a permit is modified only the conditions subject to modification are reopened. If a permit is revoked and reissued the entire permit is reopened and subject to revision and the permit is reissued for a new term.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-310, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-310, filed 4/30/90, effective 5/31/90.]

WAC 173-306-320 Demonstration and class-use permits. (1) Demonstration permits. Demonstration permits must be required for persons utilizing ash (see WAC 173-306-490 (2)(b)). In addition, persons applying for a utilization permit must demonstrate that the proposed utilization will successfully meet the requirements of WAC 173-306-490 (2)(b)(ii) before full scale reuse or utilization is practiced.

(a) The demonstration permit will be issued in accordance with the procedures of WAC 173-306-310;

(b) The demonstration permit shall address those requirements necessary to meet the standards of WAC 173-306-490 (2)(b)(ii) and (iii), and show that a disposal facility meeting the requirements of this chapter is available in case the demonstration fails or this permit is revoked;

(c) The demonstration permit shall provide a specific time period and a limit on the quantity of ash that will be used for the demonstration; the department may extend the demonstration period as a modification of the demonstration permit;

(d) Unless otherwise approved by the department, the permittee shall submit a report to the department within ninety days of the end of the demonstration. The report shall contain the results of all field tests and laboratory analyses and all data developed during the demonstration period. The department shall then use the information to determine whether or not there is adequate information to issue a class-use permit that will incorporate conditions sufficient to provide compliance with all requirements of WAC 173-306-490 (2)(b)(ii) and (iii). If the information is adequate, the department will issue a class-use permit under the provisions of this section. If the information is inadequate, the department may, as the situation warrants, either issue a modification to the demonstration permit in accordance with the procedures of WAC 173-306-310(3) and this subsection, or deny the class-use permit application.

(2) Class-use permits. Class-use permits are required for persons who distribute utilized ash on the land in a manner that constitutes disposal. The permit is issued to the seller or distributor of utilized ash or ash products to a class of users.

(a) The class-use permit will be issued in accordance with the procedures of WAC 173-306-310;

(b) The class-use permit shall contain those requirements necessary to meet the standards of WAC 173-306-490 (2)(b), including reporting requirements; and

(c) The department will place limitations on the class of users of utilized ash or ash products if it is shown that the limits are necessary to protect human health and the environment.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-320, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-320, filed 4/30/90, effective 5/31/90.]

WAC 173-306-330 Application contents for permits. (1) Application contents for permits for new or expanded facilities.

(a) All permit applications shall contain the following:

(i) A general description of the facility;

(ii) The types of ash to be handled at the facility;

(iii) The plan of operation required by WAC 173-306-405(3) (except for demonstration and class-use permits, WAC 173-306-320);

(iv) The operating log required by WAC 173-306-405(4) (except for demonstration and class-use permits, WAC 173-306-320);

(v) The inspection schedule and inspection log required by WAC 173-306-405.

(b) Application contents for monofill facilities. In addition to the requirements of (a) of this subsection, each monofill application for a permit must contain:

(i) A hydrogeological assessment of the facility that addresses:

(A) Local/regional geology and hydrology, including holocene faults within two hundred feet of the active area and three thousand feet of all other faults, unstable slopes, and subsidence areas on site; or a department approved geologic hazard assessment study;

(B) Evaluation of bedrock and soil types and properties;

(C) Depths to ground water or aquifer(s), or both;

(D) Direction and flow rate of the uppermost aquifer;

(E) Direction of regional ground water;

(F) Quantity, location, and construction (where available) of private and public wells within a two thousand foot radius of site;

(G) Tabulation of all water rights for ground water and surface water within a two thousand foot radius of the site;

(H) Identification and description of all surface waters within a one-mile radius of the site;

(I) Background and surface water quality assessment, and for expanded facilities, identification of impacts to date of applicant's existing facilities upon ground and surface waters from monofill leachate discharges;

(J) Calculation of a site water balance;

(K) Conceptual design of a ground water and surface water monitoring system, including proposed installation methods for these devices and, where applicable, a vadose zone monitoring plan;

(L) Land use in the area, including nearby residences;

(M) Topography of the site and surrounding areas; and

(N) Drainage pattern of the site and surrounding areas.

(ii) Preliminary engineering report/plans and specifications that address:

(A) How the facility will meet the siting standards of WAC 173-306-350;

(B) Relationship of facility to city and county solid waste comprehensive plan as applicable and the basis for calculating the facility's life;

(C) The design of bottom and side liners;

(D) Identification of materials for daily cover and borrow sources for final cover and soil liners;

(E) Interim/final leachate collection, treatment, and disposal;

(F) Leachate detection where applicable;

(G) Fugitive dust controls;

(H) Trench design, fill methods, elevation of final cover and bottom liner, and equipment requirements;

(I) The run-on and runoff system;

(J) The design to avoid washout;

(K) Filling phases, interim cover and final cap elevation; interim cover should be minimized depending on site specific topography and projected filling phases;

(L) Closure/post-closure design, construction, maintenance, and land use;

(M) Signs, fencing, and road paving; and

(N) Scales, employee amenities, communication, and unloading areas.

(iii) An operation plan that addresses:

(A) Operation and maintenance of leachate collection, treatment, and disposal systems;

(B) Operation and maintenance of fugitive dust controls;

(C) Monitoring plans for ground water, surface water, soils and ambient air to include sampling technique, frequency, handling, and analysis requirements;

(D) Safety and emergency accident/fire plans;

(E) Routine filling, grading, cover, and housekeeping; and

(F) Record system to address records on weights (or volumes), number of vehicles, and the types of waste received.

(iv) A closure plan that addresses:

(A) Estimate of closure season/year;

(B) Capacity of site in volume and tonnage;

(C) Maintenance of active fill versus completed, final covered acreage;

(D) Estimated closure construction timing and notification procedures;

(E) Inspection by regulatory agencies;

(F) Items required in WAC 173-306-410(3); and

(G) Identification of final closure cost including cost calculations and funding mechanisms.

(v) A post-closure plan that addresses:

(A) Estimated time period for post-closure activities;

(B) Site monitoring of ash monofill, soil, air, ground water, and surface water;

(C) Deed clause changes, land use, and zoning restrictions;

(D) Maintenance activities to maintain cover and runoff systems;

(E) Items required in WAC 173-306-410(6);

(F) Identification of post-closure costs including cost calculations and funding mechanisms; and

(vi) Other information as required by the department.

(c) Application contents for treatment (including solidification and stabilization) standards. In addition to the requirements of (a) of this subsection, each application for a treatment permit must contain:

(i) Preliminary engineering reports/plans and specifications that address:

(A) The chemical and physical principle(s) upon which the treatment is based, including laboratory, pilot plant, prototype, or full-scale data with sufficient detail to assure the department that the treatment process is feasible and to allow the department to specify capacity and operating conditions;

(B) Tank, reaction vessel, furnace, total-enclosed treatment facility and container designs and the basis for selecting the materials of construction and the thickness of the treatment device (such as corrosion data) or protective lining;

(C) Fugitive dust controls, including conveyor, transport, unloading, and building design;

(D) Instrumentation and process control design to assure operating within conditions specified in the permit;

(E) Warning signs and occupational health and safety engineering controls;

(F) Monitoring equipment; and

(G) Other factors as required by the department.

(ii) An operation plan that addresses:

(A) Operation and maintenance of the treatment device;

(B) Operation and maintenance of fugitive dust controls;

(C) Monitoring as required in WAC 173-306-500 and the department on a case-by-case basis; and

(D) Safety, occupational health, and emergency accident/fire plans.

(iii) A closure plan that addresses:

(A) Estimate of closure year and cost;

(B) Methods of removing wastes and cleaning or decontaminating reaction devices and final disposal of both;

(C) Closure timing and notification procedures;

(D) Final inspection by regulatory agencies;

(E) Items required in WAC 173-306-410(3); and

(iv) Other information as required by the department.

(d) Application contents for utilization facilities. In addition to the requirements of (a) of this subsection, each application for utilization must contain:

(i) For accumulation before utilization facilities:

(A) The method of calculating the percent of ash being reused within a calendar year; and

(B) Compliance with the generator management plan storage requirements of WAC 173-306-200 (3)(d)(i) and (ii) if accumulation is by the generator; or

(C) Compliance with the monofill facility standards of WAC 173-306-440 if accumulation is by a disposal facility.

(ii) For reuse constituting disposal facilities:

(A) Information supplied by the applicant pertaining to the factors of WAC 173-306-490 (2)(b)(iii); and

(B) Other information as required by the department.

(2) Application contents for permits for existing facilities. Owners or operators of existing facilities applying for a permit to comply with the requirements of WAC 173-306-310 shall include:

(a) The information required in subsection (1)(a) of this section; and

(b) Other information as required by the department.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-330, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-330, filed 4/30/90, effective 5/31/90.]

WAC 173-306-340 Engineering reports, plans and specifications required in permits. (1) Before constructing or modifying disposal facilities, final engineering reports, plans and specifications must be submitted to and approved by the department according to a compliance schedule specified in the permit. The engineering report for a disposal facil-

ity must be sufficiently final so that plans and specifications can be developed from it without substantial changes.

(2) All final engineering reports, plans and specifications should be submitted by the owner or operator consistent with the compliance schedule in the permit and at least thirty days before the time approval is needed. The department will review and comment on and may approve (or conditionally approve) or disapprove the plans and reports within the thirty-day period unless circumstances prevent, in which case the owner or operator will be notified and informed of the reason for the delay.

(3) The final engineering report may be submitted before or concurrently with the final plans and specifications.

(4) The department will review the documents to ascertain that the proposed facility will be:

(a) Designed, constructed, operated, maintained, and closed to meet the requirements of the permit issued under this chapter; and

(b) Consistent with good engineering practices.

(5) Within thirty days after acceptance by the owner or operator of or modification to an ash disposal facility, a professional engineer in responsible charge of inspection of the project shall submit to the department one complete set of record drawings or as-builts, and a declaration stating the facilities were constructed in accordance with the provisions of the construction quality assurance plan and without significant change from the department approved plans and specifications.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-340, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-340, filed 4/30/90, effective 5/31/90.]

WAC 173-306-345 Construction quality assurance plan. (1) Before construction or modification, a detailed plan that shows how adequate and competent construction inspection will be provided to insure compliance with the requirements of this chapter and the approved engineering documents must be submitted to and approved by the department. The plan must be submitted according to a schedule specified in the permit.

(2) The construction quality assurance plan shall include:

(a) A construction schedule summarizing planned construction activities, noting sequence interrelationships, durations, and terminations;

(b) A description of construction management, organization management procedures, lines of communication, and responsibility;

(c) A description of anticipated quality control testing, including type of test, frequency, and who will perform the tests;

(d) A description of the construction inspection program including inspection responsibilities, anticipated inspection frequency, deficiency resolution, and inspector qualifications; and

(e) For monofills, a description of how WAC 173-306-440 (4)(d) is to be met.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-345, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-345, filed 4/30/90, effective 5/31/90.]

WAC 173-306-350 Incinerator ash siting standards for disposal facilities. (1) Applicability. These standards apply to all new or expanded monofills. These standards do not apply to:

(a) Existing monofills or monofills that have closed before the effective date of this chapter; or

(b) Treatment, utilization, or processing facilities.

(2) Siting standards.

Owners or operators of all applicable disposal facilities shall, at the time of permit application, meet the following locational standards:

(a) Geology. No facility may be located within two hundred feet, measured horizontally, from a fault that has had displacement in holocene times. All faults within three thousand feet of a facility must be identified and evaluated under WAC 173-306-330(1), where existing geologic information is available or can be obtained with reasonable effort. For sites for which fault information cannot reasonably be obtained, a geologic hazard assessment performed by an experienced, qualified geologist may be substituted for this siting criteria, if the study methods are reviewed and approved by the department before the investigation.

(b) Ground water.

(i) No facility may be located where the depth from the lowest point of the bottom liner to the seasonal high water level of the upper most aquifer of beneficial use is less than ten feet or one hundred twenty days travel time hydraulically, whichever is greater.

(ii) No facility may be located over a sole source aquifer.

(iii) No facility's active area may be located closer than one thousand feet to the nearest downgradient ground water intake for domestic water in use and existing at the time of permit application unless the owner or operator can show that the active area is no less than one hundred twenty days travel time hydraulically to the nearest downgradient ground water intake for domestic water.

(c) Natural soils. No facility may be located:

(i) Where known subsidence exists within the facility boundary;

(ii) In an area where unstable slopes may impact the active area of the facility;

(iii) Where weak or unstable soils exist within the proposed facility boundary, unless the structural stability of the soils is mitigated through engineering practices. (The following soils or conditions are defined as weak or unstable: Organic soils, expansive soils, liquefaction sands, soft clays, sensitive clays, loess and quick conditions.)

(d) Flooding. No facility's active area may be located within the one hundred-year flood elevation as indicated in the most current Federal Emergency Management Agency maps.

(e) Surface water. No facility's active area may be located within five hundred feet, measured horizontally, of the ordinary high water mark of any perennial surface water body.

(f) Sensitive areas. No facility may be located:

(i) In an area that would result in the taking of species or the direct elimination of critical habitat for federal or state listed threatened or endangered species;

(ii) In a wetland as defined by the United State Fish and Wildlife Service (Cowardin et al. 1979);

(iii) In a shoreline of the state under the jurisdiction of the Shoreline Management Act;

(iv) In an area classified as a wilderness area as defined by the Wilderness Act of 1964 (P.L. 88-577);

(v) In a state or federally designated wildlife refuge or a game farm;

(vi) In an area with city, county, state, or federal designation as a park or recreation area or any area provided for under chapter 79.70 RCW, natural area preserves; and

(vii) In an area with city, county, state, or federal designation as an archaeological or historic area or a national monument.

(g) Land use. No facility may be located so that its active area is closer than two hundred feet to the facility property line. The active area may be no closer than one thousand feet to the nearest housing unit in an existing residential development. The one thousand-foot rule may be evaluated on a case-by-case basis in rural areas and unincorporated towns.

(h) Climatic factors. No facility may be located in an area that has a history of severe climatic factors without engineered protection to mitigate those factors. Severe climatic factors, include but are not limited to, high annual rainfall, extreme temperatures (high or low), and high winds.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-350, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-350, filed 4/30/90, effective 5/31/90.]

WAC 173-306-400 Ash disposal facility standards. (1) Applicability. The standards of WAC 173-306-405 through 173-306-470 are the ash disposal standards and apply to all disposal facilities except ash disposal facilities that are engaged in closure or were closed before the effective date of this chapter.

(2) Standards for permits. The standards of WAC 173-306-405 through 173-306-470 must be used as the basis for permitting as required in WAC 173-306-300.

(3) Effective dates.

(a) All existing ash disposal facilities not in conformance with these standards must be placed on compliance schedules as part of the permit issued in WAC 173-306-300. Full compliance must be met within three years of the effective date of this chapter. However, the following facility standards must be met within eighteen months of the effective date of this chapter:

(i) The general facility standards of WAC 173-306-405;

(ii) The operating and maintenance standards of WAC 173-306-440(5); and

(iii) The monitoring requirements of WAC 173-306-500.

(b) All new and expanded facilities shall meet the ash disposal facility standards of WAC 173-306-405 to 173-306-470 after the effective date of this chapter.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-400, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-400, filed 4/30/90, effective 5/31/90.]

WAC 173-306-405 General facility operational standards. (1) Applicability. All special incinerator ash disposal facilities shall meet the requirements of this section.

(2) Imminent hazard. Notwithstanding any provisions of this chapter, enforcement actions may be brought in the event that the management practices of an ash disposal facility present an imminent and substantial hazard to the health of employees, the public health or the environment.

(3) Plan of operation. Each owner or operator shall develop and use the plan of operation required during the permitting process in WAC 173-306-300. The plan shall describe the facility's operation and convey to the operating personnel the concept of operation intended by the designer. The facility must be operated in accordance with the plan. Modifications to the plan must be approved by the department. The plan of operation must be available for inspection at the request of the department. Each plan of operation shall include:

(a) Ash management during the facility's active life;

(b) Frequency and methods of inspections and monitoring;

(c) Employee safety and training that addresses:

(i) Protection from exposure and contact with ash;

(ii) Employee training;

(iii) Medical monitoring; and

(iv) A safety plan or procedure;

(d) Actions to take for mitigating any sudden release of ash to surface water or dispersal by wind;

(e) Modifications to the plan permit, or plan of operation, or both, in the event of ground water contamination;

(f) Equipment maintenance, particularly for leachate collection and treatment; and

(g) Other details as required by the department.

(4) Recordkeeping. The facility owner or operator shall keep a written operating record at the facility that must be furnished upon request and made available at all reasonable times, to any employee of the department.

(a) The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(i) The type and quantity of each ash shipment received or managed on-site and the methods and dates of management at the facility;

(ii) Records and inspection results as required by subsections (5) and (6) of this section;

(iii) Monitoring, testing, or analytical data where required by WAC 173-306-500;

(iv) All closure and, for final deposit, post-closure cost estimates required for the disposal facility; and

(v) Deviations from the plan of operation specified in subsection (3) of this section.

(b) The retention period for all facility records required under this chapter is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the department.

(5) Reporting. Each owner or operator shall prepare and submit a copy of the annual report to the department by March 1 of the following year. The annual report shall cover facility activities during the previous year and must include the following information:

(a) The name and address of the disposal facility;

(b) The calendar year covered by the report;

(c) Annual quantity in tons and the type of ash accepted by the disposal facility and the method of management;

(d) Results of soil, air quality, and ground water monitoring required in WAC 173-306-440;

(e) The most recent closure cost estimate and, for final deposit monofills, post-closure cost estimates under WAC 173-306-410; and

(f) Other information required by the department.

(6) Inspections. The owner or operator shall inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of ash to the environment or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment. The owner or operator shall keep an inspection log or summary including, at a minimum, the date and time of inspection, the printed name and the hand-written signature of the inspector, a notation of observations made and the date and nature of any repairs or corrective action. The log or summary must be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least three years from the date of inspection. Inspection records must be made available to the department upon request.

(7) Other state and local requirements. All owners or operators of ash disposal facilities shall comply with all state and local laws and rules such as zoning, land use, fire protection, industrial safety and hygiene, water pollution, air pollution, nuisance and aesthetics.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-405, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-405, filed 4/30/90, effective 5/31/90.]

WAC 173-306-410 General closure and post-closure requirements. (1) Applicability. The closure requirements of subsections (2), (3), and (4) of this section apply to all disposal facilities. The post-closure requirements of subsections (5), (6), and (7) apply to monofills subject to WAC 173-306-440.

(2) Closure performance requirements. Each owner and operator shall close the facility in a manner that:

(a) Minimizes the need for further maintenance;

(b) Controls, minimizes, or eliminates threats to human health and the environment from post-closure escape of ash constituents, leachate, monofill gases, contaminated rainfall or ash decomposition products to the ground or soil, ground water, surface water, and the atmosphere; and

(c) Prepares the facility for the post-closure period.

(3) Closure plan and amendment. Closure as defined in WAC 173-306-100 includes, but is not limited to, grading, seeding, landscaping, contouring and screening.

(a) Each owner or operator shall develop and use a plan of closure approved by the department as part of the permitting process of WAC 173-306-310.

(b) The closure plan shall project time intervals at which closure activities must be implemented, and shall identify estimated closure costs and project fund withdrawal intervals from the approved financial assurance instrument, where applicable.

(c) No owner or operator may begin disposal operations in any part of a facility until a closure plan for the entire facility has been approved by the department, and until a financial assurance instrument has been provided, as required by WAC 173-306-470.

(d) The department may determine at its discretion and for cause that a facility closure plan is invalid and may require an owner or operator to:

(i) Amend the facility closure plan and obtain the department's written approval; and/or

(ii) Cease facility operation or closure activities in whole or in part until an approved closure plan is obtained.

(e) Each owner or operator shall close the facility in accordance with the approved closure plan and all approved amendments.

(4) Closure procedures.

(a) Each owner or operator shall notify the department and, where applicable, the financial assurance instrument trustee, of the intent to implement the closure plan in whole or in part, no later than one hundred eighty days before the projected final receipt of waste at part of or at the entire facility.

(b) The owner or operator shall begin implementing the closure plan in part or whole within thirty days after receipt of a final volume of ash and/or attaining the final monofill elevation at part of or at the entire facility as identified in the approved facility closure plan.

(c) Ash may not be accepted for use in closure except as identified in the closure plan approved by the department, as required in subsection (3)(a) of this section.

(d) When facility closure is completed in part or whole, each owner or operator shall submit to the department:

(i) Facility closure plan sheets signed by a professional engineer registered in the state of Washington. The plan shall reflect all as-built changes to final closure construction as approved in the closure plan; and

(ii) An affidavit signed by the owner or operator and a professional engineer registered in the state of Washington that the site has been closed in accordance with the approved closure plan.

(e) Maps and a statement of fact concerning the location of the final ash disposal must be recorded as part of the deed with the county auditor not later than three months after closure. Records and plans specifying ash amounts, locations and periods of operation must be submitted to the local zoning authority or the authority with jurisdiction over land use and must be made available for inspection.

(f) When the department finds the facility has been closed in accordance with the specifications of the approved closure plan and the closure requirements of this section, the department shall:

(i) Issue a certificate of closure for the site to the owner or operator and the department; and

(ii) Notify the owner or operator and the department that the facility post-closure period has begun in whole or in part on a specified date.

(5) Post-closure performance standard. Monofill owners or operators shall perform post-closure activities as needed to protect human health and the environment.

(6) Post-closure plan and amendment. Post-closure includes monitoring of ground water, surface water, and air quality; maintenance of the facility, facility structures, and monitoring systems; and other activities deemed appropriate by the department.

(a) The owner or operator shall develop and use a post-closure plan approved as a part of the permitting process in

WAC 173-306-310. The post-closure plan shall address facility maintenance and monitoring activities for a thirty-year period.

(b) The post-closure plan shall project time intervals at which post-closure activities are to be implemented, and identify post-closure cost estimates and projected fund withdrawal intervals from the selected financial assurance instrument, where applicable, for the associated post-closure costs.

(c) No owner or operator may begin disposal operations in any part of a facility until a post-closure plan for the entire facility has been approved by the department, and until a financial assurance instrument has been provided, where applicable, as required by WAC 173-306-470. Facility post-closure activities must be completed in accordance with the approved post-closure plan or the plan must be so amended with the approval of the department.

(d) The department may determine, at its discretion and for cause, that a facility post-closure plan is invalid and may require an owner or operator to:

(i) Amend the facility post-closure plan and obtain the department's written approval; and/or

(ii) Cease facility operation or closure activities in part or wholly until an approved post-closure plan is obtained.

(7) Post-closure procedures.

(a) Each owner or operator shall begin post-closure activities after completing closure activities outlined in subsection (4)(d)(i) and (ii) of this section. The department may direct that post-closure activities cease until the owner or operator has received the department's certification of closure and a notice to proceed with post-closure activities.

(b) When post-closure activities are complete, the owner or operator shall submit an affidavit to the department, signed by the owner or operator and a professional engineer registered in the state of Washington, stating why post-closure activities are no longer necessary.

(c) If the department finds that post-closure activities have stabilized the facility, the department may, at its discretion, authorize the owner or operator to gradually reduce or discontinue post-closure maintenance and monitoring activities. The department shall certify the end of the post-closure care period by issuing a certificate of post-closure completion to the facility owner or operator.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-410, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-410, filed 4/30/90, effective 5/31/90.]

WAC 173-306-440 Ash monofill facility standards. (1) Applicability. This section applies to owners and operators of facilities that monofill special incinerator ash, except as WAC 173-306-400 provides otherwise.

(2) Minimum standards for performance.

(a) Ground water. Monofill owners or operators may not contaminate underlying ground water beyond the point of compliance. Contamination and point of compliance are defined in WAC 173-306-100.

(b) Soil. Soils at the property boundary may not exceed the following limits for cadmium due to the facility operations based upon annual samples:

(i) The annual increase in cadmium loading in the upper six inches of soil with a pH equal to or greater than 6.5 may not exceed 0.5 kilograms per hectacre annually or a total accumulation of 20 kilograms per hectacre; and

(ii) The annual increase in cadmium loading in the upper six inches of soil with a pH less than 6.5 may not exceed a total accumulation of 5.0 kilograms per hectacre.

(c) Air quality. Monofill owners or operators may not cause a violation of an emission standard from any emission of particulates, dusts or gases associated with the operation and/or closure/post-closure of the landfill nor any ambient air quality standard at the property boundary including the following ambient lead standard:

The level of lead and its compounds measured as elemental lead in suspended particulate matter measured during a twenty-four hour sample taken at the downwind facility boundary may not exceed 1.5 micrograms per cubic meter of air due to the facility's operation or the latest national ambient air quality standards. The sampling frequency will be monthly unless otherwise approved by the department.

(d) Surface waters. Monofill owners or operators may not cause a violation of any receiving water quality standard or violate chapter 90.48 RCW from discharges of surface runoff, leachate, or any other liquid associated with a monofill.

(3) Siting standards. Monofill owners or operators receiving special incinerator ash shall comply with incinerator ash siting standards of WAC 173-306-350(2).

(4) Minimum design standards.

(a) Minimizing liquids. Monofill owners or operators shall minimize liquids admitted to active areas by:

(i) Covering according to subsection (5)(e) of this section.

(ii) Disposing of no ash containing free liquids unless approved by the department;

(iii) Designing, constructing, and maintaining runoff controls to restrict the chance of a runoff event from releasing contaminated runoff waters to an annual probability of one percent or less (one hundred-year event or greater). In meeting this requirement the following items are to be considered:

(A) The design of the containment structures should be selected based on the ability of the facility to store, test, and/or treat the runoff during a twenty-four hour or longer storm event.

(B) The design assumes that the storm event occurs during the final year of the active life of the monofill or at a time when the facility is most vulnerable to a storm that could produce the release of contaminated waters. The method of placement of the ash should be considered when determining the volume available for storage of runoff.

(C) A minimum of one foot of freeboard (measured from the invert of the emergency spillway) should be maintained following the occurrence of the design storm.

(D) An emergency spillway is to be constructed for the containment structure to provide controlled release of excess runoff waters in the case where the design storm is exceeded.

(iv) Design, construct, and maintain diversion channels, channel containment berms, culverts, pipes, and other drainage control features to pass and/or store run-on to restrict the chance of failure of the drainage control features to an annual probability of one percent or less (one hundred-year event or greater). In meeting this requirement the following items are to be considered:

(A) For those cases where the run-on waters are to be stored and/or treated, selection of the storm design should be based on the appropriate procedures governing runoff controls.

(B) For those cases where the run-on waters are to be diverted around the facility, the drainage control features should be sized to pass the run-on peak discharge (design flood) of a magnitude that has an annual exceedance probability of one percent or less (one hundred-year flood peak discharge or greater).

(C) Sufficient erosion protection and freeboard (one foot minimum) are to be provided for all drainage control features to preclude failure of those features during passage of the design flood.

(v) Submit engineering plans and specifications for any containment barrier equalling or exceeding as storage capacity of ten acre-feet to the department's dam safety section for review under RCW 90.03.350.

(b) Leachate systems. Monofill owners or operators shall:

(i) Install a department-approved leachate collection system sized according to water balance calculations or using other accepted engineering methods;

(ii) Install a leachate collection system to prevent no more than one foot of leachate developing at the topographical low point of the active area; and

(iii) Install a leachate treatment system to meet requirements of WAC 173-306-200 (3)(c)(ii)(B) through (E).

(c) Liner and final cap design. Ash monofill owners or operators shall comply with the requirements of WAC 173-306-450.

(d) Liner construction and inspection. Ash monofill owners or operators shall:

(i) Comply with the requirements of WAC 173-306-450.

(ii) Employ an independent third party as defined in WAC 173-306-100 to inspect the liners during construction and installation for uniformity, damage and imperfections (e.g., holes, cracks, thin spots, foreign materials) and quality of construction; and immediately after construction and installations to inspect:

(A) Synthetic liners and covers for tight seams and joints and the absence of tears, punctures or blisters; and

(B) Soil-based and admixed liners and covers for imperfections (e.g., lenses, cracks, channels, root holes) or structural nonuniformities that may affect liner permeability.

(e) Filling requirements for ash cells. Monofill owners or operators shall design and fill ash monofills in phases or cells, as defined in WAC 173-306-100. Only one cell may be open and in use at one time; each cell must be graded and covered with a flexible high density polyethylene liner or other material of equivalent mechanical strength and chemical resistance during the interim period before reaching final elevation. The liner must be 60 mils and have the ability to withstand weather conditions. The owner or operator shall provide, as part of the interim cover, a method of detecting and/or monitoring/inspecting the integrity and any possible failure of the interim cover.

(f) Fugitive dust controls. Monofill owners and operators shall:

(i) Employ tire washing for all ash-carrying vehicles as they leave the site or any equivalent method to prevent the trackout of ash onto the site and the public right of way. Contaminated wash-waters must be disposed of according to WAC 173-306-200 (3)(c);

(ii) Orient the major axis of the active area of the monofill with respect to the prevailing wind directions so as to minimize the effect of wind upon dispersion of special incinerator ash unless engineering designs can provide equivalent protection; and

(iii) Provide for paved approach and exit roads outside the active area with traffic separation and traffic control on-site and at the site entrance.

(g) Other design requirements. Monofill owners and operators shall:

(i) Post signs at each entrance to the active portion and at other locations, in sufficient numbers to be seen from any approach to the active portion. Signs must bear the legend "Danger - unauthorized personnel keep out" or an equivalent legend, and must be legible from a distance of twenty-five feet;

(ii) Have either:

(A) A twenty-four-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility; or

(B) An artificial or natural barrier; or

(C) A combination of both, which completely surrounds the active portion of the facility, with a means to control access through gates or other entrances to the active portion of the facility at all times.

(iii) Provide for monitoring according to WAC 173-306-500 using a design approved by the department;

(iv) Weigh all incoming ash on scales or provide an equivalent method of measuring ash tonnage;

(v) Provide for employee facilities including shelter, toilets, handwashing facilities, and potable drinking water;

(vi) Provide for unloading areas to be as small as possible, consistent with traffic patterns and safe operation; and

(vii) Provide communication (such as telephones) between employees working at the monofill and on-site or off-site management offices to handle emergencies.

(5) Standards for operation and maintenance. All owners and operators shall:

(a) Prohibit the co-disposal of any other solid or hazardous waste in a special incinerator ash landfill;

(b) Comply with the requirements of the general operation standards, WAC 173-306-405;

(c) Control fugitive dust by wetting, by the use of dust suppressing substances, covering, compacting, or otherwise managing the active area of the monofill to control wind dispersal and prevent visible emissions of windblown dust. Road dust on unpaved roads must also be similarly controlled.

(d) Clearly mark the active area boundaries authorized in the permit, with permanent posts or using an equivalent method clearly visible for inspection purposes.

(e) Compact and cover ash daily before adding successive layers according to the requirements of WAC 173-306-450.

(f) Maintain the monitoring systems required in subsection (4)(g)(iii) of this section;

(g) Inspect the monofill weekly while it is in operation and after major storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of run-on and runoff control systems and interim cover;

(ii) The presence of liquids in leak detection systems, where installed, to comply with subsection (4)(b) of this section. The department must be notified of any leaks into the leak detection system within seven days after detecting the leak and immediately remove any accumulated liquid. Notification shall include a schedule for determining the cause of the leak and any remedial measures or increased ground water monitoring to assure that the performance standards of subsection (2)(a) of this section are met;

(iii) The presence of leachate in, and proper functioning of, leachate collection and removal systems; and

(iv) Proper functioning of engineered wind dispersal control systems.

(h) Record the inspections in the log as required in WAC 173-306-405(6).

(6) Closure and post-closure requirements.

(a) At final closure of the monofill or upon closure of any cell, the owner or operator shall cover the monofill or cell with a final cover designed and constructed according to subsection (4)(d) of this section and shall comply with all closure requirements of WAC 173-306-410;

(b) After final closure, the owner or operator must comply with all post-closure requirements of WAC 173-306-410, and must:

(i) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(ii) Prevent run-on and runoff from eroding or otherwise damaging the final cover;

(iii) Maintain and monitor the leak detection system in accordance with subsection (4)(b) of this section, where such a system is present; the owner or operator shall immediately remove any accumulated liquid and notify the department of any leaks into the leak detection system within seven days after detecting the leak. Notification shall include a schedule for determining the cause of the leak and any remedial measures or increased ground water monitoring to assure that the performance standards of subsection (2)(a) of this section are met;

(iv) Operate the leachate collection and removal system; and

(v) Maintain and operate the monitoring systems of WAC 173-306-500.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-440, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-440, filed 4/30/90, effective 5/31/90.]

WAC 173-306-450 Liner and final cap design and construction standards. (1) Applicability. This section applies to owners or operators of facilities that monofill combined or separated special incinerator ash, except as WAC 173-306-400 provides otherwise.

(2) Liner design.

(a) Owners or operators who monofill combined or separated fly ash and bottom ash shall comply with the requirements of Design A, subsection (3) of this section.

(b) Owners or operators who demonstrate ability to maintain the permeability requirements of Design B during an eighteen-month demonstration period may seek approval to use Design B following the demonstration period.

(3) Design A.

(a) General requirements. Owners or operators shall comply with the liner inspection requirements of WAC 173-306-440 (4)(d) and siting and design requirements of WAC 173-306-440 (3) and (4). In addition, owners or operators shall:

(i) Thoroughly compact ash residues. Owners or operators shall compact ash residues thoroughly by using compaction equipment.

(ii) Provide daily cover to prevent fugitive dust emissions and run-on and runoff discharges. Cover material may include high density polyethylene or any department approved equivalent material.

(b) Liner design. The liner must be an engineered liner of the following design from bottom to top:

(i) A foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift. The foundation slope must be a minimum of two percent;

(ii) Next, a single composite liner consisting of an engineered soil liner at least two feet thick that has permeability of 1×10^{-7} cm/sec or the equivalent upon which a synthetic liner of sixty mils high density polyethylene or other material of equivalent mechanical strength and chemical resistance is placed. Liner slopes must be a minimum of four percent;

(iii) Next, a leachate detection system consisting of a minimum of twelve inches of sand or equivalent material with a permeability greater than or equal to 1×10^{-2} cm/sec with drain pipes;

(iv) Next, a synthetic liner of sixty mils high density polyethylene or other material of equivalent mechanical strength and chemical resistance;

(v) Next, a leachate collection and removal system that consists of a minimum of twelve inches of sand or equivalent material with a permeability greater than or equal to 1×10^{-2} cm/sec with drain pipes; and

(vi) A fabric filter placed between the drainage layer and the first lift of special incinerator ash.

(4) Design B. Owners or operators who monofill combined or separated fly and bottom ash shall comply with these design criteria.

(a) General requirements. Owners or operators shall comply with the liner inspection requirements of WAC 173-306-440 (4)(d) and siting and design requirements of WAC 173-306-440 (3) and (4). In addition, owners or operators shall:

(i) Compact ash residues to a permeability of 1×10^{-5} cm/sec. All ferrous material will be removed using magnetic separation or an equivalent method approved by the department so that the pozzolanic effect of compacted ash will not be impeded.

(ii) Lifts will be tested for ash permeability using guidance established by the department. Lift thickness before compaction may not exceed one foot.

(A) Design B liner design may be used as long as lift permeability tests at 1 x 10^{-5} cm/sec or less.

(B) If the ash permeability requirement cannot be maintained, the owner or operator shall immediately close the Design B cell according to the closure requirements of WAC 173-306-410 and subsection (5) of this section and resume disposal activities using the Design A liner.

(iii) Provide daily cover to prevent fugitive dust emissions and run-on and runoff discharges. Cover material may include high density polyethylene or any department approved equivalent material.

(b) Liner design. The liner must be an engineered liner of the following design:

(i) A foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift. Foundation slope must be a minimum of two percent;

(ii) Next, a single composite liner that consists of an engineered soil liner at least two feet thick that has a permeability of 1 x 10^{-7} cm/sec or the equivalent upon which a synthetic liner of sixty mils high density polyethylene or other material of equivalent mechanical strength and chemical resistance rests. Liner slopes must be a minimum of four percent;

(iii) Next, a leachate collection system that consists of a minimum of twelve inches of sand or equivalent material with a permeability greater than or equal to 1 x 10^{-2} cm/sec with drain pipes; and

(iv) A fabric filter placed between the drainage layer and the first layer of special incinerator ash.

(5) Final cap design. All owners or operators of special incinerator ash monofills shall comply with the following design requirements.

(a) The final cap shall maintain a surface slope between two and five percent and side slope of no more than thirty-three percent and shall consist, from bottom to top, of:

(i) Two feet of ash, well graded (with ferrous material removed and having proportional size distribution of ash particles) and thoroughly compacted;

(ii) Next, a layer, system, or mechanism capable of detecting cap failure;

(iii) Next, a fabric filter overlaid by at least two feet of clay that has a permeability of 1 x 10^{-7} cm/sec upon which a synthetic liner of sixty mils high density polyethylene or other material of equivalent mechanical strength and chemical resistance rests; and

(iv) Eighteen inches of native soil covered by six inches of topsoil.

(b) Final cap inspections must be done in accordance with the liner inspection requirements of WAC 173-306-440 (4)(d).

(c) In case of cap failure, immediately notify the department with a plan for remedial action.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-450, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-450, filed 4/30/90, effective 5/31/90.]

WAC 173-306-470 Financial assurance. (1) Applicability.

These standards apply to all new and expanded monofill facilities, and to existing monofill facilities that have not closed before or within twelve months after the effective date of this chapter.

(2) Cost estimate for closure.

(a) Each owner or operator shall prepare a written closure cost estimate as part of the facility closure plan. The closure cost estimate must be in current dollars and must represent the cost of closing the facility in accordance with the closure requirements in WAC 173-306-410.

(i) The cost estimate must be based on a reasonable cost estimate for completing design, purchase, construction, and other activities as identified in the facility closure plan as required under WAC 173-306-410;

(ii) The closure plan shall project intervals for withdrawal of closure funds from the closure financial assurance instrument to complete the activities identified in the approved closure plan;

(iii) The closure cost estimate may not be reduced by allowance for salvage value of equipment, ash, or the resale value of property or land.

(b) Each owner or operator must prepare a new closure cost estimate in accordance with (a) and (c) of this subsection whenever:

(i) Changes in operating plans or facility design affect the closure plan;

(ii) A change in the expected year of closure affects the closure plan; or

(iii) The department directs the owner or operator to revise the closure plan or closure cost estimate.

(c) Each owner or operator shall review the closure cost estimate thirty days before the anniversary date of the date on which the first closure cost estimate was prepared. The review shall examine all factors, including inflation, involved in estimating the closure cost. Any cost changes must be factored into a revised closure cost estimate. The revised cost estimate must be submitted to the department.

(d) During the operating life of the facility, and when the estimate has been adjusted in accordance with (c) of this subsection, the owner or operator shall make available for review the closure cost estimate prepared in accordance with (a) and (b) of this subsection.

(e) The department shall evaluate each cost estimate and may accept, or at its discretion require revision of, the cost estimate in accordance with its evaluation.

(f) The department may require the facility owner or operator to adjust the cost estimate in accordance with the department's review and direction.

(3) Financial assurance account for closure. Each owner or operator of special incinerator ash monofill facility shall establish a financial assurance account in an amount that, over the life of the facility, will accumulate funds at a rate that will enable premature closure during the monofill life. The total amount must be equal to the closure cost estimate prepared in accordance with subsection (2) of this section.

(a) Applicable monofill facilities that accept special incinerator ash must choose from the following financial assurance account options or combination of options:

(i) For monofill disposal facilities owned or operated by municipal corporations, the closure and post-closure reserve account must be handled in one of the following ways:

(A) Cash and investments accumulated and restricted for closure with an equivalent amount of fund balance reserved in the fund accounting for special incinerator ash activity; or published Budget Accounting Reporting System Manual; or

(B) The cash and investments held in a nonexpendable trust fund.

(ii) Closure trust fund established with an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. The wording of the trust agreement must be acceptable to the department. The purpose of the closure trust fund is to receive and manage any funds paid by the owner or operator and to disburse those funds only for closure activities as identified in the approved closure plan.

(b) For private disposal facilities that accept public waste, established closure financial assurance accounts may not constitute an asset of the facility owner or operator.

(c) Any income in excess of the closure cost estimate accruing to the established closure financial assurance account will be used at the owner's discretion.

(d) Excess moneys remaining in the closure financial assurance account after the department has certified the completion of closure as identified in WAC 173-306-410 (4)(f)(i) must be returned to the owner or operator.

(4) Cost estimate for post-closure.

(a) Each owner or operator shall prepare a written post-closure cost estimate as part of the facility post-closure plan. The post-closure cost estimate must be in current dollars and must represent the total cost of completing post-closure activities for the facility for a thirty-year post-closure period in accordance with the post-closure requirements in WAC 173-306-410.

(i) The post-closure cost estimate must be based on a reasonable cost estimate for completing post-closure monitoring, maintenance, and other activities identified in the approved facility post-closure plan as required under WAC 173-306-410;

(ii) The post-closure plan shall project intervals for withdrawal of post-closure funds from the post-closure financial assurance instrument to complete the activities identified in the approved post-closure plan;

(iii) The post-closure cost estimate may not be reduced by allowance for salvage, value of equipment, ash, or the resale value of property or land.

(b) Each owner or operator shall prepare a new post-closure costs estimate for the remainder of the post-closure care thirty-year period in accordance with (a) and (c) of this subsection, whenever:

(i) Change in the post-closure plan increases the cost of post-closure care; or

(ii) The department directs the owner or operator to revise the post-closure plan or post-closure cost estimate.

(c) Each owner or operator shall review the post-closure cost estimate thirty days before the annual date on which the first post-closure cost estimate was prepared. The review shall examine all factors, including inflation, involved in estimating the post-closure cost. Any cost changes must be factored into a revised post-closure cost estimate and the revised cost estimate must be submitted to the department.

(d) During the operating life of the facility, the owner or operator shall keep the latest post-closure cost estimate prepared in accordance with (a) and (b) of this subsection available for review.

(5) Financial assurance account for post-closure. Each owner or operator of an applicable monofill facility shall establish a financial assurance account in an amount equal to the post-closure cost estimate prepared in accordance with subsection (4) of this section.

(a) Owners or operators of applicable monofill facilities that accept special incinerator ash shall choose from the following options or combinations of options for accounting for the financial assurance account:

(i) For monofill disposal facilities owned or operated by municipal corporations, the post-closure reserve must be handled in one of the following ways:

(A) Cash and investments accumulated and restricted for post-closure with an equivalent amount of fund balance reserved in the fund accounting for special incinerator ash activity; or

(B) Cash and investments held in a nonexpendable trust fund.

(ii) Post-closure trust fund established with an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. The wording of the trust agreement must be acceptable to the department. The purpose of the post-closure trust fund is to receive and manage any funds paid by the owner or operator and to disburse those funds only for post-closure activities as identified in the approved post-closure plan.

(b) For private disposal facilities that accept public waste, established post-closure financial assurance accounts may not constitute an asset of the facility owner or operator.

(c) Any income accruing to the established post-closure financial assurance account will be used at the owner's discretion.

(d) Excess moneys remaining in the post-closure financial assurance account after the department has certified the completion of post-closure requirements identified in WAC 173-306-410 (7)(c) must be returned to the owner or operator.

(6) Closure/post-closure financial assurance account establishment and reporting.

(a) Closure and post-closure financial assurance funds must be generated at each facility by transferring a percentage of the facility user fees to the selected financial assurance instrument at the agreed upon rate to be specified in the closure and post-closure plans so that adequate closure and post-closure funds will be generated to ensure full implementation of the approved closure and post-closure plans.

(b) Each applicable facility owner or operator shall establish a procedure with the financial assurance instrument trustee for notification of nonpayment of funds to be sent to the Department of Ecology, Solid and Hazardous Waste and Financial Assistance Program, P.O. Box 47600, Olympia, WA 98504-7600.

(c) Each owner or operator shall file with the department an annual audit of the financial assurance accounts established for closure and post-closure activities, and a statement

of the percentage of user fees diverted to the financial assurance instruments.

(i) For monofill disposal facilities owned and operated by municipal corporations, the closure reserve account, including each of the post-closure care years, must be audited according to the audit schedule of the office of state auditor and must be filed with the department of ecology.

(ii) For monofill disposal facilities not owned or operated by municipal corporations:

(A) Annual audits must be conducted by a certified public accountant licensed in the state of Washington, and must be filed with the department no later than March 31 of each year for the previous calendar year, including each of the post-closure care years.

(B) The audit shall also include calculations that demonstrate the proportion of closure completed during the preceding year as specified in the closure and post-closure plans.

(d) Owners or operators of an existing monofill disposal facility may submit to the department a written request with the annual audit asking for a waiver from applying user fees to generate the moneys necessary for the closure and/or post-closure financial assurance account.

(i) The waiver request should provide documentation to demonstrate the facility user fees are prohibitively high, and should include alternate methods for funding the facility's closure and/or post-closure financial assurance account;

(ii) The waiver request review procedure will be conducted according to WAC 173-306-900.

(7) Authorization for financial assurance account fund withdrawal for closure and post-closure activities.

(a) Each owner or operator will withdraw funds from the closure and/or post-closure financial assurance instrument as specified in the approved closure/post-closure plans;

(b) If the withdrawal of funds from the financial assurance instrument exceeds by more than five percent the withdrawal schedule stated in the approved closure and/or post-closure plan, the closure and/or post-closure plan must be amended.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-470, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-470, filed 4/30/90, effective 5/31/90.]

WAC 173-306-480 Treatment (including solidification and stabilization) standards. (1) Applicability. The standards of this section apply to treatment, as defined in WAC 173-306-100, of any special incinerator ash subject to this chapter. These standards do not apply to the manual or mechanical removal of ferrous metal from ash residues.

(2) Requirements. All owners and operators shall design, construct, operate, maintain, and close treatment facilities so as to:

(a) Meet the general facility standards of WAC 173-306-405;

(b) Only treat special incinerator ash in tanks, reaction vessels, furnaces (such as glass furnaces), containers, or totally enclosed treatment facilities (such as pipelines). No treatment process may be designed to occur in ash piles, surface impoundments, or land treatment facilities;

(i) The department shall review and approve tank and reaction vessel design. All tanks and reaction vessels will be closed or otherwise designed to avoid emissions of dusts or vapors to the atmosphere. Tanks and reaction vessels must be of sufficient thickness and corrosion resistance to prevent rupture;

(ii) Totally enclosed treatment facilities must be in good condition and of a design and construction to avoid rupture under maximum operating conditions and must be capable of being inspected periodically; and

(iii) Furnaces must be in good condition structurally, designed and operated to accept only special incinerator ash and capable of being inspected periodically. The department may review and approve furnace design.

(c) Meet the performance standards of WAC 173-306-440(2). The department shall specify the type and frequency of all sampling and monitoring necessary to assure compliance.

(d) Assure that treatment of special incinerator ash occurs under conditions spelled out in prototype, pilot plant or full scale operation. The design must be approved by the department and the department shall specify operating conditions.

(e) Control fugitive dust emissions in the handling of special incinerator ash by:

(i) Collecting and handling in enclosed buildings or the equivalent (e.g., covered conveyors and transfer points); and

(ii) Adding moisture, dust suppressants, or other methods as necessary.

(f) Comply with chapter 296-62 WAC, the general occupational health standards.

(g) Assure that treated special incinerator ash is disposed of according to this chapter or chapter 173-304 WAC, the minimum functional standards for solid waste, if the residues are designated as solid waste.

(h) Close the treatment facility according to the requirements of WAC 173-306-410.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-480, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-480, filed 4/30/90, effective 5/31/90.]

WAC 173-306-490 Ash utilization standards. (1) Applicability.

(a) These standards apply to persons who utilize special incinerator ash including:

(i) Generators of special incinerator ash;

(ii) Owners and operators of disposal facilities; and

(iii) Persons who neither generate nor dispose of special incinerator ash but are involved in the reuse or utilization of special incinerator ash.

(b) These standards do not apply to the following wastes and waste processes:

(i) Ferrous metal separation from ash;

(ii) Special incinerator ash that is reinjected into the incinerator or energy-recovery facility from which it was produced;

(iii) Reclamation of nonferrous metals.

(2) Standards.

(a) Accumulation before reuse or utilization.

(i) All ash for utilization must be stored in totally enclosed buildings.

(ii) Floor or surface drains serving storage areas may not be connected to uncontaminated storm water runoff drains.

Contaminated water must be processed according to WAC 173-306-200 (3)(c)(ii).

(iii) All ash not utilized within one calendar year of generation is subject to:

(A) The management plan requirements of WAC 173-306-200 if a generator is accumulating the ash; or

(B) The permitting and facility standard requirements of WAC 173-306-300 and 173-306-400, if a disposal facility is accumulating the ash.

(b) Use constituting disposal. Use constituting disposal is applying ash to the land or placing ash on the land in a manner constituting disposal, or applying ash contained in a product to the land or placing ash products on the land in a manner constituting disposal. Placement on the land includes placement in water (such as in reef construction).

(i) Persons wishing to reuse or utilize ash in a manner constituting disposal shall apply for a permit under WAC 173-306-310.

(ii) Persons reusing or utilizing ash in a manner constituting disposal are subject to the following sections of the general facility standards:

(A) WAC 173-306-405(2);

(B) WAC 173-306-405 (3)(b);

(C) WAC 173-306-405 (5)(a), (b), (c), and (f); and

(D) WAC 173-306-405(7).

(iii) The department will base its decision on whether to issue a permit upon the following factors:

(A) The effectiveness of the utilized ash or ash product for the claimed use;

(B) The degree to which the utilized ash is like an analogous product;

(C) The extent to which the utilized ash or ash product minimizes loss or escapes to the environment;

(D) The extent to which the utilized ash or ash product impacts public health, the environment, and employee health given a reasonable worst case exposure, risk assessment analyses and compliance with the performance standards of WAC 173-306-440(2);

(E) The extent to which an end market for the utilized ash and ash product is guaranteed;

(F) The time period between generating the ash and utilization;

(G) The degree to which the end uses (and users) can be tracked and recorded; and

(H) Other factors as appropriate.

(iv) The department may require that applicants apply for a demonstration permit or class use permit under WAC 173-306-320, if available information exists to satisfy the informational requirements of (b)(ii) and (iii) of this subsection.

(c) Utilization as ingredients in industrial products, or as effective substitutes. The utilization of ash in industrial products or as effective substitutes for commercial products are activities that ordinarily are not considered to be waste management because they are like normal production processes and/or the products are used like commercial products. (E.g., ash as a substitute in cement construction blocks is an example.)

(i) The department may grant requests for classifying that type of reuse or utilization for solely commercial purposes, if:

(A) The applicant shows that the ash or ash products are recycled in a manner so that they closely resemble products or raw materials rather than waste; and

(B) The applicant addresses the factors of (b)(iii) of this subsection (except for (2)(b)(iii)(G)).

(ii) Public review of the decision to grant or deny such a request must be conducted according to WAC 173-306-900 (4), (5), and (6).

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-490, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-490, filed 4/30/90, effective 5/31/90.]

WAC 173-306-495 Other methods of ash disposal. (1) Applicability. This section applies to other methods of ash disposal not specifically identified elsewhere in this chapter, nor excluded from this chapter.

(2) Requirements. Owners and operators of other methods of ash disposal shall:

(a) Comply with the requirements in WAC 173-306-405;

(b) Obtain a permit under WAC 173-306-300 from the department, by submitting an application containing information required in WAC 173-306-330, and other information as may be required by the department including:

(i) Preliminary engineering reports and plans and specifications; and

(ii) A closure plan.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-495, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-495, filed 4/30/90, effective 5/31/90.]

WAC 173-306-500 Monitoring and sampling methods. (1) Applicability. These requirements apply to owners and operators of incinerators, energy recovery facilities, disposal facilities, and management facilities who are required to perform ash sampling, analyses and testing, ground water and air quality monitoring under this chapter.

(2) Ground water monitoring requirements.

(a) The ground water monitoring system:

(i) Must consist of at least one background or up-gradient well and three down-gradient wells, installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer and all hydraulically connected aquifers below the active portion of the facility.

(ii) Must represent the quality of background water that has not been affected by leakage from the active area; and

(iii) Must represent the quality of ground water passing the point of compliance. Additional wells may be required by the department in complicated hydrogeological settings or to define the extent of contamination detected.

(b) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must allow collection of representative ground water samples. Wells must be constructed in such a manner as to prevent contamination of the samples, the sampled strata, other substrata aquifers and waterbearing strata. Construction must be accomplished in accordance with chapter 173-160 WAC, minimum standards for construction and maintenance of water wells.

(c) The ground water monitoring program shall include, at a minimum, procedures and techniques for:

(i) Decontamination of drilling and sampling equipment;

(ii) Sample collection;

(iii) Sample preservation and shipment;

(iv) Analytical procedures and quality assurance;

(v) Chain of custody control; and

(vi) Procedures to ensure employee health and safety during well installation and monitoring.

(d) Sample constituents.

(i) Owners or operators of all facilities shall test for the following parameters:

(A) Temperature;

(B) Conductivity;

(C) pH;

(D) Chloride;

(E) Nitrate, nitrite, and ammonia as nitrogen;

(F) Sulfate;

(G) Dissolved iron, cadmium, lead, and mercury;

(H) Dissolved zinc and manganese;

(I) Chemical oxygen demand;

(J) Total organic carbon;

(K) Calcium and sodium; and

(L) Gamma radiation.

(ii) The department may specify additional or fewer constituents depending upon the leachate analyses, the composition of the ash, and other information.

(iii) To detect the parameters of (d)(i) of this subsection, EPA Publication Number SW-846, "Test methods for evaluating solid waste physical/chemical methods" must be used.

(e) The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

(f) The owner or operator shall use a department-approved statistical procedure for determining whether a significant change over background has occurred.

(g) The owner or operator must determine ground water quality at each monitoring well at the compliance point at least quarterly from start up through the post-closure care period. The owner or operator must express the ground water quality at each monitoring well in a form necessary for the determination of statistically significant increases.

(h) The owner or operator must determine and report the ground water flow rate and direction in the uppermost aquifer at least annually.

(i) If the owner or operator determines that there is a statistically significant increase for parameters or constituents at any monitoring well at the compliance point, the owner or operator must:

(i) Notify the department of this finding in writing within seven days of receipt of the sampling data. The notification must indicate which parameters or constituents have shown statistically significant increases;

(ii) Immediately resample the ground water in all monitoring wells and determine the concentration of all constituents listed in the definition of contamination in WAC 173-306-100 including additional constituents identified in the permit and whether there is a statistically significant increase such that the ground water performance standard has been exceeded. The department must be notified within fourteen days of receipt of the sampling data.

(j) The department may require modifications to the disposal facility, the plan of operation or the permit, including facility closure, if the performance standard of WAC 173-306-440 (2)(a) is exceeded and, in addition, may revoke any permit and require reapplication under WAC 173-306-310.

(3) Modifications. An owner or operator required to modify the facility or plan of operation under this section must first obtain approval from the department and must at a minimum:

(a) Implement modifications that reduce contamination and, if possible, prevent constituents from exceeding their respective concentration limits at the compliance point by removing the constituents, treating them in place or other remedial measures; and

(b) Begin modifications according to a written schedule after the ground water performance standard is exceeded.

(4) Ash and soil sampling, and analysis.

(a) Ash residue samples taken for the purpose of determining their designation status as a special incinerator ash waste must be conducted according to guidance established by the department. Ash samples taken for the purpose of determining carbon residue and for determining dioxins and dibenzofuran content, if different from samples taken for designation status under chapter 173-303 WAC, must also be conducted according to guidance established by the department. Representative sampling methods and frequency as developed in guidelines by the department must be employed.

(b) Ash samples must be analyzed as follows:

(i) For designation purposes, as a special incinerator ash waste, the samples must be analyzed according to:

(A) "Chemical testing methods for complying with the state of Washington dangerous waste regulation," WDOE 83-13;

(B) "Biological testing methods," WDOE 80-12;

(C) "Test methods for evaluating solid waste, physical/chemical methods," SW 846.

(ii) For chlorinated-p-dioxins and dibenzofurans, 40 CFR Part 261 Appendix X is adopted by reference.

(iii) For cadmium in soil, method 7130 or 7131 cited in "Test methods for evaluating solid waste, physical/chemical methods," SW 846.

(5) Ambient air quality sampling for lead. Ambient lead concentrations must be measured and reported according to 40 CFR Part 50 Appendix G, which is adopted by reference, except that the sampling frequency will be determined by the department: Provided, That the department has not adopted "Compendium of methods for the determination of inorganic compounds in ambient air" (EPA/625/R-96/01a, July 1999).

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-500, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-500, filed 4/30/90, effective 5/31/90.]

WAC 173-306-900 Variances. (1) Any person applying for an ash disposal permit or who owns or operates an ash generation or disposal facility may apply to the department for a variance from any section of this chapter. The application must be accompanied by information such as the department may require.

(2) The applicant shall provide usual and reasonable public notification within the area that will be impacted, including publication in the area's major general circulation newspaper and mailing notices to surrounding property own-

ers. Proof of compliance must be submitted with the variance application.

(3) The department shall give public notice of an application and allow a thirty-day public comment period. Notice must be mailed to persons who have written to the department asking to be notified of all variance requests and shall indicate that a public hearing may be requested.

(4) In considering a variance request, the department shall consider:

(a) The relative interests of the applicant, other property owners likely to be affected by the applicant's activity and the general public;

(b) If the ash handling practices or facility location protect public health, worker health, safety or the environment to a degree equal to or greater than the standard from which a variance is requested;

(c) Whether compliance with the rule from which the variance is sought would produce hardship without equal or greater benefits to the public;

(d) Whether compliance with the rule will require spreading of costs over a considerable time period; and

(e) Whether the timetable is for a period that is sufficient to comply with this chapter.

(5) The department shall approve or disapprove a variance request within ninety days of receipt unless the applicant and the department agree to a continuance.

(6) Any variance granted under this section may be renewed. Application for a variance renewal must be made at least sixty days before the expiration of the variance and must follow the application process of subsections (1) through (5) of this section.

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-900, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-900, filed 4/30/90, effective 5/31/90.]

WAC 173-306-9901 Maximum contaminant levels for ground water. Maximum contaminant levels for ground water are those specified in chapter 248-54 WAC, as the primary drinking water standards. Analytical methods for these contaminants may be found in the Code of Federal Regulations, 40 CFR Part 141. (These contaminant levels are to be considered interim levels for the purpose of regulating disposal facilities and must be used until the department establishes ground water quality standards for all types of activities impacting ground water.)

[Statutory Authority: Chapter 70.138 RCW. 00-19-018 (Order 00-17), § 173-306-9901, filed 9/8/00, effective 10/9/00; 90-10-047, § 173-306-9901, filed 4/30/90, effective 5/31/90.]

Chapter 173-307 WAC
POLLUTION PREVENTION PLANS

WAC

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WAC 173-307-010 Purpose. This chapter implements chapter 70.95C RCW, an act relating to hazardous waste reduction. The act encourages voluntary efforts to redesign industrial, commercial, production, and other processes to result in the reduction or elimination of hazardous waste byproducts and to maximize the in-process reuse or reclamation of valuable spent material. The act establishes a legislative policy to encourage reduction in the use of hazardous substances and reduction in the generation of hazardous waste whenever economically and technically practicable. It also adopts, as a policy goal for Washington state, the reduction of hazardous waste generation through hazardous substance use reduction and waste reduction techniques by fifty percent by 1995. Some individual facilities may have the ability to reduce the use of hazardous materials and the generation of hazardous wastes by far more than fifty percent while others may not be able to reduce by as much as fifty percent. Therefore, the fifty percent reduction goal is not applied as a regulatory requirement. The plans provided for in this chapter are intended to achieve, for each facility, the greatest reduction economically and technically practicable. The intent of the department of ecology is to provide technical assistance, to the greatest extent possible, to those required to prepare facility plans. The purpose of this chapter is to establish the specific elements that must be included in the documents required of hazardous waste generators and hazardous substance users under the act. The rule also establishes completion dates and implements other requirements in the act. Copies of all rules or statutes cited in this chapter are available from Records Management, Department of Ecology, P.O. Box 47600, Olympia, Washington 98504-7600.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-010, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-010, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-010, filed 4/1/91, effective 5/2/91.]

WAC 173-307-015 Applicability. (1) The requirements of WAC 173-307-010 through 173-307-140 apply to all hazardous substance users as defined in this chapter and to hazardous waste generators who generate more than two thousand six hundred forty pounds of hazardous waste per year, except for those facilities that are primarily treatment, storage, and disposal facilities or recycling facilities. Used oil to be rerefined or burned for energy or heat recovery may not be used in the calculation of hazardous wastes generated for purposes of this rule, and is not required to be addressed by plans prepared under this rule. For the purposes of this section, neither hazardous waste reported on the dangerous waste annual report as having been either recycled on-site or recycled for beneficial use off-site, nor amounts of hazardous substances introduced into a process and subsequently recycled for beneficial use may be used in the calculation of hazardous waste generated. A facility may petition the director to exclude hazardous wastes recycled for beneficial use even if they were not reported as such on the dangerous waste annual report. Documentation from the hazardous waste handling

facility that the hazardous waste was recycled for beneficial use must be submitted along with the petition.

(2) Except as noted in subsection (3) of this section, each hazardous substance user and hazardous waste generator identified above shall prepare one plan for each facility owned or operated.

(3) A person with multiple interrelated facilities where a significant majority of the processes are substantially similar, as defined in this chapter, may prepare a single plan covering one or more of those facilities.

(a) To obtain approval, a person desiring to submit a single plan under this provision shall submit documentation to the director that a significant majority of the processes at the facilities are substantially similar before developing a plan. This documentation must be submitted by May 1 of the year before the plan due date.

(b) If a single plan is being prepared for two or more interrelated facilities with substantially similar processes, the sum total of the hazardous waste generated and the hazardous substances used by these facilities must be considered when applying any of the thresholds and/or percentages required by this chapter.

(c) In instances where a person has interrelated facilities without substantially similar processes, a single document may be prepared, but it must contain separate detailed plans for each facility.

(4) Facilities required by this chapter to prepare plans are also required to pay a hazardous waste fee, as described in chapter 173-305 WAC. The requirements of WAC 173-305-010 through 173-305-050 and 173-305-210 through 173-305-240 specifically apply.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-015, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-015, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-015, filed 4/1/91, effective 5/2/91.]

WAC 173-307-020 Definitions. As used in this chapter, the following terms have the meanings indicated unless the context clearly requires otherwise.

(1) "Closed-loop recycling" means that the entire process through completion of any reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance. Recycled materials are returned to the original process or processes.

(2) "Dangerous waste" means any discarded, useless, unwanted, or abandoned nonradioactive substances including, but not limited to, certain pesticides, or any residues or containers of those substances which are disposed of in such a quantity or concentration that would pose a substantial present or potential hazard to human health, wildlife, or the environment because those wastes or constituents or combinations of those wastes:

(a) Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or

(b) Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.

Dangerous wastes specifically includes those wastes designated as extremely hazardous by rules adopted under chapter 70.105 RCW.

(3) "Department" means the department of ecology.

(4) "Director" means the director of the department of ecology or the director's designee.

(5) "EPA/state dangerous waste identification number" means the number assigned by the EPA (Environmental Protection Agency) or by the department of ecology to each generator and/or transporter and each treatment, storage, and/or disposal facility.

(6) "Extremely hazardous waste" means any dangerous waste which, if disposed of at a disposal site in quantities that would present an extreme hazard to man or the environment:

(a) Will persist in a hazardous form for several years at a disposal site and which, in its persistent form:

(i) Presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic make-up of man or wildlife; and

(ii) Is highly toxic to man and wildlife.

Extremely hazardous waste specifically includes those wastes designated as extremely hazardous by rules adopted under chapter 70.105 RCW.

(7) "Facility" means any geographical area that has been assigned an EPA/state dangerous waste identification number. In the case of a hazardous substance user not having an EPA/state dangerous waste identification number, facility means all buildings, equipment, structures, and other stationary items located on a single site or on contiguous or adjacent sites and owned or operated by the same person.

(8) "Fee" means the annual hazardous waste fees imposed under RCW 70.95E.020 and 70.95E.030.

(9) "Generate" means any act or process that produces hazardous waste or which first causes a hazardous waste to become subject to regulation.

(10) "Hazardous substance" means:

(a) Any hazardous substance listed as a hazardous substance as of the effective date of this section in accordance with Section 313 of Title III of the Superfund Amendments and Reauthorization Act and any further updates; and

(b) All ozone depleting compounds as defined by the Montreal Protocol of October 1987 and any further updates of the Montreal Protocol.

(11) "Hazardous substance use reduction" means the reduction, avoidance, or elimination of the use, toxicity, or production of hazardous substances without creating substantial new risks to human health or the environment. "Hazardous substance use reduction" includes proportionate changes in the usage of hazardous substances or the hazardous substances changes that are a result of production changes or other business changes.

(12) "Hazardous substance user" means any facility required to report under Section 313 of Title III of the Superfund Amendments and Reauthorization Act, except for those facilities which only distribute or use fertilizers or pesticides intended for commercial agricultural applications.

Note: This definition refers to those SARA Title III, Section 313 reporters who must prepare a plan, whereas the definition of hazardous substance refers to the substances that must be addressed in the plan.

(13) "Hazardous waste" includes all dangerous and extremely hazardous wastes, but:

(a) Does not include radioactive wastes or a substance composed of both radioactive and hazardous components; and

(b) Does not include any hazardous waste generated as a result of a remedial action under state or federal law.

(14) "Hazardous waste generator" or "generator" means any person generating hazardous waste that is subject to regulation by the department.

(15) "Hazardous waste reduction" means all in-facility practices that reduce, avoid, or eliminate the generation of hazardous waste or the toxicity of hazardous waste, before the hazardous waste is generated, without creating substantial new risks to human health or the environment.

(16) "Interrelated facilities" means multiple facilities owned or operated by the same person.

(17) "Office" means the hazardous waste and toxic reduction program.

(18) "Plan" means the plan provided for in RCW 70.95C.200.

(19) "Person" means an individual, trust, firm, joint stock company, partnership, association, state, public or private or municipal corporation, commission, political subdivision of a state, interstate body, the federal government, including any agency or officer thereof, and any Indian tribe or authorized tribal government.

(20) "Process" means one or a number of steps that produce an end product or service, or a component to be incorporated into an end product or service.

(21) "Product" means any hazardous substance or mixture containing hazardous substances that is used by a facility in a production or service process. Metals or metal alloys used by the facility are not considered "products" if they do not become incorporated into the hazardous waste streams and have no known pathway for the release of metals to the environment, either at the facility or after their use at the facility, such as from ultimate disposal by the consumer. Facilities will have to decide whether to group similar products (for example with different brand names) and list them as a single product. While some flexibility is left to the facility, products must be identified as a single product if they have a similar chemical composition and may be used interchangeably by the facility.

Note: The term "product" as defined here and used throughout this chapter is not to be confused with the term "end product," which specifically refers to the "output" of a production process.

(22) "Recycled for beneficial use" means the use of hazardous waste, either before or after reclamation, as a substitute for a commercial product or raw material, but does not include:

Use constituting disposal;

Incineration; or

Use as a fuel.

(23) "Recycling" means reusing waste materials and extracting valuable materials from a waste stream. Recycling does not include burning for energy recovery.

Note: While burning for energy recovery may be preferable to disposal, burning for energy recovery does not count as recycling for the purpose of chapter 70.95C RCW.

(24) "Remedial action wastes" means hazardous wastes that result from the cleanup of sites under state or federal hazardous waste laws.

(25) "Shifting of risks" means changing the character, location, or receptor of a toxic material without achieving a substantial reduction in the overall risk to health and safety or the environment.

(26) "Substantially similar processes" means processes that are essentially interchangeable, inasmuch as they use similar equipment and materials and produce similar products or services and generate similar wastes.

(27) "Treatment" means the physical, chemical, or biological processing of waste to render it completely innocuous, produce a recyclable by-product, reduce toxicity, or substantially reduce the volume of material that requires disposal as described in the priorities established in RCW 70.105.150. Treatment does not include incineration.

(28) "Used oil" means:

(a) Lubricating fluids that have been removed from an engine crankcase, transmission, gearbox, hydraulic device, or differential of an automobile, bus, truck, vessel, plane, heavy equipment, or machinery powered by an internal combustion engine;

(b) Any oil that has been refined from crude oil, used, and as a result of use, has been contaminated with physical or chemical impurities; and

(c) Any oil that has been refined from crude oil and, as a consequence of extended storage, spillage, or contamination, is no longer useful to the original purchaser. "Used oil" does not include used oil to which hazardous wastes have been added.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-020, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-020, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-020, filed 4/1/91, effective 5/2/91.]

WAC 173-307-030 Plan requirements. This section establishes the specific elements required to be included in a plan. The purpose of a plan is to require serious consideration of ways in which processes and procedures may be modified to reduce dependence upon hazardous substances and/or the generation of hazardous wastes. All plans must consider opportunities based on the following priorities: Hazardous substance use reduction and hazardous waste reduction, recycling, and treatment. The plans shall consist of the following parts:

(1) Part one. Part one shall include:

(a) A written policy expressing management and corporate support for the plan and a commitment to implement planned activities and achieve established goals.

(b) The plan scope and objectives.

(c) A description of the facility type, a description of products made and/or services provided, and a statement or listing of the current levels of production or service activity in units of measure appropriate to the industry or activity;

(d) A general overview of the processes used in production or service activities (a schematic drawing may be included);

(e) A statement providing, for the last calendar year, the total pounds of extremely hazardous waste and total pounds of dangerous waste reported on Form 4, Dangerous Waste Annual Report, and, if applicable, the total pounds of toxic releases reported on Form R under SARA Title III, Section 313; and

(f) A description of current reduction, recycling, and treatment activities and documentation of hazardous substance use reduction and hazardous waste reduction efforts that were completed before the first plan due date specified in WAC 173-307-050. Clearly separate the explanations of reduction activities from recycling and other management activities.

(2) Part two. Part two shall include an identification of hazardous substances used and hazardous wastes generated by the facility; a description of the facility processes; an identification of reduction, recycling, and treatment opportunities; an evaluation of those opportunities; a selection of proposed options; a policy to prevent shifting of risks; performance goals; and an implementation schedule. Specifically, Part two shall include:

(a) An identification of products containing hazardous substances used and hazardous wastes generated. This must be based on actual usage and generation during the most recent calendar year for which records are available. This task can be accomplished by choosing one of two approaches. The approaches are identified as the "pounds approach" and the "percentage approach." Look at the following descriptions and requirements of each of these and determine which one you wish to use.

(i) "Pounds approach."

This approach requires you to identify the types and amounts, in either weight or volume, of hazardous waste generated and products containing hazardous substances used up to these threshold levels:

(A) All dangerous waste streams five hundred pounds or greater, any smaller dangerous waste streams that individually represent ten percent or more of the total annual hazardous wastes, and all extremely hazardous waste streams subject to regulation by the department. If this combination equals less than ninety percent of the total hazardous wastes generated, then additional dangerous wastes generated at the facility must be included until ninety percent of the total is reached; and

(B) Each product used that contains a total of fifty percent or more of any combination of hazardous substances if one thousand pounds or more was used; each product used that contains a total of between twenty-five percent and forty-nine percent of hazardous substances if four thousand pounds or more was used; and each product used that contains a total of between ten and twenty-four percent of hazardous substances if ten thousand pounds or more was used. Any product that contains less than ten percent of any hazardous substances is not required be included in the list regardless of the amount of the product used.

(C) Office products and products that are used at the facility for nonprocess routine janitorial or grounds maintenance related activities may be excluded from this list.

(D) Hazardous substances used and hazardous wastes generated in laboratory research need not be listed. Note: See (2)(k) of this subsection for discussion on this issue.

(ii) "Percentage approach."

This approach requires you to identify the types and amounts, in either weight or volume, of hazardous waste generated and products containing hazardous substances used up to these threshold levels;

(A) All extremely hazardous waste and enough additional dangerous waste to reach ninety percent of all the hazardous waste generated; and

(B) Ninety percent of all the products used that contain hazardous substances. The person making this list should attempt to include those products which contain the highest concentrations of hazardous substances and the most toxic hazardous substances.

(C) Office products and products that are used at the facility for nonprocess routine janitorial or grounds maintenance related activities may be excluded from this list.

(D) Hazardous substances used and hazardous wastes generated in laboratory research are not required to be listed. Note: See (2)(k) of this subsection for discussion on this issue.

(iii) Determinations of whether these quantities are met or exceeded for either approach must be based on the best available information. This information may be included or referenced in the plan. Available information may include any or all of the following as necessary to determine quantities of hazardous substances contained in products: Information available from material safety data sheets, information furnished upon request from manufacturers or suppliers of hazardous substances or products containing hazardous substances, information obtained from the department, and information otherwise known by the facility owner or operator.

An explanation of the procedures used to determine that the thresholds were met or exceeded must be included in this section of the plan.

(iv) The above thresholds must only be used for plans required to be completed before September 2, 1996. Plans or plan updates completed from that date on shall identify the types and amounts, in either weight or volume, of hazardous waste generated and hazardous substances used up to the following threshold levels;

(A) The "pounds approach" may only be used for identifying hazardous waste after September 2, 1996. This approach may not be used for products containing hazardous substances. The thresholds for hazardous waste are:

All dangerous waste streams five hundred pounds or greater, any smaller dangerous waste streams that individually represent ten percent or more of the total annual hazardous wastes, and all extremely hazardous waste streams subject to regulation by the department. If this combination equals less than ninety-five percent of the total hazardous wastes generated, then additional dangerous wastes generated at the facility must be included until ninety-five percent of the total is reached.

(B) The "percentage approach" remains an optional approach for hazardous waste, but it is the only approach that may be used for products. The thresholds for this approach are:

All extremely hazardous waste and enough additional dangerous waste to reach ninety-five percent of all the hazardous waste generated; and

Ninety-five percent of all the products used that contain hazardous substances.

(C) The exemptions in (ii)(C) and (D) of this subsection remain in effect.

(b) A detailed description of each process in the facility that generates hazardous waste or uses products containing

hazardous substances as identified in the chosen approach in (a) of this subsection. This description may include a schematic drawing.

(c) For the hazardous waste and products containing hazardous substances identified in (a) of this subsection within each of the processes identified in (b) of this subsection, an identification, based on thorough research, of all reasonable opportunities for further hazardous substance use reduction, hazardous waste reduction, recycling, and treatment. Thorough research shall include, at a minimum, a review of literature commonly available to that industry or trade. The full range of potentially feasible opportunities must be identified without regard to possible impediments to implementing the opportunities. In identifying opportunities, consideration must be given to alternative approaches which, in the judgment of the facility management, satisfy the same demand for end products or services but use substantially less hazardous substances or result in the generation of substantially less hazardous waste;

(d) An evaluation of the identified opportunities. Opportunities must be grouped by priority and evaluated according to these priorities. The priorities are, in descending order: Hazardous substance use and hazardous waste reduction; recycling; and, treatment. Opportunities of a lower priority must be given consideration only after a determination is made that the higher priority opportunities are inappropriate due to impediments to their implementation. Impediments that are considered acceptable include, but are not limited to:

(i) Adverse impacts on product quality, legal or contractual obligations;

(ii) Economic and technical practicality;

(iii) Safety considerations; and

(iv) The creation of substantial new risks to human health or the environment.

Except with respect to the use and distribution of fertilizers or pesticides intended for commercial agricultural applications, the evaluation of hazardous waste reduction opportunities must include an evaluation of hazardous substance use reduction opportunities for those hazardous substances which subsequently result in hazardous waste streams as well as an evaluation of other opportunities for the reduction of hazardous waste.

The evaluation required under this subsection shall include:

(A) An economic analysis;

(B) A technical evaluation;

(C) An identification of whether, and if so how, the identified opportunity would result in a shifting of risk from one part of a process, environmental medium, or product to another; and

(D) An identification of all impediments to implementing the opportunities.

The economic analysis shall seek to identify the total costs associated with the current hazardous substance use and hazardous waste generation, management and disposal, compared with comparable costs associated with implementing the alternatives.

Evaluation of each opportunity may be considered complete when enough information is available to select or reject the opportunity for implementation. For opportunities rejected, the reason or reasons for rejecting them must be stated.

(e) A selection of opportunities to be implemented in accordance with the evaluation conducted in (d) of this subsection. For each selected opportunity, the process it affects must be identified, and estimates of the amount, by weight, of the reduction of hazardous substances or products containing hazardous substances and hazardous waste reduction that would be achieved through implementation must be stated, and the amount of hazardous wastes recycled or treated as a result of implementation must be included;

(f) A written policy stating that in implementing the selected options whenever technically and economically practicable, risks will not be shifted from one part of a process, environmental medium, or product to another;

(g) Specific performance goals in each of the following categories, expressed in numeric terms:

(i) Hazardous substances or products containing hazardous substances to be reduced or eliminated from use;

(ii) Hazardous wastes to be reduced or eliminated through hazardous waste reduction techniques;

(iii) Materials or hazardous wastes to be recycled; and

(iv) Hazardous wastes to be treated.

If the establishment of numeric performance goals is not practicable, the performance goals shall include a clearly stated list of objectives designed to lead to the establishment of numeric goals as soon as is practicable. Goals must be set for a five-year period from the first reporting date (see (h) of this subsection regarding implementation activities that will take longer than five years);

(h) A five-year implementation schedule, which shall display planned implementation activities for each of the five calendar years following completion of the plan. Information to be provided shall include, but is not limited to, the opportunities (or phases of opportunities) being implemented and related milestones. Where complete implementation of a selected opportunity will take longer than five years, the schedule shall contain relevant milestones within a five-year period and an estimated date of completion. The schedule may be in table form and organized by opportunities within processes, if desired.

(i) A description of how those hazardous wastes that are not recycled or treated and the residues from recycling and treatment processes are managed may be included in the plan.

(j) Documentation of any research conducted in fulfillment of any of the above subdivisions of this subsection must be available to the department upon request.

(k) For research laboratories, the plan may include, in lieu of all the detailed requirements of this subsection, a description of policies and procedures to be followed by laboratory personnel regarding the use of hazardous substances and the generation of hazardous wastes through laboratory research. These policies and procedures must be consistent with the waste reduction priorities as defined in this chapter.

(3) Part three. Part three shall provide a financial description of the plan, which shall identify costs and benefits realized from implementing selected opportunities to the extent reasonably possible. Part three shall also include a description of accounting systems that will be used to identify hazardous substance use and hazardous waste management

costs. Liability, compliance, and oversight costs must be components of these accounting systems.

(4) Part four. Part four of the plan shall include a description of personnel training and employee involvement programs. Each facility required to write a plan is encouraged to advise its employees of the planning process and solicit comments or suggestions from its employees on hazardous substance use and waste reduction opportunities.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-030, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-030, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-030, filed 4/1/91, effective 5/2/91.]

WAC 173-307-040 Executive summary. Upon completion of a plan, the owner, chief executive officer, or other person with the authority to commit management to the plan, such as a facility manager, shall sign and submit an executive summary of the plan to the department. This summary must be available from the department for public inspection upon request. The facility may choose to submit the complete plan to the department rather than prepare an executive summary. In that event, the complete plan must also be available for public inspection.

Executive summaries shall include the following information from the plan:

(1) A written policy expressing management and corporate support for the plan and a commitment to implement planned activities and achieve established goals;

(2) The plan scope and objectives;

(3) A description of the facility type and a summary of product made and/or services provided;

(4) A list of the type and amount of each hazardous waste and products containing hazardous substances as identified in WAC 173-307-030 (2)(a);

(5) A brief description of each process in the facility that generates hazardous waste or uses products containing hazardous substances as listed in subdivision (d);

(6) A description of current reduction, recycling, and treatment activities, and documentation of hazardous substance use reduction and hazardous waste reduction activities completed before the first reporting date specified in WAC 173-307-050;

(7) A summary of all further hazardous substance use reduction, hazardous waste reduction, recycling, and treatment opportunities identified. Opportunities must be identified first for hazardous substance use reduction and hazardous waste reduction, secondly for recycling, and lastly for treatment. A statement of the reason or reasons for rejecting any opportunity from further consideration and a summary of all identified impediments to implementing opportunities must be included;

(8) A description of the opportunities selected to be implemented, process or processes affected, and estimated reductions to be achieved;

(9) Specific performance goals, expressed in numeric terms for each of the categories listed below (assumptions on changing production or service activity levels during the period covered by the plan must be described):

(a) Hazardous substances to be reduced or eliminated from use;

(b) Hazardous wastes to be reduced or eliminated through waste reduction techniques;

(c) Materials or hazardous wastes to be recycled; and

(d) Hazardous wastes to be treated.

If the establishment of numeric performance goals is not practicable, the performance goals shall include a clearly stated list of objectives designed to lead to the establishment of numeric goals as soon as is practicable. Goals must be set for a five-year period from the first reporting date;

(10) The five-year implementation schedule identified in WAC 173-307-030 (2)(h), which shall display planned implementation activities for each of the five calendar years following completion of the plan;

(11) A summary of costs and benefits realized from implementing selected opportunities;

(12) For research labs, the executive summary may include, in lieu of all the detailed requirements of this section, a description of policies and procedures to be followed by laboratory personnel regarding the use of hazardous substances and the generation of hazardous waste through laboratory research. These policies and procedures must be consistent with the waste reduction priorities as defined in this chapter.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-040, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-040, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-040, filed 4/1/91, effective 5/2/91.]

WAC 173-307-050 Due dates. Plans must be completed and executive summaries must be submitted in accordance with the following schedule:

(1) Hazardous waste generators who generated more than fifty thousand pounds of hazardous waste in calendar year 1991 and hazardous substance users who were required to report in 1991, by September 1, 1992;

(2) Hazardous waste generators who generated between seven thousand and fifty thousand pounds of hazardous waste in calendar year 1992 and hazardous substance users who were required to report for the first time in 1992, by September 1, 1993;

(3) Hazardous waste generators who generated between two thousand six hundred forty and seven thousand pounds of hazardous waste in 1993 and hazardous substance users who were required to report for the first time in 1993, by September 1, 1994;

(4) Hazardous waste generators who have not been required to complete a plan on or before September 1, 1994, shall complete a plan by September 1 of the year following the first year that they generate more than two thousand six hundred forty pounds of hazardous waste; and

(5) Hazardous substance users who have not been required to complete a plan on or before September 1, 1994, shall complete a plan by September 1 of the year following the first year that they are required to report under Section 313 of Title III of the Superfund Amendments and Reauthorization Act.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-050, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-050, filed 4/1/91, effective 5/2/91.]

WAC 173-307-060 Plan availability. Plans developed under chapter 173-307 WAC must be kept at the facility and made available for review to authorized representatives of the department. The plan is not a public record under the public disclosure laws of the state of Washington contained in chapter 42.17 RCW, unless submitted in lieu of an executive summary as provided for in WAC 173-307-040.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-060, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-060, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-060, filed 4/1/91, effective 5/2/91.]

WAC 173-307-070 Plan amendments and updates. (1) A plan must be kept reasonably current and may be amended in response to changes in facility operations, substances used, or wastes generated.

(a) Users or generators shall notify the department of an amended plan and submit amendments to their plan or executive summary, whichever was originally submitted, including an identification of which sections have been amended. The implementation schedule of the amended plan and/or new executive summary must be within the original five-year timeline initiated by completion of the original plan.

(b) Even if a plan is amended, a five-year plan update will still be required five years from completion of the first plan, or from the last five-year update.

(2) Every five years, each plan must be updated, and the plan or a new executive summary must be submitted to the department. A plan update shall conform to the requirements for preparing reduction plans as specified in this chapter.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-070, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-070, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-070, filed 4/1/91, effective 5/2/91.]

WAC 173-307-080 Progress reports. Progress reports must be submitted to the department annually on September 1 after the due date of the plan. The purpose of the progress report is to provide information on quantities of hazardous waste and hazardous substances or products containing hazardous substances reduced in the prior twelve-month period.

(1) Progress reports shall include a discussion of:

(a) Performance goals. If numeric performance goals were listed in the plan, progress toward achieving these goals must be discussed. If numeric performance goals were not listed in the plan, progress made toward establishing numeric goals and progress made toward achieving the goals as stated in the plan must be discussed. This discussion shall include:

(i) A description of reduction, recycling, and treatment opportunities that were implemented.

(ii) A description of the process or processes impacted by each opportunity.

(iii) A description of the quantities, by weight, of hazardous substances or products containing hazardous substances reduced and hazardous waste reduced by each option. Estimation techniques, and any assumptions used must be described. Quantities reduced must be displayed in relation to changing production levels. The description shall also include a statement of the level of production or service activity in relation to the level of production or service activity stated in the plan at the time the plan was prepared.

Note: Factors not resulting in actual reductions, such as new estimating techniques, delistings of substances or hazardous wastes, and reclassifications of waste management techniques cannot be counted or claimed as reductions.

(iv) If measurement or estimation techniques are changed from the prior reports in such a way that reductions are not additive for the five-year planning period, a methodology for converting prior reported reductions must be described and recalculations must be provided.

(b) Problems encountered in the implementation process. Problems must be clearly identified and must include a discussion of steps taken or proposed to resolve problems. An update on problems reported in previous progress reports must be included.

(2) Upon the request of two or more users or generators belonging to similar industrial classifications, the department may aggregate data contained in their annual progress reports for the purpose of developing a public record.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-080, filed 7/11/00, effective 8/11/00; 91-20-131 (Order 91-35), § 173-307-080, filed 10/1/91, effective 11/1/91; 91-08-041 (Order 90-57), § 173-307-080, filed 4/1/91, effective 5/2/91.]

WAC 173-307-090 Review process. A user or generator required to prepare a plan shall permit the director to review the plan to determine its adequacy.

(1) The department may review a plan, executive summary, or an annual progress report to determine whether the document is adequate and shall base its determination solely on whether the document is complete and prepared in accordance with the provisions of this chapter and the requirements of chapter 70.95C RCW.

(2) If a hazardous substance user or hazardous waste generator fails to complete an adequate plan, executive summary, or annual progress report, the department shall notify the user or generator of the inadequacy, identifying specific deficiencies. For the purposes of this section, a deficiency may include failure to develop a plan, failure to submit an executive summary, or failure to submit an annual progress report. The department shall specify a reasonable time frame, of not less than ninety days, within which the user or generator shall complete a modified plan, executive summary, or annual progress report addressing the specified deficiencies.

(3) If the department determines that a modified plan, executive summary, or annual progress report is inadequate, the department may, within its discretion, either require further modification or enter an order under WAC 173-307-100.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-090, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-090, filed 4/1/91, effective 5/2/91.]

WAC 173-307-100 Penalties. (1) If, after having received a list of specified deficiencies from the department, a hazardous substance user or hazardous waste generator required to prepare a plan fails to complete modification of a plan, executive summary, or annual progress report within the time period specified by the department, the department may enter an order under chapter 34.05 RCW finding the user or generator not in compliance with the requirements of RCW 70.95C.200. When the order is final, the department shall notify the department of revenue to charge a penalty fee.

The penalty fee must be the greater of one thousand dollars or three times the amount of the user's or generator's previous year's fee, in addition to the current year's fee. If no fee was assessed the previous year, the penalty must be the greater of one thousand dollars or three times the amount of the current year's fee. The penalty assessed under this subsection must be collected each year after the year for which the penalty was assessed until an adequate plan, executive summary, or annual progress report is completed.

(2) If a hazardous substance user or hazardous waste generator required to prepare a plan fails to complete an adequate plan, executive summary, or annual progress report after the department has levied against the user or generator the penalty provided for in subsection (1) of this section, the user or generator must be required to pay a surcharge to the department whenever the user or generator disposes of a hazardous waste at any hazardous waste incinerator or hazardous waste landfill facility located in Washington state, until the required document is completed and determined to be adequate by the department. The surcharge must be equal to three times the fee charged for disposal. The department shall furnish the incinerator and landfill facilities in Washington state with a list of Environmental Protection Agency/state identification numbers of the hazardous waste generators that are not in compliance with the requirements of RCW 70.95C.200.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-100, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-100, filed 4/1/91, effective 5/2/91.]

WAC 173-307-110 Appeals. A user or generator may appeal a department order or a surcharge under RCW 70.95C.220 to the pollution control hearings board under chapter 43.21B RCW.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-110, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-110, filed 4/1/91, effective 5/2/91.]

WAC 173-307-120 Exemptions. A person required to prepare a plan because of the quantity of hazardous waste generated may petition the director to be excused from this requirement. The person must demonstrate to the satisfaction of the director that the quantity of hazardous waste generated was due to unique circumstances not likely to be repeated and that the person is unlikely to generate sufficient hazardous waste to require a plan in the next five years.

[Statutory Authority: Chapter 70.95C RCW. 91-08-041 (Order 90-57), § 173-307-120, filed 4/1/91, effective 5/2/91.]

WAC 173-307-130 Public disclosure. (1) The department shall make available for public inspection any executive summary or annual progress report submitted to the department. Any hazardous substance user or hazardous waste generator required to prepare an executive summary or annual progress report, who believes that disclosure of any information contained in the executive summary or annual progress report may adversely affect the competitive position of the user or generator, may request the department under RCW 43.21A.160 to delete from the public record those portions of the executive summary or annual progress report that may affect the user's or generator's competitive position. The department may not disclose any information contained in an executive summary or annual progress report pending a determination of whether the department will delete any information contained in the report from the public record. This determination will be made within sixty days following a request for public inspection.

(2) Any ten persons residing within ten miles of a hazardous substance user or hazardous waste generator required to prepare a plan may file with the department a petition requesting the department to examine a plan to determine its adequacy. The department shall report its determination of adequacy to the petitioners and to the user or generator within a reasonable time. The department may deny a petition if the department has, within the previous year, determined the plan of the user or generator named in the petition to be adequate.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-130, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-130, filed 4/1/91, effective 5/2/91.]

WAC 173-307-140 Records. The department shall maintain a record of each plan, executive summary, or annual progress report it reviews, and a list of all plans, executive summaries, or annual progress reports the department has determined to be inadequate, including descriptions of corrective actions taken. This information must be made available to the public.

[Statutory Authority: Chapter 70.95C RCW. 00-15-020 (Order 00-08), § 173-307-140, filed 7/11/00, effective 8/11/00; 91-08-041 (Order 90-57), § 173-307-140, filed 4/1/91, effective 5/2/91.]

Chapter 173-308 WAC
BIOSOLIDS MANAGEMENT

WAC

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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-308-070	Use of term, "biosolids"—Explanation. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-070, filed 2/18/98, effective 3/21/98.] Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07. Statutory Authority: Chapters 70.95J and 70.95 RCW.
173-308-220	Bulk biosolids applied to forestland. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-220, filed 2/18/98, effective 3/21/98.] Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07. Statutory Authority: Chapters 70.95J and 70.95 RCW.
173-308-230	Bulk biosolids applied to a public contact site. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-230, filed 2/18/98, effective 3/21/98.] Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07. Statutory Authority: Chapters 70.95J and 70.95 RCW.
173-308-240	Bulk biosolids applied to a land reclamation site. [Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-240, filed 2/18/98, effective 3/21/98.] Repealed by 07-12-010 (Order 06-06), filed 5/24/07, effective 6/24/07. Statutory Authority: Chapters 70.95J and 70.95 RCW.

WAC 173-308-005 Explanation for the use of the terms "sewage sludge," "biosolids," and "septage." (1) Sewage sludge is the solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Biosolids are produced by treating sewage sludge to meet certain quality standards that allow it to be applied to the land for beneficial use. Septage is a class of biosolids that comes from septic tanks and similar systems receiving domestic wastes.

(a) Sewage sludge. Unless the context requires otherwise, "sewage sludge" is the term used in this chapter to refer to the residual material produced by a treatment works treating domestic sewage that does not meet the standards to be classified as biosolids or that is being disposed in a municipal solid waste landfill.

(b) Biosolids. Unless the context requires otherwise, "biosolids" is the term used in this chapter to refer to sewage sludge or septage that has been or is being treated to meet standards so that it can be applied to the land.

(c) Septage. Unless the context requires otherwise, "septage" is the term used in this chapter to refer to septage that is or will be managed as septage.

(2) The following sections apply only to biosolids or septage managed as biosolids originating from sewage sludge: WAC 173-308-150, 173-308-160, 173-308-170, 173-308-180, 173-308-200, 173-308-210, 173-308-250, and 173-308-260.

(3) WAC 173-308-270 addresses the management requirements for septage.

(4) Unless the context requires otherwise, all other sections apply to all biosolids, including septage.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-005, filed 5/24/07, effective 6/24/07.]

WAC 173-308-010 Authority and purpose. (1) **Authority.** This chapter is adopted under the authority of chapters 70.95J and 70.95 RCW.

(2) **Purpose.** The purpose of this chapter is to protect human health and the environment when biosolids are managed.

(a) This chapter encourages the maximum beneficial use of biosolids and is intended to conform to all applicable federal rules adopted under the Federal Clean Water Act as it existed on February 4, 1987.

(b) This chapter establishes permitting requirements for treatment works treating domestic sewage that engage in applicable biosolids treatment or management practices, including any person, site, or facility that has been designated as a treatment works treating domestic sewage.

(c) This chapter establishes standards for the treatment, quality, and management of sewage sludge and septage that are directly enforceable and that allow these materials to be classified and managed as biosolids.

(d) This chapter establishes requirements, standards, management practices, and monitoring, recordkeeping and reporting requirements that are applicable when biosolids are applied to the land and when sewage sludge is disposed in a municipal solid waste landfill unit as defined in chapter 173-351 WAC.

(e) This chapter establishes fees for permits issued to treatment works treating domestic sewage.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-010, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-010, filed 2/18/98, effective 3/21/98.]

WAC 173-308-020 Applicability. (1) These rules apply to all treatment works treating domestic sewage as defined by this chapter. In addition, these rules apply to, but are not limited to, the following:

(a) A person who prepares biosolids or sewage sludge.

(b) A person who stores biosolids or sewage sludge.

(c) A person who applies biosolids to the land.

(d) Biosolids that are applied to the land.

(e) The land where biosolids are applied.

(f) The owner and lease-holder of land where biosolids are applied.

(g) A person who disposes of sewage sludge in a municipal solid waste landfill.

(h) Sewage sludge that is disposed of in a municipal solid waste landfill.

(i) Biosolids or sewage sludge generated at an industrial facility during the treatment of only domestic sewage.

(j) A person who transfers biosolids or sewage sludge from one facility to another.

(k) A person who transports biosolids or sewage sludge.

(l) Mixtures of biosolids and other materials including, but not limited to, solid wastes.

(2) This chapter does not apply to the following sewage sludge and biosolids management facilities and practices:

(a) The firing of biosolids or sewage sludge in an incinerator.

(b) The placing or disposal of sewage sludge in facilities other than municipal solid waste landfills (e.g., the placement of sewage sludge at a surface disposal site).

(3) Except as provided in (g) of this subsection, the following solid wastes are not regulated under this chapter:

(a) Sludge generated at an industrial facility during the treatment of industrial wastewater, including when such a facility combines their industrial wastewater with their domestic sewage.

(b) Sewage sludge determined to be hazardous in accordance with chapter 70.105 RCW or rules adopted thereunder.

(c) Sewage sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(d) Ash generated during the firing of sewage sludge or biosolids in an incinerator.

(e) Grit or screenings generated during preliminary treatment of domestic sewage in a treatment works.

(f) Sludge generated during the treatment of either surface water or ground water used for drinking water.

(g) Commercial or industrial septage or a mixture of domestic septage and commercial or industrial septage except as allowed in accordance with this subsection.

(i) Grease trap wastes from restaurants and similar food service facilities may be mixed with domestic septage up to twenty-five percent by volume.

(ii) On a case-by-case basis, on request of a septage management facility or at the department's discretion, the department may designate other commercial or industrial septage as septage that is "domestic in quality" and require the septage to be managed in accordance with the provisions of this chapter.

(iii) At no time may the combined total of grease trap wastes and other commercial or industrial septage mixed with domestic septage exceed twenty-five percent by volume.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-020, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-020, filed 2/18/98, effective 3/21/98.]

WAC 173-308-030 Relationship to other laws, regulations, and ordinances. In addition to the requirements of this chapter, other laws, regulations, and ordinances may also apply to biosolids or sewage sludge. These include, but are not limited to, the following:

(1) Commercial fertilizers are subject to regulation by the Washington state department of agriculture. Biosolids meeting the definition of a commercial fertilizer must comply with chapter 15.54 RCW and chapter 16-200 WAC.

(2) Except as required in WAC 173-308-100, the transportation of biosolids or sewage sludge is subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW.

(3) Facilities required to obtain permits under WAC 173-308-310 must comply with the requirements in chapter 43.21C RCW and the State Environmental Policy Act (SEPA) rules adopted under chapter 197-11 WAC. Public notice and hearing requirements under SEPA may be coordinated with the similar requirements of this chapter.

(4) Biosolids facilities and sites where biosolids are applied to the land must comply with the requirements of chapter 90.48 RCW and chapters 173-200 and 173-201A WAC.

(5) Facilities and sites where biosolids are applied to the land or sewage sludge is disposed must comply with the federal biosolids rule, 40 CFR Part 503.

(6) Facilities and sites where biosolids are applied to the land must comply with other applicable federal, state and local laws, regulations, and ordinances, including zoning and land use requirements.

(7) The enforcement of other laws, regulations, and ordinances is the responsibility of the agency with jurisdiction.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-030, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-030, filed 2/18/98, effective 3/21/98.]

WAC 173-308-040 Direct enforceability. All persons and facilities subject to the requirements of this chapter must comply with these rules on the effective date of the applicable regulation, regardless of whether or not a permit has been issued under WAC 173-308-310.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-040, filed 2/18/98, effective 3/21/98.]

WAC 173-308-041 Enforcement. Any violation of this chapter or any permit issued under this chapter may be subject to the enforcement provisions of applicable law including, but not limited to, chapters 70.95 and 70.95J RCW.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-041, filed 5/24/07, effective 6/24/07.]

WAC 173-308-042 Appeals. Any person aggrieved by a decision of the department made in accordance with provisions of this chapter may appeal that decision only as provided by applicable law including, but not limited to, chapters 43.21B and 34.05 RCW.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-042, filed 5/24/07, effective 6/24/07.]

WAC 173-308-050 Delegation of authority. Upon the request of a local health jurisdiction, the department may delegate authority to implement and assist in the administration of appropriate portions of this chapter.

Delegation must be consistent with any applicable state-EPA agreement regarding delegation of federal biosolids program authority.

(1) **Method of delegation.**

(a) Delegation will be accomplished through an instrument of mutual consent that is acceptable to both the department and the local health jurisdiction seeking delegation.

(b) The department may revoke part or all of a delegation of authority under this section if it finds that a local health jurisdiction has failed to adequately carry out any portion of a delegated responsibility.

(2) **Contents of delegation agreements.**

(a) At a minimum, delegation agreements must specify the authorities and responsibilities that are being delegated to a local health jurisdiction.

(b) Other authorities and responsibilities are assumed to be retained by the department.

(c) All delegation agreements must have a termination date that is no more than five years from the date signed.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-050, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-050, filed 2/18/98, effective 3/21/98.]

WAC 173-308-060 Biosolids not classified as solid waste. (1) The state of Washington recognizes biosolids as a valuable commodity.

(2) Biosolids are not solid waste and are not subject to regulation under solid waste laws.

(3) Sewage sludge or septage that fails to meet standards for classification as biosolids is a solid waste, and may not be applied to the land.

(4) Sewage sludge or septage that will be disposed in a landfill is a solid waste.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-060, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-060, filed 2/18/98, effective 3/21/98.]

WAC 173-308-080 Definitions. Unless the department determines that the context of the rule requires otherwise, the following definitions are applicable for the purposes of this chapter.

"Administrator" means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

"Aerobic digestion" is the biochemical decomposition of organic matter in biosolids into carbon dioxide and water by microorganisms in the presence of air. Aerobic digestion does not include composting.

"Agricultural land" is land on which a food crop, feed crop, or fiber crop is grown. This includes range land and land used as pasture.

"Agronomic rate" is the biosolids application rate that provides the amount of nitrogen necessary for the optimum growth of targeted vegetation, and that will not result in the violation of applicable standards or requirements for the protection of ground or surface water as established under chapter 90.48 RCW and related rules including chapters 173-200 and 173-201A WAC.

"Anaerobic digestion" is the biochemical decomposition of organic matter in biosolids into methane gas and carbon dioxide by microorganisms in the absence of air. Anaerobic digestion does not include composting.

"Apply biosolids or biosolids applied to the land" means the land application of biosolids for the purpose of beneficial use.

"Beneficial use facility" means a receiving-only facility consisting of a site or sites where biosolids from other treatment works treating domestic sewage are applied to the land for beneficial use, which has been permitted as a treatment works treating domestic sewage in accordance with the provisions of WAC 173-308-310, and that has been designated as a beneficial use facility through the permitting process.

"Beneficial use of biosolids" means the application of biosolids to the land for the purposes of improving soil characteristics including tilth, fertility, and stability to enhance the growth of vegetation consistent with protecting human health and the environment.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all applicable requirements under this chapter. Biosolids includes a material derived from biosolids, and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under this chapter. For the purposes of this rule, semisolid products include biosolids or products derived from biosolids ranging in character from mostly liquid to fully dried solids.

"Biosolids sold or given away in a bag or other container" means biosolids sold or given away to the general public in a bag or other container holding less than 1 metric ton (1.1 U.S. tons).

"Bulk biosolids" means biosolids that are not sold or given away in a bag or other container for application to the land.

"Ceiling concentration" means the maximum concentration of a pollutant in any biosolids sample, beyond which level the biosolids would be classified as sewage sludge not suitable for application to the land. Ceiling concentrations are established in Table 1 of WAC 173-308-160.

"Class I biosolids management facility" is any publicly owned treatment works (POTW), as defined in 40 CFR 501.2, required to have an approved pretreatment program under 40 CFR 403.8(a) (including any POTW located in a state that has elected to assume local program responsibilities under 40 CFR 403.10(e)), and any treatment works treating domestic sewage, as defined in 40 CFR 122.2, classified as a Class I biosolids management facility by the EPA Regional Administrator, or in the case of approved state programs, the Regional Administrator in conjunction with the state director, because of the potential for its biosolids use or disposal practice to affect public health and the environment adversely.

"Clean Water Act" or **"CWA"** means the Clean Water Act or Federal Clean Water Act (FCWA) (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-117, and Public Law 100-4.

"Composting" means the biological degradation of organic material under controlled conditions designed to promote aerobic decomposition. This does not include the treatment of sewage sludge in a digester at a wastewater treatment plant.

"Cumulative pollutant loading rate" is the maximum amount of a pollutant that can be applied to an area of land

from biosolids that exceed the pollutant concentration limits established in Table 3 of WAC 173-308-160.

"Density of microorganisms" is the number of microorganisms per unit mass of total solids (dry weight) in the biosolids.

"Department" means the Washington state department of ecology and, within the scope of its delegation, a local health jurisdiction that has been delegated authority under WAC 173-308-050.

"Director" means the director of the department of ecology or his or her authorized representative.

"Disposal on an emergency basis" means a period up to but not exceeding one year. Generally, emergency situations requiring the use of disposal facilities will normally occur as a result of inclement weather conditions at a beneficial use site, contractual or technical difficulties in the treatment, transportation, or application of the biosolids, or as a result of short term economic or administrative barriers, any and all of which are expected to be resolved within a period of one year.

"Disposal on a long-term basis" means to adopt disposal as a preferred method of management for at least five years, or for an indefinite period of time with no expectation for pursuing other management alternatives.

"Disposal on a temporary basis" means a period of more than one but less than five years. Generally, situations requiring the temporary use of disposal facilities will normally occur as a result of deficiencies in the wastewater or biosolids treatment process, or economic, administrative, or contractual constraints which cannot be resolved in less than one year.

"Domestic sewage" is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

"Dry weight basis" means calculated on the basis of having been dried at 105°C (221°F) until reaching a constant mass (i.e., essentially one hundred percent solids content).

"EPA" means the United States Environmental Protection Agency.

"Exceptional quality biosolids" means biosolids that meet the pollutant concentration limits in Table 3 of WAC 173-308-160, **and** at least one of the Class A pathogen reduction requirements in WAC 173-308-170, **and** at least one of the vector attraction reduction requirements in WAC 173-308-180.

"Facility" means a treatment works treating domestic sewage as defined in this chapter, unless the context of the rule requires otherwise. For the purposes of this chapter a facility is considered to be new if it has not been previously approved for the treatment, storage, use, or disposal of biosolids or sewage sludge.

"Feed crops" are crops produced primarily for consumption by animals.

"Fiber crops" are crops such as flax and cotton including, but not limited to, those whose parts or by-products may be consumed by humans or used in the production or preparation of food for human consumption.

"Food crops" are crops consumed by humans. These include, but are not limited to, fruits, vegetables, grains, and tobacco.

"Forest" is an area of land that is managed for the production of timber or other forest products, or for benefits such as recreation and watershed protection, and that is or will be dominated by trees under the current system of management. For the purposes of this rule, other areas of land that are not regulated as agricultural land, public contact sites, land reclamation sites, or lawns or home gardens are considered forest land.

"General permit" means a permit issued by the department in accordance with the procedures established in this chapter, to be effective in a designated geographical area, that authorizes the application of biosolids to the land or the disposal of sewage sludge in a municipal solid waste landfill, under which multiple treatment works treating domestic sewage may apply for coverage.

"Geometric mean" means the antilogarithm of the arithmetic average of the logarithms of the sample values, or the nth root of the product of n sample values.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"Health jurisdiction" or **"local health jurisdiction"** means city, county, city-county, or district public health jurisdiction as defined in chapters 70.05, 70.08, and 70.46 RCW.

"Individual permit" means a permit issued by the department to a single treatment works treating domestic sewage in accordance with WAC 173-308-310, which authorizes the management of biosolids or sewage sludge.

"Industrial septage" or **"commercial septage"** is the contents from septic tanks or similar systems that receive wastewater generated in a commercial or industrial process. This definition includes, but is not limited to, grease trap wastes generated at restaurants and similar food service facilities.

"Industrial wastewater" or **"commercial wastewater"** is wastewater generated in a commercial or industrial process.

"Land application" is the application of biosolids to the land surface by means such as spreading or spraying, the injection of biosolids below the land surface, or the incorporation of biosolids into the soil, for the purpose of beneficial use.

"Land with a low potential for public exposure" is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

"Land with a high potential for public exposure" is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

"Local health jurisdiction" see definition of health jurisdiction.

"Manufactured inerts" means wastes such as plastic, metals, ceramics and other manufactured items that remain relatively unchanged during wastewater or biosolids treatment processes.

"Monthly average" is the arithmetic mean of all measurements taken during the month.

"Municipal sewage sludge" means sewage sludge generated from a publicly owned treatment works. For the pur-

poses of this chapter, sewage sludge generated from the treatment of only domestic sewage in a privately owned or industrial treatment facility is considered municipal sewage sludge.

"Municipality" means a city, town, borough, county, parish, district, association, or other public body (including an inter-municipal agency of two or more of the foregoing entities) created by or under state law, or a designated and approved management agency under section 208 of the Clean Water Act, as amended. The definition includes a special district created under state law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the Clean Water Act, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of biosolids.

"Nonexceptional quality biosolids" means biosolids that do not meet the criteria of "exceptional quality biosolids" as defined in this section.

"Other container" is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton (1.1 U.S. tons) or less.

"Owner" means any person with ownership interest in a site or facility, or who exercises control over a site or facility, but does not include a person who, without participating in management of the site or facility, holds indicia of ownership primarily to protect the person's security interest.

"Pasture" is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

"Pathogenic organisms" are disease causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

"Permit" means an authorization, license, or equivalent control document issued by the director to implement the requirements of this chapter. Unless the context requires differently, the use of the term in this chapter refers to individual permits, general permits, and coverage under general permits.

"Person" is an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

"Person who prepares biosolids" is either the person who generates biosolids during the treatment of domestic sewage in a treatment works or the person who derives a material from biosolids.

"pH" means the logarithm of the reciprocal of the hydrogen ion concentration.

"Place sewage sludge" or **"sewage sludge placed"** means to dispose of sewage sludge.

"Pollutant" is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

"Pollutant limit" is a numerical value that describes the amount of a pollutant allowed per unit amount of biosolids (e.g., milligrams per kilogram of total solids), the amount of a pollutant that can be applied to a unit area of land (e.g., kilograms per hectare), the volume of a material that can be applied to a unit area of land (e.g., gallons per acre), or the number of pathogens or indicator organisms per unit of biosolids. Pollutant limits are established in Tables 1 - 3 of WAC 173-308-160, in 173-308-170, and in 173-308-270.

"Public contact site" is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

"Publicly owned treatment works" means a treatment works treating domestic sewage that is owned by a municipality, the state of Washington, or the federal government.

"Range land" is generally open, uncultivated land dominated by herbaceous or shrubby vegetation that may be used for grazing or browsing, either by wildlife or livestock.

"Receiving-only facility" means a treatment works treating domestic sewage that only receives sewage sludge or biosolids from other sources for further treatment and/or application to the land, and which does not generate any biosolids from the treatment of domestic sewage.

"Reclamation site" is drastically disturbed land that is reclaimed using biosolids. This includes, but is not limited to, strip mines and construction sites.

"Regional administrator" means the Regional Administrator of Region 10 of the Environmental Protection Agency or his/her authorized representative.

"Residential equivalent value" means the number of residential equivalents determined for a facility under chapter 173-224 WAC or a value similarly obtained under WAC 173-308-320.

"Restrict public access" means to minimize access of nonessential personnel to land where biosolids are applied, through the use of natural or artificial barriers, signs, remoteness, or other means.

"Saturated zone" means the zone below the water table in which all interstices are filled with water.

"Septage" or **"domestic septage"** is liquid or solid material removed from septic tanks, cess pools, portable toilets, type III marine sanitation devices, vault toilets, pit toilets, RV holding tanks, or similar systems that receive only domestic sewage. Septage may also include commercial or industrial septage mixed with domestic septage if approved in accordance with the provisions in WAC 173-308-020 (3)(g).

"Septage managed as biosolids originating from sewage sludge" means septage managed as if it had originated from a sewage treatment process at a wastewater treatment facility including, but not limited to, meeting the sampling requirements in WAC 173-308-140, the monitoring requirements in WAC 173-308-150, the pollutant limits in WAC 173-308-160, the pathogen reduction requirements in WAC 173-308-170, and the vector attraction reduction requirements in this chapter.

"Septage management facility" means a person who applies septage to the land or one that treats septage for application to the land.

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

"Significant change in biosolids management practices" means, but is not limited to, the following: A change in the quality of biosolids that are applied to the land, either from class A to class B for pathogens, or from Table 3 to Table 1 of WAC 173-308-160 for pollutant limits; the addition of a new area to which biosolids will be applied which was not previously disclosed during a required public notice process; for class B biosolids only, a change from nonfood crops to food crops, a change from crops where the harvestable portions do not contact the biosolids/soil mixture to crops where the harvestable portions contact the biosolids/soil mixture, or a change in site classification from land with a low potential for public exposure to land with a high potential for public exposure; or any change or deletion of a requirement established in an approved land application plan or established as a condition of coverage under a permit that would result in a decrease in buffer size, site monitoring, or facility reporting requirements, which was not otherwise provided for in the permit or plan approval process.

"Site" means all areas of land, including buffer areas, which are identified in the scope of an approved site specific land application plan. A site is considered to be new or expanded when biosolids are applied to an area not approved in a site specific land application plan or that was not previously disclosed during a required public notice process.

"Specific oxygen uptake rate (SOUR)" is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the biosolids.

"State" means the state of Washington.

"Store or storage of biosolids or sewage sludge" is the placing of biosolids or sewage sludge on land or in surface impoundments or other containment devices in which the biosolids or sewage sludge remain for two years or less, except where a greater time period has been approved by the department. This does not include the placing of biosolids or sewage sludge on land or in surface impoundments or other containment devices for treatment or disposal.

"Stover" is the nongrain, above-ground part of a grain crop, often corn or sorghum.

"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"Surface waters of the state" means surface waters of the state as defined in WAC 173-201A-020.

"Tank" means a stationary device designed to contain an accumulation of liquid or semisolid materials and which is constructed primarily of nonearthen materials to provide structural support.

"Temporary, small-scale storage" is the storage of biosolids or sewage sludge for no more than thirty days in a tank holding no more than 10,000 gallons with a total on-site maximum volume of no more than 20,000 gallons.

"Total solids" are the materials in biosolids that remain as residue when the biosolids are dried at 103 to 105°C (217.4 to 221°F).

"Treat or treatment of biosolids" is the preparation of biosolids for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of biosolids. This does not include storage of biosolids.

"Treatment works" is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

"Treatment works treating domestic sewage" means a publicly owned treatment works or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage or sewage sludge, including land dedicated for the disposal of sewage sludge. Treatment works treating domestic sewage also includes beneficial use facilities and septage management facilities as defined in this section, and a person, site, or facility designated as a treatment works treating domestic sewage in accordance with WAC 173-308-310 (1)(b). This definition does not include septic tanks or similar devices or temporary, small-scale storage as defined in this section.

"Unstabilized solids" are organic materials in biosolids that have not been treated in either an aerobic or anaerobic treatment process.

"Vector attraction" is the primarily odorous characteristic of biosolids that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

"Volatile solids" is the amount of the total solids in biosolids that are lost when the biosolids are combusted at 550°C (1,022°F) in the presence of excess air.

"Waters of the state" means waters of the state as defined in RCW 90.48.020.

"Wetlands" means those areas that are inundated or saturated by surface water or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-080, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-080, filed 2/18/98, effective 3/21/98.]

WAC 173-308-090 Requirement for a person who prepares biosolids or sewage sludge. Any person who prepares biosolids or sewage sludge must ensure that the applicable requirements in this chapter and any applicable permit issued under this chapter are met when the biosolids are managed.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-090, filed 5/24/07, effective 6/24/07. Statutory Authority:

RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-090, filed 2/18/98, effective 3/21/98.]

WAC 173-308-100 Requirement for a person who transports biosolids or sewage sludge. This section applies to facilities required to obtain a permit under this chapter who transport their biosolids or sewage sludge or contract for the transportation of their biosolids or sewage sludge.

(1) Any person who transports biosolids or sewage sludge must ensure that the transportation vehicle is properly cleaned prior to use of the vehicle for the transportation of food crops, feed crops, or fiber crops.

(2) **Spill prevention/response plan.** Facilities must submit a spill prevention/response plan to the department which describes how they will attempt to prevent and respond to any spillage of biosolids or sewage sludge during transportation. The plan must include a list of contact names and numbers, an explanation of how and when they would be contacted, what their role is, and how a spill would be cleaned up. For those who contract for the transportation of their biosolids or sewage sludge, a contractor's plan is sufficient if the minimal requirements are met.

(3) The transportation of biosolids or sewage sludge is otherwise subject to regulation by the Washington state utilities and transportation commission under Title 81 RCW and WAC 173-308-030(2).

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-100, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-100, filed 2/18/98, effective 3/21/98.]

WAC 173-308-110 Requirement for a person who applies biosolids. A person may not apply biosolids to the land except in accordance with applicable requirements of this chapter and any applicable permit issued under this chapter.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-110, filed 2/18/98, effective 3/21/98.]

WAC 173-308-120 Requirement to obtain and provide information. (1) It is a violation of the provisions of this chapter for any person to falsify a certification or statement that is required by these rules or to make any required certification or statement under false pretense.

(2) Any person who applies biosolids to the land must obtain information needed to comply with the requirements of this chapter.

(3) The person who prepares biosolids must provide the person who applies biosolids to the land with notice and necessary information to comply with the requirements of this chapter, including sufficient information on the concentration and types of nutrients in the biosolids needed to determine an agronomic rate for the crop under management.

(4) When a person who prepares biosolids provides the biosolids to another person who further prepares the biosolids, the person who provides the biosolids must provide the person who receives the biosolids notice and necessary information to comply with the requirements of this chapter.

(5) The person who applies bulk biosolids to the land must provide the owner or lease holder of the land on which the bulk biosolids are applied notice and necessary information to comply with the requirements of this chapter.

(6) The person who applies nonexceptional quality bulk biosolids to the land must obtain written approval of the landowner prior to applying biosolids to the land for the first time.

(7) All persons required to keep and maintain records under any provision of this chapter must provide access to those records during normal business hours to a representative of the department, a local health jurisdiction, or the United States EPA, and to the owner, lessor, lessee or other person with a legal management interest in the land on which the biosolids are applied, at the location where the records are kept.

(8) Any facility, including a beneficial use facility, must immediately notify all sources from which it receives biosolids, if at any time it becomes unsuitable for the purpose of receiving biosolids from those other sources.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-120, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-120, filed 2/18/98, effective 3/21/98.]

WAC 173-308-130 Requirements for treatment works located outside of the jurisdiction of the department. When bulk biosolids or sewage sludge or biosolids in a bag or other container originating from treatment works located on tribal lands, in other states, or in other nations are exported into the state, the requirements of this section must be met.

(1) Bulk biosolids or sewage sludge from a treatment works seeking its own management program within the state must meet the following requirements:

(a) The exporting facility must apply for a permit in accordance with the requirements in WAC 173-308-310 and receive final coverage under a general permit or receive an individual permit prior to exporting biosolids or sewage sludge into the state.

(b) The exporting facility must pay a fee as determined by the criteria specified in WAC 173-308-320.

(2) Bulk biosolids or sewage sludge from a treatment works seeking to transfer its biosolids or sewage sludge to a facility within the state for management or further treatment must meet the following requirements:

(a) The exporting facility must receive written approval from the department prior to exporting biosolids or sewage sludge for the first time.

(b) There must be no sustainable objection to the approval required in (a) of this subsection from the EPA or the local health jurisdiction(s) in the county(s) where the material will be received.

(c) The biosolids or sewage sludge must be exported to a facility with a current permit issued by the department that allows it to accept biosolids or sewage sludge from other facilities.

(d) The receiving facility must maintain any applicable records and certification statements required in WAC 173-308-290 on the biosolids or sewage sludge from the exporting facility and provide such records to the department upon request and in its annual biosolids report.

(e) The exporting facility must pay a fee as determined by the criteria specified in WAC 173-308-320.

(3) Biosolids in a bag or other container must meet the following requirements:

(a) The exporting facility must receive written approval from the department prior to exporting biosolids for the first time.

(b) The biosolids must meet the requirements in WAC 173-308-260.

(4) The exporting facility must be in compliance with any other federal, state, provincial, or local biosolids or sewage sludge laws, regulations, and ordinances.

(5) All other applicable requirements of this chapter must be met.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-130, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-130, filed 2/18/98, effective 3/21/98.]

WAC 173-308-140 Biosolids sampling and analytical methods. (1) **Sampling.** Samples that are collected and analyzed must be representative of the biosolids that are applied to the land.

(2) **Analytical methods.**

(a) The most current version of the publications listed in this subsection are incorporated by reference. These publications are available for review during normal working hours at the Washington State Department of Ecology headquarters located at 300 Desmond Drive in Olympia, Washington. Copies may be obtained from the standard producer or publisher.

(b) Unless otherwise stipulated by the department, the following methods (or methods in 40 CFR Part 136 or 40 CFR Part 503) must be used to analyze samples of biosolids or sewage sludge.

ANALYTICAL METHODS

Parameter	Analytical Method
Arsenic	SW-846 Method 6010 SW-846 Method 6020 SW-846 Method 7010 SW-846 Method 7061
Cadmium	SW-846 Method 6010 SW-846 Method 6020 SW-846 Method 7000B SW-846 Method 7010
Copper	SW-846 Method 6010 SW-846 Method 6020 SW-846 Method 7000B SW-846 Method 7010
Lead	SW-846 Method 6010 SW-846 Method 6020 SW-846 Method 7000B SW-846 Method 7010
Mercury	SW-846 Method 7470 SW-846 Method 7471
Molybdenum	SW-846 Method 6010 SW-846 Method 6020 SW-846 Method 7000B SW-846 Method 7010
Nickel	SW-846 Method 6010 SW-846 Method 6020 SW-846 Method 7000B
	SW-846 Method 7010
Selenium	SW-846 Method 6010 SW-846 Method 6020 SW-846 Method 7010 SW-846 Method 7741
Zinc	SW-846 Method 6010 SW-846 Method 6020 SW-846 Method 7000B SW-846 Method 7010
Fecal Coliform	SM 9221 C or E SM 9222 D Appendix F, EPA/625/R-92/013 EPA 1680 EPA 1681
Salmonella Bacteria	SM 9260 D Appendix G, EPA/625/R-92/013 EPA 1682
Helminth Ova	Appendix I, EPA/625/R-92/013
Enteric Viruses	ASTM Designation: D 4994-89 Appendix H, EPA/625/R-92/013
Total Kjeldahl Nitrogen (TKN)	SM Method 4500, N_{org} B SM Method 4500, N_{org} C
Nitrate (as N)	SM Method 4500-NO_3 E, F, or H
Nitrite (as N)	SM Method 4500-NO_2 B
Ammonia (as N)	SM Method 4500-NH_3 B + C, D, E, or G
Organic Nitrogen	Value calculated as TKN minus NH_3-N
Total Phosphorus	SM Method 4500-P B + E or F
Total Solids, Fixed Solids, or Volatile Solids	SM Method 2540 G
Volatile Solids Reduction	Appendix C, EPA/625/R-92/013
Additional Volatile Solids Reduction for Anaerobically Digested Solids	Appendix D (1), EPA/625/R-92/013
Additional Volatile Solids Reduction for Aerobically Digested Solids	Appendix D (3), EPA/625/R-92/013
Specific Oxygen Update Rate (SOUR)	SM Method 2710 B Appendix D (2), EPA/625/R-92/013
pH	SW-846 Method 9045D
TCLP	SW-846 Method 1311
Paint Filter Test	SW-846 Method 9095B

Parameter		Analytical Method
Where:		
ASTM	=	"*Standard Practice for Recovery of Viruses From Wastewater Sludges*," Annual Book of ASTM Standards: Section 11-Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.
EPA/625/R-92/013	=	"*Environmental Regulations and Technology, Control of Pathogens and Vector Attraction in Sewage Sludge (Including Domestic Septage) Under 40 CFR Part 503*," U.S. Environmental Protection Agency, Office of Research and Development, National Risk Management Research Laboratory, Center for Environmental Research Information, Cincinnati, OH 45268.
EPA 1680	=	USEPA. Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation Using Lauryl-Tryptose Broth (LTB) and EC Medium. U.S. Environmental Protection Agency, Office of Water, Washington, DC EPA-821-R-06-012.
EPA 1681	=	USEPA. Method 1681: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using A-1 Medium. U.S. Environmental Protection Agency, Office of Water, Washington, DC EPA-821-R-06-013.
EPA 1682	=	USEPA. Method 1682: *Salmonella* in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium. U.S. Environmental Protection Agency, Office of Water, Washington, DC EPA-821-R-06-014.
SM	=	"*Standard Methods for the Examination of Water and Wastewater*," American Public Health Association, 1015 15th Street NW, Washington, DC 20005.
SW-846	=	"*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," EPA publication SW-846. Available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-140, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-140, filed 2/18/98, effective 3/21/98.]

WAC 173-308-150 Frequency of biosolids monitoring. (1) The frequency of monitoring required by this section is based on the dry weight tonnage of bulk biosolids applied to the land per three hundred sixty-five-day period or the dry weight tonnage of biosolids received per three hundred sixty-five-day period by a person who prepares biosolids that are sold or given away for application to the land.

(2) The person who prepares biosolids is responsible for ensuring that monitoring is carried out in accordance with the requirements of this chapter and any applicable permit.

(3) The minimum frequency of monitoring listed below applies to the pollutants listed in Tables 1, 2, and 3 of WAC 173-308-160, the pathogen density requirements in WAC 173-308-170, and the vector attraction reduction requirements in WAC 173-308-180.

MINIMUM FREQUENCY OF MONITORING

Metric tons (U.S. tons) per 365-day period	Frequency
Greater than zero but less than 290 (320)	once per year
Equal to or greater than 290 (320) but less than 1,500 (1,653)	once per quarter (4 times per year)
Equal to or greater than 1,500 (1,653) but less than 15,000 (16,535)	once per 60 days (6 times per year)
Equal to or greater than 15,000 (16,535)	once per month (12 times per year)

(4) Treatment works treating domestic sewage that transfer biosolids or sewage sludge for further treatment to another facility are not required to monitor for pollutant concentrations, pathogen reduction, or vector attraction reduction unless specifically required to do so in a permit issued by the department.

(5) After the biosolids have been monitored for two years at the frequency in this section, the person who prepares the biosolids may request the department to reduce the frequency of monitoring for pollutant concentrations. The frequency of monitoring must not be less than once per year when biosolids are applied to the land.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-150, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-150, filed 2/18/98, effective 3/21/98.]

WAC 173-308-160 Biosolids pollutant limits. This section sets pollutant concentration limits and cumulative pollutant loading rate limits for biosolids that are applied to the land.

(1) **Table 1.** Table 1 of this section sets the maximum allowable concentration (ceiling limit) of pollutants in biosolids that are applied to the land. Sewage sludge that contains any pollutant listed in Table 1 of this section at a concentration greater than the allowable ceiling limit is not biosolids, is a solid waste, and may not be applied to the land.

(2) **Table 2.** Table 2 of this section sets the maximum quantities of pollutants that may be added to an area of land, also referred to as the cumulative pollutant loading rate. The cumulative pollutant loading rates in Table 2 apply when the concentration of any pollutant in biosolids that are applied to the land exceeds the allowable pollutant concentration limit in Table 3 of this section.

(a) A person may not apply bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section to a land application site, if any of those rates have been reached on the site.

(b) Before bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section are applied to the land, the person who proposes to apply the bulk biosolids must contact the local health jurisdiction and the department to determine whether bulk biosolids subject to the cumulative pollutant loading rates were applied to the site before the effective date of this chapter.

(i) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site since that date is known, in addition to any amount subtracted in (b)(iii) of this subsection, the amount previously applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(ii) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have been applied to the site since July 20, 1993, and the cumulative amount of each pollutant applied to the site in the bulk biosolids since that date is not known, additional biosolids subject to the cumulative pollutant loading rates in Table 2 of this section may not be applied to the site.

(iii) If bulk biosolids were applied to the site prior to July 20, 1993, and the cumulative amount of each pollutant applied to the site prior to that date can be determined, in addition to any amount subtracted in (b)(i) of this subsection, the amount applied must be subtracted from the cumulative pollutant loading rate for each pollutant, to determine the remaining amount of pollutant that may be applied to the site.

(iv) If bulk biosolids subject to the cumulative pollutant loading rates in Table 2 of this section have not been applied to the site, the cumulative amount of each pollutant listed in Table 2 of this section may be applied to the site.

(v) Any person who applies bulk biosolids to the land, which are subject to the cumulative pollutant loading rates in Table 2 of this section, must provide written notice prior to the initial application of bulk biosolids to the land. Notice must be submitted to the department, and to any local health jurisdiction in whose jurisdiction the biosolids will be applied. The department and the local health jurisdiction must retain and provide access to the notice. The notice must include the following:

(A) The location of each site, either by street address, the latitude and longitude of the approximate center, or the section, township and range of each quarter section, **and** a map(s) with the application area(s) clearly shown.

(B) The name, address, telephone number, and National Pollutant Discharge Elimination System (NPDES) or state waste discharge permit number and state biosolids permit number (if applicable) of the person who prepared the biosolids and also of the person who applies (if applicable) the bulk biosolids.

(3) **Table 3.** Table 3 of this section sets a lower pollutant concentration threshold which, when achieved, relieves the person who prepares biosolids and the person who applies biosolids, from certain requirements related to recordkeeping, reporting, and labeling.

TABLE 1 - CEILING CONCENTRATION LIMITS

POLLUTANT	CEILING CONCENTRATION **milligrams per kilogram (dry weight basis)**
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7500

TABLE 2 - CUMULATIVE POLLUTANT LOADING RATES

POLLUTANT	CUMULATIVE POLLUTANT LOADING RATE **kilograms per hectare (dry weight basis)**
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

TABLE 3 - POLLUTANT CONCENTRATION LIMITS

POLLUTANT	LIMIT **monthly average in milligrams per kilogram (dry weight basis)**
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-160, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-160, filed 2/18/98, effective 3/21/98.]

WAC 173-308-170 Pathogen reduction. This section contains the requirements for biosolids to be classified either Class A or Class B with respect to pathogens.

The Class A pathogen reduction requirements must be met at the same time or before the vector attraction reduction requirements in WAC 173-308-180 (1), (2), or (3).

(1) **Class A - Alternative 1: Time and Temperature.**

(a) ***Fecal coliform or Salmonella sp. bacteria density.*** The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis) or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used, at the time the biosolids are prepared for sale or give away in a bag or other container for applica-

tion to the land, or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, and one of the requirements in (b) through (e) of this subsection must be met.

(b) When the percent solids of the biosolids is seven percent or higher, the temperature of the biosolids must be 50°C (122°F) or higher, the time period must be twenty minutes or longer, and the temperature and time period must be determined using equation (1), except when small particles of biosolids are heated by either warmed gases or an immiscible liquid.

$$\text{Equation (1)} \qquad D = \frac{131{,}700{,}000}{10^{0.1400t}}$$

Where:

D = time in days
t = temperature in degrees Celsius

(c) When the percent solids of the biosolids is seven percent or higher and small particles of biosolids are heated by either warmed gases or an immiscible liquid, the temperature of the biosolids must be 50°C (122°F) or higher, the time period must be fifteen seconds or longer, and the temperature and time period must be determined using equation (1).

(d) When the percent solids of the biosolids is less than seven percent and the time period is at least fifteen seconds, but less than thirty minutes, the temperature and time period must be determined using equation (1).

(e) When the percent solids of the biosolids is less than seven percent, the temperature of the biosolids is 50°C (122°F) or higher, and the time period is thirty minutes or longer, the temperature and time period must be determined using equation (2).

$$\text{Equation (2)} \qquad D = \frac{50{,}070{,}000}{10^{0.1400t}}$$

Where:

D = time in days
t = temperature in degrees Celsius

(2) **Class A - Alternative 2: pH, Time, Temperature, and Percent Solids.**

(a) ***Fecal coliform or Salmonella sp. bacteria density.*** The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis) or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used, at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land, or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, and the requirements in (b) of this subsection must be met.

(b) The pH of the biosolids that are used must be raised to above twelve and remain above twelve for seventy-two hours.

(i) The temperature of the biosolids must be above 52°C (126°F) for twelve hours or longer during the period that the pH of the biosolids is above twelve.

(ii) At the end of the seventy-two-hour period during which the pH of the biosolids is above twelve, the biosolids must be air dried to achieve a percent solids in the biosolids greater than fifty percent.

(3) **Class A - Alternative 3: Processes to Further Reduce Pathogens.**

(a) ***Fecal coliform or Salmonella sp. bacteria density.*** The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids (dry weight basis) or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used, at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land, or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, and one of the requirements in (b)(i) through (vii) of this subsection must be met.

(b) ***Processes to further reduce pathogens.*** The biosolids must be treated in one of the processes to further reduce pathogens described in this subsection.

(i) *Composting*.

(A) Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the biosolids must be maintained at 55°C (131°F) or higher for three days.

(B) Using the windrow composting method, the temperature of the biosolids must be maintained at 55°C (131°F) or higher for fifteen days or longer. During the period when the compost is maintained at 55°C (131°F) or higher, there must be a minimum of five turnings of the windrow.

(ii) *Heat drying*. Biosolids must be dried by direct or indirect contact with hot gases to reduce the moisture content of the biosolids to ten percent or less and one of the following requirements must be met.

(A) The temperature of the biosolids particles must exceed 80°C (176°F).

(B) The wet bulb temperature of the gas in contact with the biosolids as the biosolids leave the dryer must exceed 80°C (176°F).

(iii) *Heat treatment*. Liquid biosolids must be heated to a temperature of 180°C (356°F) or higher for thirty minutes.

(iv) *Thermophilic aerobic digestion*. Liquid biosolids must be agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the biosolids must be at least ten days at 55 to 60°C (131 to 140°F).

(v) *Beta ray irradiation*. Biosolids must be irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20°C (68°F)).

(vi) *Gamma ray irradiation*. Biosolids must be irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (ca. 20°C (68°F)).

(vii) *Pasteurization.* The temperature of the biosolids must be maintained at 70°C (158°F) or higher for thirty minutes or longer.

(4) **Class A - Alternative 4: Equivalent Process to Further Reduce Pathogens.**

(a) ***Fecal coliform or Salmonella sp. bacteria density.*** The density of fecal coliform in the biosolids must be less than 1000 Most Probable Number per gram of total solids

(dry weight basis) or the density of *Salmonella* sp. bacteria in the biosolids must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are used, at the time the biosolids are prepared for sale or give away in a bag or other container for application to the land, or at the time the biosolids or material derived from biosolids is prepared to meet the requirements for exemption in WAC 173-308-200, and the requirements in (b) of this subsection must be met.

(b) The biosolids must be treated in a process that is equivalent to a process to further reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

(5) **Class B - Alternative 1: Testing.** A minimum of seven samples of the biosolids must be collected at the time the biosolids are used, and the geometric mean of the density of fecal coliform of the samples must be less than 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

(6) **Class B - Alternative 2: Process to Significantly Reduce Pathogens.** The biosolids must be treated in one of the processes to significantly reduce pathogens described in (a) through (e) of this subsection.

(a) ***Aerobic digestion.*** The biosolids must be agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between forty days at 20°C (68°F) and sixty days at 15°C (59°F).

(b) ***Air drying.*** The biosolids must be dried on sand beds or on paved or unpaved basins. The biosolids must dry for a minimum of three months. During two of the three months, the ambient average daily temperature must be above 0°C (32°F). During the air drying period, no additional material may be added.

(c) ***Anaerobic digestion.*** The biosolids must be treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature must be between fifteen days at 35 to 55°C (95 to 131°F) and sixty days at 20°C (68°F).

(d) ***Composting.*** Using the within-vessel, static aerated pile, or windrow composting methods, the temperature of the biosolids must be raised to 40°C (104°F) or higher and remain at 40°C (104°F) or higher for five days. For four hours during the five days, the temperature in the compost pile must exceed 55°C (131°F).

(e) ***Lime stabilization.*** Sufficient lime must be added to the biosolids to raise the pH of the biosolids to twelve after two hours of contact.

(7) **Class B - Alternative 3: Equivalent Process to Significantly Reduce Pathogens.** The biosolids must be treated in a process that is equivalent to a process to significantly reduce pathogens. Pathogen equivalency for biosolids applied to land under jurisdiction of the state of Washington will be determined by the department or by the EPA with the approval and concurrence of the department.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-170, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-170, filed 2/18/98, effective 3/21/98.]

WAC 173-308-180 Vector attraction reduction. When vector attraction reduction is accomplished prior to application of biosolids to the land, the requirements in one of subsections (1) through (6) of this section must be met.

The vector attraction reduction requirements in subsection (1), (2), or (3) of this section must be met at the same time or after the Class A pathogen requirements in WAC 173-308-170.

(1) **Alternative 1: Volatile Solids Reduction.** The mass of volatile solids in the biosolids must be reduced by a minimum of thirty-eight percent.

(a) ***Bench-scale test for anaerobically digested solids.*** When the thirty-eight percent volatile solids reduction requirement in this subsection cannot be met for anaerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids anaerobically in the laboratory in a bench-scale unit for forty additional days at a temperature between 30 and 37°C (86 and 98.6°F). After the forty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than seventeen percent.

(b) ***Bench-scale test for aerobically digested solids.*** When the thirty-eight percent volatile solids reduction requirement in this subsection cannot be met for aerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for thirty additional days at 20°C (68°F). After the thirty-day period, the vector attraction reduction requirement is met if the volatile solids in the biosolids at the beginning of that period are reduced by less than fifteen percent.

(2) **Alternative 2: Specific Oxygen Uptake Rate (SOUR).** The specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process must be less than or equal to 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20°C (68°F).

(3) **Alternative 3: Aerobic Process.** The biosolids must be treated in an aerobic process for fourteen days or longer. During that time, the temperature of the biosolids must be higher than 40°C (104°F) and the average temperature of the biosolids must be higher than 45°C (113°F).

(4) **Alternative 4: pH Adjustment.** The pH of the biosolids must be raised to twelve or higher by alkali addition and, without the addition of more alkali, must remain at twelve or higher for two hours and then at 11.5 or higher for an additional twenty-two hours.

(5) **Alternative 5: Percent Solids for Stabilized Solids.** For biosolids that do not contain unstabilized solids generated in a primary wastewater treatment process, the percent solids must be equal to or greater than seventy-five percent based on the moisture content and total solids prior to mixing with other materials.

(6) **Alternative 6: Percent Solids for Unstabilized Solids.** For biosolids that contain unstabilized solids generated

in a primary wastewater treatment process, the percent solids must be equal to or greater than ninety percent based on the moisture content and total solids prior to mixing with other materials.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-180, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-180, filed 2/18/98, effective 3/21/98.]

WAC 173-308-190 Protecting waters of the state—Agronomic rate requirement. (1) Biosolids must be applied to the land in a manner approved by the department and at agronomic rates, except when approved by the department for land reclamation sites in accordance with subsection (3) of this section or for research purposes when approved by the department in accordance with WAC 173-308-192 or in a site-specific land application plan developed under WAC 173-308-310(8).

(2) Agronomic rate determinations must take into account nitrogen supplied from other sources such as manures, cover crops, and commercial fertilizers as well as biosolids.

(3) Biosolids applied to land reclamation sites may be applied in excess of agronomic rates if approved by the department in a site specific land application plan developed under WAC 173-308-310(8).

(4) The person who prepares exceptional quality biosolids that are sold or given away to another person must provide sufficient information to allow the person who receives the biosolids to determine an agronomic rate of application.

(5) The person who applies exceptional quality biosolids to the land is responsible for compliance with the agronomic rate requirement in this section.

(6) When the potential for ground water contamination due to biosolids application exists, the department may require ground water monitoring or other conditions in accordance with the provisions of chapter 173-200 WAC. If it is determined that an enforcement criterion may be violated, an evaluation must be conducted to demonstrate compliance with the provisions of chapter 173-200 WAC.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-190, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-190, filed 2/18/98, effective 3/21/98.]

WAC 173-308-191 Protection of endangered or threatened species. Biosolids may not be applied to the land if they are likely to adversely affect a threatened or endangered species or its critical habitat as listed under Title 232 WAC or section 4 of the Endangered Species Act.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-191, filed 5/24/07, effective 6/24/07.]

WAC 173-308-192 Exemptions for research. For the purposes of furthering necessary research, the land application of nonexceptional quality biosolids is exempt from the agronomic rate requirements in WAC 173-308-190 or 173-308-270, the reporting requirements in WAC 173-308-295, and the permitting requirements in WAC 173-308-310 if all of the following requirements are met:

(1) A research proposal must be submitted containing, at a minimum, the following:

(a) A description of the nature of the project, what may be learned, the anticipated benefits, provisions for progress reports, provisions for peer review, and provisions for providing a final report to the department.

(b) A discussion of any potential adverse impacts of application rates in excess of agronomic rates, along with potential mitigation or response to adverse effects if observed.

(c) An explanation for the sizing of the research plot(s) that will receive biosolids. Plot size must not exceed the minimum area required to support the goals of the research.

(2) The generator of the biosolids must report the dry tons of biosolids land applied in the research project in their annual biosolids report required under WAC 173-308-295.

(3) The department must approve, in writing, the research proposal required in subsection (1) of this section.

(4) There must be no sustainable objections to the approval required in subsection (3) of this section from the EPA or the local health jurisdiction(s) in the county(s) where the biosolids will be managed.

(5) All other applicable requirements of this chapter must be met.

(6) All other local, state, and federal regulatory requirements must be met.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-192, filed 5/24/07, effective 6/24/07.]

WAC 173-308-193 Management and exemptions for septage from composting toilets. (1) The residual solids from composting toilet systems (also known as "waterless toilets") that receive only domestic waste are considered to be septage.

(2) Septage from composting toilet systems must either be sent to a permitted facility for further treatment, or it must be managed in accordance with the requirements in WAC 173-308-270 and other applicable sections of this chapter.

(3) Unless a permit is otherwise required by the department, persons who land apply septage from composting toilet systems and sites where the septage is applied are exempt from the reporting requirements in WAC 173-308-295 and the permitting requirements in WAC 173-308-310.

(4) All other applicable requirements of this chapter must be met.

(5) All other local, state, and federal regulatory requirements must be met.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-193, filed 5/24/07, effective 6/24/07.]

WAC 173-308-200 Exemptions based on the exceptional quality of biosolids. The person who prepares and the person who applies biosolids that meet the exceptional quality standards are exempt from the following requirements:

(1) The requirement in WAC 173-308-120(6) for obtaining prior written approval of the landowner.

(2) The site management and access restrictions in WAC 173-308-210(5) except where, on a case-by-case basis, the director applies any or all restrictions after determining that the requirements are necessary to protect public health and

the environment from any adverse effect that may occur from a pollutant in the bulk biosolids.

(3) The recordkeeping and certification requirements in WAC 173-308-290(3).

(4) The requirement in WAC 173-308-300 (6)(c) for submittal of a land application plan when used as a component of intermediate or final cover at a municipal solid waste landfill.

(5) The land application plan requirements of WAC 173-308-310(8), except as provided in WAC 173-308-310 (8)(a)(ii) or (iii).

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-200, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-200, filed 2/18/98, effective 3/21/98.]

WAC 173-308-205 Significantly remove manufactured inerts. (1) Except for sewage sludge approved for long-term disposal in accordance with WAC 173-308-300(9), all biosolids (including septage) or sewage sludge must be treated by a process such as physical screening or another method to significantly remove manufactured inerts prior to final disposition. Meeting this requirement may occur at any point in the wastewater treatment or biosolids manufacturing process.

(2) **Options for meeting the requirement.** Meeting the requirement in subsection (1) of this section can be accomplished by either of the following:

(a) Screening through a bar screen with a maximum aperture of 3/8 inch (0.95 cm).

(b) Obtaining approval from the department for an alternative method that achieves a removal rate similar to or greater than that achieved by the screening standard in (a) of this subsection.

(3) **Timing for meeting the requirement.** The requirement in subsection (1) of this section must be met by July 1, 2012, or at the time of final disposition if the material will not be managed prior to July 1, 2012.

(4) Regardless of the date that the requirement in subsection (1) of this section is met, biosolids (including septage) that are land applied or sold/given away in a bag or other container must contain less than one percent by volume recognizable manufactured inerts.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-205, filed 5/24/07, effective 6/24/07.]

WAC 173-308-210 Bulk biosolids applied to agricultural land, forest land, a public contact site, or a land reclamation site. (1) Bulk biosolids applied to agricultural land, forest land, a public contact site, or a land reclamation site must meet the requirements for a significant reduction in manufactured inerts in WAC 173-308-205.

(2) **Pollutant concentrations.**

(a) The concentration of a pollutant in bulk biosolids that are applied to agricultural land, forest land, a public contact site, or a land reclamation site may not exceed the allowable ceiling limit in Table 1 of WAC 173-308-160.

(b) If the concentration of a pollutant in bulk biosolids that are applied to agricultural land, forest land, a public contact site, or a land reclamation site exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, then the total cumulative loading rate for each pollutant may not exceed the limit in Table 2 of WAC 173-308-160, and the requirements in WAC 173-308-160(2) must be met.

(3) **Pathogens.** Bulk biosolids that are applied to agricultural land, forest land, a public contact site, or a land reclamation site must be Class A for pathogens, or they must be Class B for pathogens and the site management and access restrictions in subsection (5) of this section must be met.

(4) **Vector attraction reduction.** Bulk biosolids that are applied to agricultural land, forest land, a public contact site, or a land reclamation site must meet one of the vector attraction reduction requirements in WAC 173-308-180 (1) through (6) before they are applied to the land, or the requirements of (a) or (b) of this subsection must be met.

(a) ***Injection*.** The biosolids must be injected below the surface of the land and the following requirements must be met, as applicable.

(i) No significant amount of the biosolids may be present on the land surface within one hour after the biosolids are injected.

(ii) When the biosolids are Class A for pathogens, the biosolids must be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(b) ***Incorporation*.** Biosolids must be incorporated into the soil within six hours after application to the land. When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids must be applied to the land within eight hours after being discharged from the pathogen treatment process.

(5) **Site management and access restrictions.**

(a) ***Class B biosolids.*** The site management and access restrictions in (a) and (b) of this subsection are applicable to biosolids that are Class B for pathogens.

(i) Food crops, feed crops, and fiber crops must not be harvested for a minimum of thirty days after the last application of biosolids.

(ii) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be harvested for a minimum of fourteen months after the last application of biosolids.

(iii) Food crops with harvested parts below the surface of the land must not be harvested for a minimum of twenty months after the last application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iv) Food crops with harvested parts below the surface of the land must not be harvested for thirty-eight months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(v) Livestock must not be allowed to graze on the land for a minimum of thirty days after the last application of biosolids.

(vi) Turf grown on land where biosolids are applied must not be harvested for a minimum of one year after the last application of the biosolids unless otherwise specified by the department.

(vii) Public access to land with a high potential for public exposure must be restricted for a minimum of one year after the last application of biosolids.

(viii) Public access to land with a low potential for public exposure must be restricted for a minimum of thirty days after the last application of biosolids.

(ix) Biosolids must not be applied to the land within one hundred feet (30.5 meters) of a well unless otherwise approved in a permit issued in accordance with the requirements of this chapter.

(x) During the time when access is restricted, signs must be posted around the application site at all significant points of access and at least every 1/2 mile (805 meters) around the perimeter of the site. Unless the department has approved the substitution of "no trespassing" signs for informational signs, signs must contain at least the following:

(A) The name and address or phone number of the generator and if different, the person who applies.

(B) The names, addresses, and phone numbers of the regulatory and permitting authorities.

(C) The material that is being applied (biosolids or a more detailed description).

(D) Notice that access is restricted, and if desired, the date after which access is no longer restricted.

(E) If applicable, a notice on limitations regarding the harvest of edible plants from the site.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of this subsection during the period when access is restricted.

(b) ***Nonexceptional quality biosolids.*** The following site management restrictions are applicable to nonexceptional quality biosolids when they are applied to agricultural land, forest land, a public contact site, or a land reclamation site:

(i) Bulk biosolids may not be applied to land that is thirty-three feet (10 meters) or less from surface waters of the state, unless otherwise specified by the department.

(ii) Bulk biosolids may not be applied to the land so that they enter a wetland or waters of the state, unless approved in a permit issued by the department or by EPA with the approval of the department.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-210, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-210, filed 2/18/98, effective 3/21/98.]

WAC 173-308-250 Bulk biosolids applied to a lawn or home garden. (1) Bulk biosolids applied to a lawn or home garden must meet the requirements for a significant reduction in manufactured inerts in WAC 173-308-205.

(2) Bulk biosolids that are applied to a lawn or home garden must meet the exceptional quality standards.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-250, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-250, filed 2/18/98, effective 3/21/98.]

WAC 173-308-260 Biosolids sold or given away in a bag or other container. (1) Biosolids sold or given away in a bag or other container must meet the requirements for a significant reduction in manufactured inerts in WAC 173-308-205.

(2) Biosolids sold or given away in a bag or other container must meet the exceptional quality standards.

(3) **Label or information sheet required.** Any person who prepares biosolids that are sold or given away in a bag or other container in the state of Washington, must comply with the requirements of this subsection when the biosolids product is prepared or derived from nonexceptional quality biosolids.

(a) A label must be affixed to the bag or other container in which biosolids are sold or given away, or an information sheet must be provided to the person who receives biosolids that are sold or given away in a bag or other container. The label or information sheet must contain the following information:

(i) The name, address, and phone number of the person who prepared the biosolids.

(ii) A statement or information indicating that the product complies with applicable regulations for biosolids or that the product has been prepared to meet standards that make it safe for its intended use when used in accordance with the directions provided by the manufacturer.

(iii) A statement or information that encourages proper use of the product and protection of public health and the environment. This may include information on product storage, hygiene, and protection of surface or ground water resources.

(iv) Agronomic rates for typical applications or guidance on how to determine the agronomic rate of application.

(v) A statement or information indicating that the product contains or is derived from biosolids.

(vi) Unless registered as a fertilizer by the Washington state department of agriculture, a disclaimer stating that the product is not a commercial fertilizer and that all nutrient claims are estimates or averages and not guaranteed.

(b) Any person who prepares biosolids that are sold or distributed outside the jurisdiction of the state of Washington must comply with the requirements in 40 CFR Part 503.14 (e), as applicable.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-260, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-260, filed 2/18/98, effective 3/21/98.]

WAC 173-308-270 Septage applied to the land. This section contains the requirements for the land application of septage as defined in WAC 173-308-080.

This section does not apply to "septage managed as biosolids originating from sewage sludge" as defined in WAC 173-308-080. Facilities who seek to manage their septage as biosolids must meet all of the requirements applicable to the particular classification of biosolids into which it falls.

(1) Septage applied to the land must meet the requirements for a significant reduction in manufactured inerts in WAC 173-308-205.

(2) Septage may not be applied to a public contact site, a lawn, or a home garden.

(3) **Pathogen reduction and vector attraction reduction.**

(a) For loads of septage that are composed of at least seventy-five percent by volume of septage from households, one of the following requirements must be met:

(i) The septage must be injected below the surface of the land and no significant amount of septage may be present on the land surface within one hour after the septage is injected.

(ii) Septage must be incorporated into the soil within six hours after application to the land.

(iii) The pH of the septage must be raised to twelve or higher and must remain at twelve or higher for a minimum of thirty minutes.

(A) A minimum of two tests for pH must be conducted for each load applied to the land.

(B) The first test must occur after a pH of twelve or higher has been attained.

(C) The second test must occur no less than thirty minutes after the first test to show that a pH of twelve or higher has been retained.

(D) If the pH has dropped below twelve when the second test is conducted, the stabilization process must be restarted.

(b) For loads of septage not composed of at least seventy-five percent by volume of septage from households, the requirements in (a)(iii) of this subsection must be met.

(4) **Site management and access restrictions.** All of the following site management and access restrictions are applicable when septage is applied to the land:

(a) Food crops, feed crops, and fiber crops must not be harvested for thirty days after the application of septage.

(b) Food crops with harvested parts that touch the septage/soil mixture and are totally above the land surface must not be harvested for a minimum of fourteen months after the last application of septage.

(c) Food crops with harvested parts below the surface of the land must not be harvested for a minimum of twenty months after the last application of septage when the septage remains on the land surface for four months or longer prior to incorporation into the soil.

(d) Food crops with harvested parts below the surface of the land must not be harvested for a minimum of thirty-eight months after the last application of septage when the septage remains on the land surface for less than four months prior to incorporation into the soil.

(e) Septage must not be applied to land that is one hundred feet (30.5 meters) or less from surface waters of the state, unless otherwise specified by the department.

(f) Septage must not be applied to the land so that it enters a wetland or waters of the state, unless approved in a permit issued by the department, or by EPA with the approval of the department.

(g) Septage must not be applied to the land within one hundred feet (30.5 meters) of a well unless approved in a permit issued by the department.

(h) Domestic animals must not be allowed to graze on the land for a minimum of thirty days after the last application of septage.

(i) Public access to land with a high potential for public exposure must be restricted for a minimum of one year after the last application of septage.

(j) Public access to land with a low potential for public exposure must be restricted for a minimum of thirty days after the last application of septage.

(k) During the time when access is restricted, signs must be posted around the application site at all significant points of access and at least every 1/2 mile (805 meters) around the perimeter of the site. Unless the department has approved the substitution of "no trespassing" signs for informational signs, signs must contain at least the following:

(i) The name and address or phone number of the generator and if different, the person who applies.

(ii) The names, addresses, and phone numbers of the regulatory and permitting authorities.

(iii) The material that is being applied (septage or a more detailed description).

(iv) Notice that access is restricted, and if desired, the date after which access is no longer restricted.

(v) If applicable, a notice on limitations regarding the harvest of edible plants from the site.

It is a violation of these rules for any person to remove a sign posted in accordance with the requirements of this subsection during the period when access is restricted.

(5) **Application rates.**

(a) Septage that is applied to the land must be applied at a rate not exceeding the rate determined by equation (3).

(b) At its discretion, the department may require the use of a different approach for calculating application rates based on the mixture ratios and site specific criteria, but at no time may the rate exceed that calculated by equation (3).

Equation (3)

$$AAR = \frac{N}{0.0026}$$

Where:

AAR = Annual application rate in gallons per acre per 365-day period.

N = Amount of nitrogen in pounds per acre per 365-day period needed by the crop or vegetation grown on the land (*subtract any nitrogen supplied by other sources - for example, commercial fertilizers or manures*).

(6) **Spreader drive length.** To determine the distance (in feet) over which a load of liquid septage should be spread to meet the application rate, use equation (4).

Equation (4)

Drive length (in feet) = gallons in spreader ÷ spread width (in feet) x 43,560 ÷ AAR

Where:

AAR = Annual application rate in gallons per acre per 365-day period.

(7) **Monitoring.**

(a) Samples of septage that are collected and analyzed must be representative of the septage that is applied to the land.

(b) When septage is applied to the land and pH adjustment as described in subsection (3)(a)(iii) of this section is used to meet the pathogen and vector attraction reduction requirements, each container of septage that is applied to the land must be monitored to determine compliance with the pH requirements.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-270, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-270, filed 2/18/98, effective 3/21/98.]

WAC 173-308-275 Contents of signs for land application sites. (1) When signs are required for the purpose of restricting access, they must contain at least the following information:

(a) The name and address or phone number of the generator and if different, the person who applies;

(b) The names, addresses, and phone numbers of the regulatory and permitting authorities;

(c) The material that is being applied (biosolids or a more detailed description);

(d) Notice that access is restricted, and if desired, the date after which access is no longer restricted; and

(e) If applicable, a notice on limitations regarding the harvest of edible plants from the site.

(2) With the consent of the department, "no trespassing" signs may be substituted for the informational signs required under subsection (1) of this section.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-275, filed 2/18/98, effective 3/21/98.]

WAC 173-308-280 Requirements for facilities storing biosolids or sewage sludge. (1) Facilities storing biosolids or sewage sludge under a local, state, or federal water pollution control permit or another environmental permit and facilities conducting temporary, small-scale storage as defined in WAC 173-308-080 are exempt from this section if the department determines that the standards in subsection (3) of this section are being met.

(2) Facilities other than those in subsection (1) of this section storing biosolids or sewage sludge must do so in accordance with the provisions of a permit issued under this chapter.

(3) Biosolids or sewage sludge may not be stored in a manner that would be likely to result in the contamination of ground water, surface water, air, or land under current conditions or in the case of fire or flood.

(4) Facilities existing on July 1, 2007, storing liquid biosolids or sewage sludge in surface impoundments must meet the requirements for the design, construction, and operation of surface impoundments in chapter 173-304 WAC or the standards in chapter 173-350 WAC.

(5) After July 1, 2007, new facilities proposing to store biosolids or sewage sludge in surface impoundments, facilities that are proposing a new surface impoundment, and facilities that are proposing to upgrade existing surface impoundments must meet the requirements for the design, construction, and operation of surface impoundments in chapter 173-350 WAC.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-280, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-280, filed 2/18/98, effective 3/21/98.]

WAC 173-308-290 Recordkeeping. The person who prepares biosolids or sewage sludge, the person who applies nonexceptional quality biosolids to the land, and the person who applies septage to the land must keep certain records and certification statements as described in this section.

(1) A responsible official as described in WAC 173-308-310(10) must sign all certification statements required under this section.

(2) **Preparers of biosolids or sewage sludge.** The person who prepares biosolids or sewage sludge must keep the following records, as applicable, and certification statement for five years:

(a) The amount applied by the preparer/preparer's agent to agricultural land.

(b) The amount applied by the preparer/preparer's agent to forest land.

(c) The amount applied by the preparer/preparer's agent to a public contact site.

(d) The amount applied by the preparer/preparer's agent to a land reclamation site.

(e) The amount applied by the preparer/preparer's agent to a lawn or home garden.

(f) The amount sold or given away by the preparer in a bag or other container.

(g) The amount sold or given away by the preparer in bulk form (does not include that provided to the preparer's agent).

(h) The amount in a compost or blended biosolids product sold or given away by the preparer.

(i) The amount sent to a municipal solid waste landfill for disposal and the name of the landfill.

(j) The amount stored on-site.

(k) The amount transferred to another facility for further treatment and the name of the other treatment facility.

(l) The amount received from another facility and the name of the other facility.

(m) The amount transferred for incineration and the name of the incineration facility.

(n) Laboratory analysis data showing that the pollutant ceiling concentrations in WAC 173-308-160 Table 1 were met.

(o) Laboratory analysis data showing that the pollutant concentrations in WAC 173-308-160 Table 3 were met.

(p) Process monitoring and/or laboratory analysis data showing that the pathogen reduction requirements in WAC 173-308-170 were met and a description of how the requirements were met.

(q) If the vector attraction reduction requirements in WAC 173-308-180 were met, process monitoring and/or laboratory analysis data and a description of how the requirements were met.

(r) Laboratory analysis data showing the nitrogen concentration.

CERTIFICATION STATEMENT:

"I certify, under penalty of law, that the following were met (check boxes, as applicable):

❏ The pollutant ceiling concentration limits in WAC 173-308-160 Table 1.

❏ The pollutant concentration limits in WAC 173-308-160 Table 3.

❏ The Class A pathogen reduction requirements in WAC 173-308-170: ❏(1), ❏(2), ❏(3), ❏(4).

❏ The Class B pathogen reduction requirements in WAC 173-308-170: ❏(5), ❏(6), ❏(7).

❏ The vector attraction reduction requirements in WAC 173-308-180: ❏(1), ❏(2), ❏(3), ❏(4), ❏(5), ❏(6).

This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that pathogen reduction requirements, vector attraction reduction requirements, and pollutant concentration limits have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."
Signature _____ Title _____
Date _____

(3) **Appliers of nonexceptional quality biosolids.** The person who applies nonexceptional quality biosolids must keep the following records, as applicable, and certification statement for five years or indefinitely where stated.

(a) The location of each site, either by street address, the latitude and longitude of the approximate center, or the section, township and range of each quarter section, **and** a map(s) with the application area(s) clearly shown.

(b) The number of acres in each site on which biosolids were applied.

(c) The date biosolids were applied to each site.

(d) The targeted vegetation grown on each site and its nitrogen requirement.

(e) The rate, in dry tons per acre per year, at which biosolids are applied to each site.

(f) The amount, in dry tons, of biosolids applied to each site.

(g) In addition, when biosolids with pollutants exceeding the WAC 173-308-160 Table 3 concentrations are applied, the following records must be kept indefinitely:

(i) The cumulative amount of each pollutant listed in WAC 173-308-160 Table 2 in the biosolids applied to each site.

(ii) A description of how the requirement to obtain information under WAC 173-308-160 (2)(b) was met.

(h) If the biosolids were Class B for pathogens, a description of how the site management and access restrictions in WAC 173-308-210 (5)(a) were met.

(i) If the vector attraction reduction requirements were not met prior to application, a description of how requirements in WAC 173-308-210 (5)(b) were met.

CERTIFICATION STATEMENT:
"I certify, under penalty of law, that the following were met (check boxes, as applicable):
❏ The requirement to obtain information under WAC 173-308-160 (2)(b) (required if any of the pollutant concentrations exceed those in WAC 173-308-160 Table 3).
❏ The vector attraction reduction requirement in ❏WAC 173-308-210(4): ❏(a) or ❏(b) (required if the vector attraction reduction requirements were not met prior to application).
❏ The site management and access restrictions in WAC 173-308-210(5): ❏(a) and/or ❏(b).
This determination was made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met, the site management and access restrictions have been met, and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."
Signature _____ Title _____
Date _____

(4) **Preparers or appliers of septage.** The person who prepares or applies septage to the land must keep the following records, as applicable, and certification statement for five years:

(a) The total number of gallons of septage managed.

(b) The total number of gallons of septage land applied.

(c) The number of gallons of septage managed in any manner other than land application (e.g., transfer to another facility).

(d) The location of each site, either by street address, the latitude and longitude of the approximate center, or the section, township, and range of each quarter section, **and** a map(s) with the application area(s) clearly shown.

(e) The number of acres in each site on which septage is applied.

(f) The date septage is applied to each site.

(g) The targeted vegetation grown on each site and its annual nitrogen requirement.

(h) The rate, in gallons per acre per year, at which septage is applied to each site.

(i) The number of gallons of septage applied to each site.

(j) The source of the septage, including the name and address of the individual or business where the septage was generated, or, in the case of a centralized septage treatment facility, the name of the person or business who delivered the septage, the dates of delivery, and how much septage was delivered.

(k) A description of how the pathogen and vector attraction reduction requirements in WAC 173-308-270(3) were met.

(l) If pH stabilization was used to meet the pathogen and vector attraction reduction requirements in WAC 173-308-270 (3)(a)(iii), pH measurements for each load.

(m) A description of how the applicable site management and access restriction requirements in WAC 173-308-270(4) were met.

CERTIFICATION STATEMENT:
"I certify, under penalty of law, that the following were met (check boxes, as applicable):
The pathogen and vector attraction reduction requirements in WAC 173-308-270(3): ❏(a)(i), ❏(a)(ii), or ❏(a)(iii).
The site management and access restriction requirements in ❏WAC 173-308-270(4).
This determination has been made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements and site management and access restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."
Signature _____ Title _____
Date _____

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-290, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-290, filed 2/18/98, effective 3/21/98.]

WAC 173-308-295 Annual reports. (1) All treatment works treating domestic sewage subject to this chapter must submit to the department by March 1 of each year, an annual report on a form provided by the department.

(2) All requested information that is required under this chapter or an applicable permit must be submitted.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-295, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-295, filed 2/18/98, effective 3/21/98.]

WAC 173-308-300 Disposal of sewage sludge in municipal solid waste landfill units and use of biosolids in municipal solid waste landfill operations. (1) When biosolids are placed in a municipal solid waste landfill unit they are considered solid waste (sewage sludge).

(2) Any landfill accepting sewage sludge for disposal must be in compliance with the requirements of chapter 173-351 WAC and 40 CFR Part 258.

(3) Sewage sludge that is disposed in a municipal solid waste landfill must meet the liquids in landfills restrictions of chapter 173-351 WAC.

(4) Sewage sludge that is disposed in a municipal solid waste landfill must not be hazardous waste as defined in chapter 173-303 WAC or 40 CFR Part 261.

(5) **Daily cover.** The use of sewage sludge as daily cover or as an amendment to daily cover is not a beneficial use and is considered disposal.

(6) **Intermediate or final cover.** The use of biosolids as a component of landfill intermediate or final cover is considered a beneficial use if the following conditions are met:

(a) The use is consistent with an approved landfill plan of operations or closure/post-closure plan.

(b) The biosolids are used for the purposes of establishing a vegetative cover.

(c) If the biosolids are nonexceptional quality, the department has approved a site specific land application plan that meets the requirements of WAC 173-308-310(8). For the purposes of this subsection, a site specific land application plan may recognize an approved plan of operations or closure/post-closure plan that addresses the substantive requirements of WAC 173-308-310(8).

(7) **Disposal on an emergency basis.**

(a) Facilities wishing to dispose of sewage sludge in a municipal solid waste landfill on an emergency basis must meet the conditions of this subsection and those in chapter 173-351 WAC.

(b) The person proposing to dispose of sewage sludge must obtain a written determination from the local health jurisdiction where the sewage sludge is proposed for disposal that a potentially unhealthful circumstance exists under present conditions of management or would result from land application, and that other management options are unavailable or would pose a threat to human health or the environment.

(c) Upon making the determination in (b) of this subsection, the local health jurisdiction must notify the department in writing of its findings and the basis for its determination. In its notification, the local health jurisdiction must state the date on which disposal is approved to commence, any conditions, and the date after which disposal is prohibited.

(8) **Disposal on a temporary basis.**

(a) Any person wishing to dispose of sewage sludge in a municipal solid waste landfill on a temporary basis must submit a plan for approval to the department. The plan must include the following information:

(i) The conditions that make disposal necessary.

(ii) The steps that will be taken to correct the conditions that make disposal necessary so that disposal will not become a long-term management option.

(iii) A time table for implementing the steps to be taken to correct the conditions that make disposal necessary.

(b) The person proposing to dispose must provide the department with written approval for disposal from the local health jurisdiction in the receiving jurisdiction.

(9) **Disposal on a long-term basis.**

(a) Any person wishing to dispose of sewage sludge in a municipal solid waste landfill on a long-term basis must have authorization to do so in a valid NPDES or state waste discharge permit issued under chapter 90.48 RCW or a permit issued under this chapter, and the person must submit for approval to the department an evaluation of the various management options that demonstrates to the satisfaction of the department that options for beneficial use are economically infeasible.

(b) The person proposing to dispose must provide the department with written approval for disposal from the local health jurisdiction in the receiving jurisdiction.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-300, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-300, filed 2/18/98, effective 3/21/98.]

WAC 173-308-310 Permitting. (1) **Applicable facilities—Application required.** All treatment works treating domestic sewage are applicable facilities, and must apply for a permit for the final use or disposal of biosolids or sewage sludge except for certain composting toilet systems described in WAC 173-308-193 and certain composting facilities described in (a) of this subsection.

(a) ***Permitting exemption for some composting facilities.*** Facilities that compost biosolids or sewage sludge do not require permitting under this chapter if all of the following conditions are met:

(i) A permit is not otherwise required in order to comply with the Federal Clean Water Act.

(ii) The department and local health jurisdiction agree that a permit issued by the local health jurisdiction will be adequate.

(iii) The conditions of the permit issued by the local health jurisdiction meet or exceed the requirements of this chapter.

(iv) The department does not otherwise find that a state-issued permit is necessary because one or more of the conditions in (b)(i) through (iv) of this subsection exists.

(b) ***Designation as a treatment works treating domestic sewage.*** In addition to facilities meeting the definition of a treatment works treating domestic sewage in WAC 173-308-

080, the department may designate any person, site, or facility that treats, uses, transports, stores, or applies biosolids, as a treatment works treating domestic sewage, and require the owner or operator to apply for a permit if any of the following conditions are met:

(i) The department determines that a permit is necessary to protect human health or the environment from the adverse effect of a pollutant in the biosolids.

(ii) The department determines that a permit is necessary to protect human health or the environment from poor biosolids management practices.

(iii) The department determines that a permit is necessary to ensure compliance with any of the requirements in this chapter.

(iv) Bulk biosolids or sewage sludge originating from a source or location outside the jurisdiction of the state of Washington are being applied to the land or received at any site or facility.

(c) It is a violation of this chapter for a facility to fail to submit a permit application to the department as required by these rules.

(2) **General and individual permits.** The department will issue permits for the treatment and final use or disposal of biosolids or sewage sludge.

(a) The department will issue, modify, revoke and reissue, and terminate general permits in accordance with the provisions of Appendix 5.

(b) The department will accept and consider applications for coverage under a general permit, modify conditions of coverage, revoke and reissue coverage, or terminate coverage under a general permit in accordance with the provisions of this section.

(c) The department will issue, modify, revoke and reissue, or terminate individual permits in accordance with the provisions of this section.

(3) **Requirements to apply for coverage under a general permit or to request an individual permit.**

(a) After the department has issued a general permit for the final use or disposal of biosolids or sewage sludge, all applicable facilities must apply for coverage under the general permit in accordance with subsection (4) of this section unless any of the following apply:

(i) The facility has a current individual permit issued under this chapter.

(ii) The department requires a facility to apply for an individual permit.

(iii) On written request of the applicant, the department has granted permission to apply for an individual permit.

(A) A facility may request an individual permit if a practice it proposes is not addressed in a general permit issued by the department.

(B) A facility may seek coverage under a general permit for any portion of its biosolids or sewage sludge management practices that are applicable under the general permit and may also request an individual permit for any portion of its biosolids or sewage sludge management practices that are not applicable under the general permit.

(iv) The department may require any facility applying for an individual permit under (a)(iii) of this subsection to limit its practices for the final use or disposal of biosolids or sewage sludge to those that are authorized in a general permit and to apply for coverage under a general permit.

(b) The department may notify a facility that it is covered by a general permit, even if the facility has not submitted a permit application as required under subsection (4) of this section.

(i) A facility so notified may request an individual permit in accordance with the provisions of (a)(iii) of this subsection.

(ii) Facilities that are notified of coverage under this subsection must submit a permit application as directed by the department.

(4) **Timing of permit applications.**

(a) ***Existing facilities seeking coverage under a general permit.*** Existing facilities seeking coverage under a general permit must submit an application for coverage within ninety days after issuance of the applicable general permit by the department. However, on a case-by-case basis the department's regional biosolids coordinator may grant an extension up to a maximum of one hundred eighty days after issuance of the applicable general permit. Requests for an extension must be made in accordance with the following:

(i) Requests must be made in writing to the applicable regional biosolids coordinator.

(ii) Requests must be made within ninety days after issuance of the applicable general permit.

(b) ***Existing facilities requesting an individual permit.*** Existing facilities that wish to request an individual permit under subsection (3)(a)(iii) of this section must do so within thirty days of issuance of an applicable general permit by the department.

(c) ***Facilities required or approved to apply for an individual permit.*** Facilities that have been directed by the department to apply for an individual permit under subsection (3)(a)(ii) of this section or approved to apply for an individual permit requested under subsection (3)(a)(iii) of this section must submit a permit application within ninety days of receiving notification.

(d) ***Facilities that have been denied an individual permit.*** Facilities that are denied an individual permit must submit an application for coverage under a general permit within sixty days after being denied an individual permit.

(e) ***New facilities.*** New facilities being proposed after July 1, 2007, must submit an application for coverage under an applicable general permit or a request for an individual permit at least one hundred eighty days prior to engaging in applicable management activities.

(5) **Timing of notices of intent - continuing coverage.**

(a) All facilities permitted under this section must submit a notice of intent to continue coverage under a general permit or an application for a new individual permit, at least one hundred eighty days prior to the expiration date of their applicable permit.

(b) When a facility has submitted a timely and sufficient notice of intent or application as required in this subsection, an expiring permit remains in effect and enforceable until any of the following occur:

(i) The application has been denied.

(ii) A replacement permit has been issued by the department.

(iii) The department has cancelled the expired permit.

(c) Coverage under a permit for permittees who fail to submit a timely and sufficient application or notice of intent shall cease on the expiration date of the permit.

(6) **Permit application contents.** All facilities must submit a complete and factually correct permit application in accordance with the schedule established in WAC 173-308-310(4) on a form or in a format specified by the department. The content requirements are listed in Appendix 1.

(7) **Notices of intent contents.** Facilities submitting a notice of intent to be covered under an applicable general permit must do so on a form provided by the department. The content requirements are listed in Appendix 2.

(8) **Land application plans.**

(a) ***Exemptions for exceptional quality biosolids.*** Land application plans are not required when exceptional quality biosolids are applied to the land, except as specified in this subsection.

(i) Any person who prepares exceptional quality biosolids for application to the land must determine and assure to the extent practicable, through recordkeeping and other means, that all applicable criteria of this chapter and any applicable permit are met when bulk exceptional quality biosolids are applied to the land.

(ii) Any person who prepares exceptional quality biosolids for application to the land and who fails to satisfy the requirements in (a)(i) of this subsection, may be required to submit a general or site specific land application plan, or both, for any or all sites where bulk exceptional quality biosolids are applied to the land, and may also be required to comply with the public notice requirements in subsection (13) of this section.

(iii) The department may require a site specific land application plan for any site where bulk exceptional quality biosolids are proposed to be applied if the plan is necessary to evaluate potential permit conditions or if the department finds there would be a strong benefit to the public from the preparation of a site specific land application plan.

(iv) The department may require advance notice prior to the application of bulk exceptional quality biosolids to the land. In such case the department will notify the facility in writing of the conditions requiring advance notice, the length of advance notice required, and the length of time the requirement for advance notice will remain in effect.

(b) ***Nonexceptional quality biosolids.*** Land application plans are required when nonexceptional quality biosolids are applied to the land except when biosolids are delivered to a beneficial use facility as provided in (g) of this subsection. Facilities that propose to apply nonexceptional quality biosolids to the land must do one or both of the following:

(i) Submit with their permit application a site specific land application plan for each site where biosolids will be applied during the life of the permit.

(ii) Submit with their permit application a general land application plan, and at a later date prior to applying biosolids, a site specific land application plan for each site where biosolids will be applied to the land.

(c) Any site specific land application plans must be consistent with a facility's general land application plan, if a general land application plan has been submitted.

(d) ***Site specific land application plan contents.*** Each site specific land application plan must provide information necessary to determine if the site is appropriate for land application of biosolids, and a description of how the site will be managed. The minimum content for site specific land application plans is listed in Appendix 3.

(e) ***General land application plan contents.*** Applicants intending to apply nonexceptional quality biosolids to sites for which a site specific land application plan is not submitted as a part of the permit application, must submit for approval as a part of their permit application a general land application plan.The minimum content for general land application plans is listed in Appendix 4.

(f) As individual sites are identified in accordance with the general land application plan in (e) of this subsection, facilities that seek to apply nonexceptional quality biosolids must develop and submit site specific land application plans in accordance with (d) of this subsection.

(g) ***Exemptions when sending biosolids to a permitted beneficial use facility.*** When biosolids are provided to a beneficial use facility that has been permitted as a treatment works treating domestic sewage, the person who prepares the biosolids is not required to prepare land application plans for the biosolids that will be applied to the beneficial use facility if all of the following conditions are met:

(i) The beneficial use facility's permit allows it to accept biosolids from the person who prepares biosolids.

(ii) As a part of the permit application or public notice, the person who prepares the biosolids identifies the beneficial use facility(ies) to which biosolids may be provided or specifies the criteria by which beneficial use facilities may be selected at a future date or states or indicates that it maintains the option to send its biosolids or sewage sludge to any facility permitted by the department to accept it for management.

(h) All land application plans, including those authorized under provisional approval in accordance with subsection (18)(a) of this section, are subject to review and final approval by the department. If a land application plan is found to be insufficient, the department may either request additional information or may impose additional requirements as a condition of approval in accordance with subsection (19) of this section.

(9) **Submitting permit applications and notices of intent.** Facilities must submit their permit application and notice of intent as follows:

(a) The original, in hardcopy form, to the biosolids coordinator in the regional office of the department where the facility is located.

(b) One copy, in either electronic or hardcopy form, to any other regional office of the department where the facility's biosolids or sewage sludge will be treated, stored, disposed, or applied to the land. The department encourages submittal in electronic form.

(c) One copy, in either electronic or hardcopy form, to the biosolids coordinator at the department's headquarters office. The department encourages submittal in electronic form.

(d) One copy, in either electronic or hardcopy form, to the local health jurisdiction in each county where biosolids or sewage sludge will be treated, stored, disposed, or applied to the land. The department encourages submittal in electronic form.

Local health jurisdictions that elect not to receive copies of notices of intent or permit applications may notify in writing the facility or the department that they do not wish to receive copies.

(10) **Signatories to permit applications and reports.**

(a) ***Applications.*** All permit applications must be signed as follows:

(i) *For a corporation.* By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means either of the following:

(A) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation.

(B) The manager of one or more manufacturing, production, or operating facilities employing more than two hundred fifty persons or having gross annual sales or expenditures exceeding twenty-five million dollars (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(ii) *For a partnership or sole proprietorship.* By a general partner or the proprietor, respectively.

(iii) *For a municipality, state, federal, or other public agency.* By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes either of the following:

(A) The chief executive officer of the agency.

(B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(b) ***Reports and other information.*** All reports and other information required by permits, and other information requested by the department must be signed by a person described in (a) of this subsection, or by a duly authorized representative of that person. A person is a duly authorized representative only if the following conditions are met:

(i) The authorization is submitted to the department in writing by a person described in (a) of this subsection.

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

(c) ***Changes to authorization.*** If an authorization under (b) of this subsection is no longer accurate, a new authorization satisfying the requirements of (b) of this subsection must be submitted to the department prior to or together with any reports or other information.

(d) ***Certification.*** Any person signing a document under (a) or (b) of this subsection must make the following certification, unless a different certification is applicable under another related section of this chapter:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(11) **Public access to information.** In accordance with chapter 42.17 RCW, the department must provide, upon request, any information submitted as part of a permit application, except as provided in (a) of this subsection.

(a) In accordance with chapters 42.17, 43.21A, 70.105, and 90.52 RCW, the department must protect any information (other than information on the quality of biosolids) contained in applications as confidential upon a showing by any person that the information, if made public, would divulge methods or processes entitled to protection as trade secrets of the person.

(b) Any information accorded confidential status, whether or not contained in any application form, must be disclosed, upon request, to the Regional Administrator of EPA.

(12) **Recordkeeping required for permit applications.** Applicants must keep records of all information used to complete permit applications and any supplemental information submitted for a period of five years, or longer, if otherwise required by this chapter, the conditions of the applicable permit, or other state or local laws.

(13) **Public notice and comment period.** Public notices and comment periods must minimally meet the requirements listed in this subsection.

(a) ***Applying for coverage under a general permit initially, proposing a significant change, or reapplying following revocation.*** All facilities applying for coverage under a general permit initially, facilities who propose a significant change in biosolids management practices, and those who reapply for a permit following revocation of their permit must issue public notice in the following manner:

(i) Issue one notice in a newspaper of general circulation in any county(ies) where you prepare biosolids or sewage sludge.

(ii) Issue one notice in a newspaper of general circulation in any county(ies) covered by a general land application you have submitted.

(iii) Issue one notice in a newspaper of general circulation in any county(ies) where you land apply nonexceptional quality biosolids except where this notice has been conducted by a permitted biosolids beneficial use facility.

(iv) Post notices at any site(s) where you plan to land apply nonexceptional quality biosolids except where this notice has been conducted by a permitted biosolids beneficial use facility. The site(s) must remain posted during the entire public comment period required in (a)(v) of this subsection.

(v) Provide a thirty-day public comment period following the issuance of newspaper notice and the posting of site(s).

(b) ***Applying for renewal of coverage under a general permit with no land application of nonexceptional quality biosolids.*** All facilities applying for renewal of coverage under a general permit who have previously met the public notice requirements of (a) of this subsection and who do not land apply nonexceptional quality biosolids are not required to conduct additional public notice.

(c) ***Applying for renewal of coverage under a general permit with land application of nonexceptional quality biosolids.*** All facilities applying for renewal of coverage under a general permit who have previously met the public notice requirements of (a) of this subsection and who land apply nonexceptional quality biosolids must conduct public notice in accordance with (a)(iii) and (v) of this subsection.

(d) ***Applying for an individual permit.*** Facilities applying for individual permits must conduct public notice in accordance with (a)(i) through (v) of this subsection at the time they apply for a permit and at the time when a draft permit is provided for formal review by the department.

(e) ***Notice when adding a new site in accordance with a general land application plan.*** All facilities who are proposing to add a new site or expand an existing site for the land application of nonexceptional quality biosolids in accordance with an approved general land application plan and who previously met the public notice requirements of (a) of this subsection must conduct public notice at the proposed new site or expanded area of an existing site in accordance with (a)(iv) and (v) of this subsection.

(f) All facilities not captured under one of the descriptions in (a) through (e) of this subsection must conduct public notice as directed by the department.

(g) ***Notice contents.*** All notices issued in accordance with this subsection must contain at least the following:

(i) The name and address of the facility and the name of the contact person for the facility.

(ii) The name and address of the department of ecology person responsible for the permit.

(iii) The name and address of the local health jurisdiction person responsible for the permit if the local health jurisdiction has been delegated this responsibility.

(iv) A description of the proposal.

(A) Proposals for coverage under a general permit must cite the name of the general permit.

(B) Proposals for land application plans must contain information on the location of the proposed land application sites and, if applicable, the source(s) of biosolids that may be applied.

(C) Proposals for general land application plans must provide information on how the public will be notified when specific sites are identified.

(v) A brief statement describing the applicant's biosolids or sewage sludge management practices.

(vi) A statement describing an interested person's opportunity to comment or request a public hearing or meeting on the proposal, including the last date for comments or requests and the contact person to whom comments or requests must be directed.

(A) The period for comments and requests must be at least thirty days following the posting.

(B) Comments and requests should be directed to the responsible department of ecology contact or the responsible local health jurisdiction contact if the authority is delegated.

(C) The following is an example: "*Any person wishing to comment on this proposal or wishing to request a public hearing or meeting must do so in writing within thirty days of this notice. Comments should be addressed to* (insert either '*the department of ecology contact listed*' or '*the local health jurisdiction contact listed*')."

(vii) The statement, "*If you wish to be included on an interested parties list to receive notification of activities relating to this project, please notify, in writing, the* (insert facility name) *contact listed.* (Insert facility name) *will provide written confirmation by certified mail, return receipt requested, to each interested person or organization that their name has been placed on the list.*"

(viii) Any additional information considered necessary or proper.

(h) ***Notice to interested parties.*** Notices must be sent to all persons on a facility's interested parties list at the same time or before notice is run in a newspaper or posted at a land application site.

(i) ***Notices at land application sites.*** Notices at land application sites must be posted at all significant site access points and at least every 1/2 mile (805 meters) around the perimeter of the site.

(j) Following the completion of public notice and comment period requirements, the facility must provide written documentation to the department certifying completion of the process in accordance with the following:

(i) When newspaper notice has been conducted, either an *Affidavit of Publication* must be submitted or a copy of the newspaper notice that shows the date of publication must be submitted.

(ii) When site posting has been conducted, a copy of the final notice posted and a brief description describing how site posting and notification was conducted.

(k) Notice must be given by any other method required by the department.

(14) **Public hearings and meetings.**

(a) The department may require an applicant to hold a public hearing or meeting when applying for a permit or for any land application plan if it finds, on the basis of requests, a significant degree of public interest or if it determines that a public discussion might clarify one or more aspects important to compliance with the requirements of this chapter or an applicable permit.

(b) During the public comment period provided for in subsection (13) of this section, any person may request the department to require a public hearing or meeting if none has been scheduled. Any request for a public hearing or meeting must be in writing and must state the nature of the issues proposed to be raised. The department will consider all requests that are received not later than the final comment date specified in the notice required under subsection (13) of this section.

(c) ***Notice of a hearing.*** If the department determines that a public hearing must be held, the applicant must give notice of a public hearing in accordance with the procedures in subsection (13) of this section, except that posting of sites that are not specifically subject to the hearing is not required.

(i) The notice of hearing must contain the following information:

(A) The dates of previous public notices relating to the permit application.

(B) The date, time, and place of the hearing.

(C) A brief description of the nature and purpose of the hearing, including any rules and procedures that apply.

(ii) Copies of the notice and an explanation of all places where and when the notice was published must be submitted to:

(A) The contact person in the regional or headquarters office of the department that has lead responsibility for the permit.

(B) Any applicable local health jurisdiction that has accepted delegation of authority for conducting public hearings.

(d) Public hearings required under this subsection, must be held in each county where biosolids will be treated or applied to the land, unless otherwise allowed by the department.

(e) Public hearings required under this subsection must be held no sooner than thirty days after the publication of the notice required in (c) of this subsection and at a time and place as can be reasonably expected to be convenient to the department and interested parties.

(f) Public hearings must be attended by a representative of the permit applicant who is authorized to respond to questions from the public and the department and by a representative of the department.

(g) ***Notice of a meeting.*** Requirements for notice conducted for public meetings are the same as that required for public hearings unless otherwise allowed by the department.

(15) **Record and response to comments received on an application or during a public hearing or meeting.**

(a) The department will maintain a record of all written comments received during the public comment period in subsection (13) of this section, and of all comments properly submitted in response to a public hearing required under subsection (14) of this section.

(b) The department will prepare a response to all relevant comments received, and will briefly describe any changes that resulted (other than editorial changes) to a permit.

(c) The department is not obligated to consider or respond to comments or information that is received later than thirty days after the date of publication of public notice, or the date of a public hearing, whichever is later.

(16) **Compliance schedules.**

(a) A permit may specify a schedule leading to compliance with the federal Clean Water Act and these regulations. Any compliance schedule under this subsection must require compliance as soon as possible, but not later than any applicable statutory deadline under the Clean Water Act or chapter 70.95J RCW.

(b) ***Interim dates.*** If a permit establishes a compliance schedule that exceeds one year from the date of permit issuance, the schedule must set forth interim requirements and the date for their achievement. The time between interim dates must not exceed six months.

(c) ***Reporting.*** The permit must require that no later than fourteen days after each interim date and the final date of compliance, the permittee must notify the department in writing of its compliance or noncompliance with the interim or final requirements.

(17) **Fact sheet required for individual permits.**

(a) The department must prepare a fact sheet for every draft individual permit for a class I biosolids management facility, for every draft individual permit requiring permit conditions developed on a case-by-case basis to implement section 405 (d)(4) of the Clean Water Act, for every draft individual permit that includes a general land application plan, and for every draft individual permit that the director finds is the subject of widespread public interest or raises major issues.

(i) The fact sheet must briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.

(ii) The director must send this fact sheet to the applicant and, on request, to any other person.

(b) ***Fact sheet contents.*** The fact sheet must include all of the following:

(i) A brief description of the type of facility or activity that is the subject of the draft permit.

(ii) Any calculations or other necessary explanation of the derivation of conditions for biosolids use and sewage sludge disposal, including a citation to the applicable standards for biosolids use or sewage sludge disposal and reasons why they are applicable, or in the case of conditions developed on a case-by-case basis to implement section 405 (d)(4) of the Clean Water Act, an explanation of, and the bases for the conditions.

(iii) For permits that include a general land application plan, a brief description of how each of the required elements of the land application plan is addressed in the permit.

(18) **Approval of coverage - provisional approval and final coverage.**

(a) ***Provisional approval.*** Except for new beneficial use facilities as described in (a)(ii) of this subsection, facilities that are in compliance with this chapter, an applicable permit, and any plans submitted as part of a request to obtain a permit are provisionally approved to engage in the biosolids management activities proposed in their applications.

(i) Facilities with provisional approval are subject to further review and permitting requirements at a later date, and are subject at all times to all applicable conditions of this chapter, an applicable permit, and any plans submitted as part of a request to obtain a permit.

(ii) New beneficial use facilities may not obtain provisional approval.

(b) ***Final coverage.*** After reviewing a permit application and considering other pertinent information including any testimony received during a public hearing or meeting or written comments submitted in response to a public notice, the department may approve coverage under a general permit or issue an individual permit.

If final approval is issued, the department will notify the applicant in writing of its decision including any additional requirements or stipulations that are imposed as a condition of approval in accordance with subsection (19) of this section.

(c) ***Disapproval.*** If an application for a permit is disapproved, the department will notify the applicant in writing, including an explanation of why the application was disapproved.

(d) In no case may a lack of action by the department be construed as relieving an applicant of the obligation to comply with any of the provisions of this chapter or an applicable permit, or as approving final use or disposal practices that are not consistent with the provisions of this chapter or an appli-

cable permit, or that pose a threat to human health or the environment.

(19) **Additional or more stringent requirements.**

(a) On a case-by-case basis, the department may impose requirements for the beneficial use of biosolids that are in addition to or more stringent than the requirements in this chapter if the department believes that the additional or more stringent requirements are necessary to protect public health or the environment from any adverse effect of a pollutant in the biosolids or to ensure compliance with this chapter.

(b) In addition to other considerations, failure of a generator, applier, or landowner to conform to any applicable requirements of this chapter may be cause to impose additional or more stringent requirements.

(c) The department will impose any additional or more stringent requirements in an individual permit issued to a facility, in general permits issued in accordance with Appendix 5 of this chapter, and in the issuance of final coverage under a general permit.

(d) Any additional or more stringent requirements imposed in accordance with this section are considered to be permit requirements, fully enforceable in accordance with the provisions of this chapter and the applicable permit.

(e) If known, any additional requirements must be disclosed at a public hearing if a public hearing is held, or if imposed subsequent to a public hearing, must become a part of the written record required under subsection (15)(b) of this section.

(20) **Prohibition.** The department may not issue a permit when the Regional Administrator of EPA has objected in writing under 40 CFR 123.44.

(21) **Duration of permits.**

(a) Permits are issued for fixed terms up to, but not exceeding, five years from the effective date of the permit. Final coverage under a general permit may be issued for a period up to the remaining term of issuance for the permit.

(b) The term of a permit may not be extended by modification beyond five years.

(22) **Transfer of permit coverage.**

(a) Except as provided in (b) of this subsection, a permit may be transferred by the permittee to a new owner operator only if the permit has been modified or revoked and reissued to identify the new permittee and incorporate other requirements as may be necessary to assure compliance with the requirements of this chapter.

(b) ***Automatic transfer.*** Coverage under a permit is automatically transferred from the old permittee to a new permittee on the date agreed to if all of the following conditions are met:

(i) A written, signed agreement between the old and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability is submitted in accordance with (b)(i)(A) through (D) of this subsection at least thirty days in advance of the proposed date of transfer.

(A) The original to the biosolids coordinator in the regional office of the department where the facility is located.

(B) One copy to any other regional office of the department where the facility's biosolids or sewage sludge will be treated, stored, disposed, or applied to the land.

(C) One copy to the biosolids coordinator at the department's headquarters office.

(D) One copy to the local health jurisdiction in each county where biosolids or sewage sludge will be treated, stored, disposed, or applied to the land.

(ii) The department has not notified both permittees of any objection to the transfer, or of the intent to revoke the permit.

(c) No condition or requirement of a permit or this chapter may be waived by the transfer of permit coverage from one party to another.

(23) **Modification or revocation and reissuance of permits.**

(a) When the department receives any information (for example, upon inspection of a facility, receipt of information submitted by the permittee as required in the permit, receipt of a request for modification or revocation and reissuance, or upon a review of the permit file), the department may determine whether or not one or more of the causes listed in (b) or (c) of this subsection for modification or revocation and reissuance, or both, exist.

(i) If cause for modification or revocation and reissuance, or both, exists, the department may modify or revoke and reissue a permit and may request an updated application if necessary.

(ii) When a permit is modified, only the conditions subject to modification are reopened.

(iii) If a permit is revoked and reissued, the entire permit is reopened and subject to revision, and the permit may be reissued for a new term.

(iv) If cause does not exist under this section, the department may not modify or revoke and reissue a permit.

(b) ***Causes for modification.*** The following are causes for modification but not revocation and reissuance of permits except when the permittee requests or agrees.

(i) *Alterations.* There are material and substantial alterations or additions to the permitted facility or activity that occurred after permit issuance that justify the application of permit conditions that are different from or absent in the existing permit.

(ii) *Information.* The department has received new information. A permit may be modified during its term for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

(iii) *New regulations.* New regulations have been adopted or the standards or regulations on which the permit was based have been changed by adoption of amended standards or regulations or by judicial decision after the permit was issued.

(iv) *Compliance schedules.* The department determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonable available remedy. However, in no case may a compliance schedule be modified to extend beyond an applicable Clean Water Act statutory deadline.

(v) *Land application plans.* When required by a permit condition to incorporate a general land application plan for beneficial use of biosolids, to revise a general land application plan, or to add a general land application plan.

(c) ***Causes for modification or revocation and reissuance.*** The following are causes to modify or, alternatively, revoke and reissue a permit.

(i) Cause exists for termination under subsection (24) of this section and the department determines that modification or revocation and reissuance is appropriate.

(ii) The department has received notification of a proposed transfer of the permit.

(d) ***Public notice requirements.*** When a permit is modified or revoked and reissued, the public notice requirements of subsection (13) of this section, and if required the public hearing requirements of subsection (14) of this section must be complied with for the reopened conditions or reissued permit.

(24) **Causes for termination of permits, denying permit applications, or denying expansion of an existing permit.** The following are causes for terminating a permit during its term, or for denying a permit application, or for denying an expansion of an existing permit:

(a) Noncompliance by the permittee with any condition of the permit.

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time.

(c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

(d) A change in any condition that requires either a temporary or a permanent reduction or elimination of any activity controlled by the permit.

(e) Failure by the permittee to pay a permit fee issued in accordance with WAC 173-308-320.

(25) **Requirement to coordinate permitting with delegated local health jurisdictions.** When a local health jurisdiction has received delegation to administer any portion of, or to carry out any activity required under this chapter, all facilities subject to permitting under this chapter must cooperate with the department and the local health jurisdiction by coordinating permitting activities so as to assure an opportunity for local health jurisdiction involvement consistent with the terms of the delegation agreement.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-310, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-310, filed 2/18/98, effective 3/21/98.]

WAC 173-308-320 Permit fees. (1) All facilities that are required to obtain a permit must pay an annual biosolids permit fee to the department.

(2) Biosolids permit fees are assessed on an annual basis and apply regardless of the date of issuance of a permit.

(3) Except for those facilities described in subsection (4)(h) of this section, biosolids permit fees are assessed and collected for fiscal years for wastewater treatment facilities and for calendar years for receiving-only facilities and septage management facilities. Fees are due and payable within forty-five days after the department mails a billing statement.

(a) Fees are considered delinquent if they are not received by the first invoice billing due date.

(i) If a fee is determined to be delinquent, the permittee will be notified by certified letter and have thirty days to bring their account up-to-date before further action is taken by the department.

(ii) Failure to pay a fee is a cause for termination of a permit in accordance with WAC 173-308-310(24).

(b) Upon request from the permittee, the department may at its discretion mail partial billing statements up to two times per year, in which case a facility is responsible only for the amount reflected on the current (and any past due) billing statement.

(4) The permit fee schedule is based on the number of residences or residential equivalents (residential equivalent value) contributing to a permittee's biosolids management system. All charges per residential equivalent and any maximum fees listed in this subsection will be adjusted by the annual fiscal growth factor calculated under chapter 43.135 RCW.

(a) All facilities required or requesting to obtain a permit or approval are assigned a minimum of one residential equivalent.

(b) For facilities with NPDES permits issued under chapter 173-220 WAC or state waste discharge permits issued under chapter 173-216 WAC, the department will use residential equivalent values determined under chapter 173-224 WAC. If no residential equivalent value is determined under chapter 173-224 WAC, the number of residences connected to the system or another appropriate criteria will be used to determine the residential equivalent value.

(c) The residential equivalent value for receiving-only facilities other than septage management facilities in (e) of this subsection is the sum of the residential equivalent values contributed from all sources, as determined by considering the portion of the current annual production of each originating source that is provided to the receiving facility.

(d) The residential equivalent value for facilities located outside of the state (e.g., those on tribal lands, other states, and other nations) who export solids into the state will be based on the portion of the current annual production of the facility that is exported into the state.

(e) For septage management facilities, each 1,250 gallons of septage received for treatment or applied to the land is equal to one residential equivalent.

(f) Equations (5) and (6), below, are used to calculate permit fees:

Equation (5)

$$\text{Permit Fee} = (\text{REV} \times \text{Cost per } RE_{FGF})$$

Where:

REV = residential equivalent value.

FGF = an annual fiscal growth factor expressed as a percentage, as determined under chapter 43.135 RCW.

Cost per RE_{FGF} = cost per residential equivalent in dollars including a fiscal growth factor. The cost per RE_{FGF} is obtained by multiplying the cost per residential equivalent in the preceding year by the current year's fiscal growth factor as follows in equation (6).

Equation (6)

Cost per RE_{FGF} = Previous year's cost per RE x [1+ (FGF)]

(g) For implementation of the fiscal growth factor, the base year for all biosolids permit fees will be fiscal year 2008, ending June 30, 2008. In the base year, the FGF will be zero (0).

(h) ***Review fee for new facilities.*** New facilities proposed after July 1, 2007, will be required to pay a nonrefundable fee of $1,800.00 for the first residential equivalent prior to departmental review of an application package or proposal. In addition, following issuance of a permit or approval, the facility will be subject to the fees described in (i) of this subsection.

(i) A cost of $600.00 will be assigned to the first residential equivalent for all facilities. The cost per subsequent residential equivalent in the base year will be as follows:

(i) $0.00 per residential equivalent for permits issued to municipalities that own or operate incinerators that fire sewage sludge to dispose of sewage sludge generated by their own facility in a municipal solid waste landfill or through another facility on an emergency basis.

(ii) $0.051 per residential equivalent up to a maximum of $3000.00 for permits issued to receiving-only facilities.

(iii) $0.215 per residential equivalent for permits authorizing any other type of solids management activity including, but not limited to, the following:

(A) Direct beneficial use by a treatment works treating domestic sewage.

(B) Transfer from one facility to another facility, including delivery to an incinerator from nonincinerating jurisdictions.

(C) Prolonged treatment or storage including, but not limited to, lagoon systems.

(D) Treatment or land application of septage.

(E) Disposal of sewage sludge in a municipal solid waste landfill except for facilities under (i)(i) of this subsection.

(F) Exporting biosolids or sewage sludge from facilities located outside of the state.

(iv) $0.16 per residential equivalent above 100,000.

(5) Following is a summary table showing the equations used to calculate fees for the base year.

Facility Type	Fee Formula for Base Year
Septage management	$600 + (gallons ÷ 1,250 x $0.215)
Receiving-only (includes beneficial use facilities)	$600 + ($REV_{received}$ x $0.051) Maximum of $3,000
Out-of-state	$600 + ($REV_{exported}$ x $0.215)
Incineration	$600.00
All others (includes most wastewater treatment facilities)	$600 + ($REV_{<100,000}$ x $0.215) + ($REV_{\geq}$100,000 x $0.16)
New facility review fee	$1,800
Where:	
	$REV_{received}$ = residential equivalent values received (based on the portion of the residential equivalent values contributed from each source).
	$REV_{exported}$ = residential equivalent values exported (based on the portion of the annual production of the facility that is exported into the state).
	$REV_{<100,000}$ = residential equivalent values less than 100,000.
	$REV_{>100,000}$ = residential equivalent values greater than or equal to 100,000.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-320, filed 5/24/07, effective 6/24/07. Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-320, filed 2/18/98, effective 3/21/98.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-308-900 Appendix A—Procedure to determine the annual whole biosolids application rate. When biosolids are sold or given away in a bag or other container for application to the land, and any of the pollutant concentration limits in Table 3 of WAC 173-308-160 are exceeded, the mathematical product of the concentration in the biosolids of each pollutant listed in Table 4 of WAC 173-308-160 and the annual whole biosolids application rate (AWBAR) must not cause the annual pollutant loading rate for the pollutant in Table 4 of WAC 173-308-160 to be exceeded. This appendix contains the procedure used to determine an AWBAR that does not cause the annual pollutant loading rates in Table 4 of WAC 173-308-160 to be exceeded. The relationship between the annual pollutant loading rate (APLR) for a pollutant and the annual whole biosolids application rate (AWBAR) is shown in equation (7).

$$APLR = C * AWBAR * 0.001 \qquad \text{Equation (7)}$$

Where:

APLR = Annual pollutant loading rate in kilograms per hectare per 365 day period.

C = Pollutant concentration in milligrams, per kilogram of total solids (dry weight basis).

AWBAR = Annual whole biosolids application rate in metric tons per hectare per 365 day period (dry weight basis).

0.001 = A conversion factor.

To determine the AWBAR, equation (7) is rearranged into equation (8):

$$AWBAR = \frac{APLR}{C * 0.001} \qquad \text{Equation (8)}$$

The procedure used to determine the AWBAR is presented below.

Procedure:

1. Analyze a sample of the biosolids to determine the concentration for each of the pollutants listed in Table 4 of WAC 173-308-160.

2. Using the pollutant concentrations from Step 1 and the APLRs from Table 4 of WAC 173-308-160, calculate an AWBAR for each pollutant using equation (8).

3. The correct AWBAR is the lowest AWBAR calculated in Step 2.

[Statutory Authority: RCW 70.95J.020 and 70.95.255. 98-05-101 (Order 97-30), § 173-308-900, filed 2/18/98, effective 3/21/98.]

WAC 173-308-90001 Appendix 1—Minimum content for a permit application. (1) The activities conducted by the applicant that require it to obtain a permit, and if applying under a general permit, the name of the permit.

(2) Name, mailing address, and location of the facility for which the application is submitted.

(3) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity.

(4) Whether or not the facility or any associated facilities or land applications sites are located on tribal or federal lands.

(5) A listing of other relevant environmental permits, and all permits or construction approvals received or applied for under any of the following programs:

(a) Hazardous waste management program under the Resource Conservation and Recovery Act.

(b) Underground injection control program under the Safe Drinking Water Act.

(c) National pollutant discharge elimination system program under the Clean Water Act.

(d) Prevention of significant deterioration program under the Clean Air Act.

(e) Nonattainment program under the Clean Air Act.

(f) National emission standards for hazardous pollutants preconstruction approval under the Clean Air Act.

(g) Ocean dumping permits under the Marine Protection, Research, and Sanctuaries Act.

(h) Dredge or fill permits under section 404 of the Clean Water Act.

(6) A map extending one mile (1.6 kilometers) beyond the property boundaries of the facility, showing the location and means of access to the facility, and additional maps if necessary, showing the same for any associated treatment or storage facilities.

(7) Any biosolids monitoring data the applicant has for the last two years, including for land application sites any available soil, or surface or ground water monitoring data, with a description of the sampling locations, and for wells the approximate depth to ground water.

(8) A description of the applicant's biosolids use and disposal practices including, where applicable, the location of any sites where the applicant transfers biosolids for treatment or sewage sludge for disposal, as well as the name of the applicator or other contractor who applies the biosolids to land if different from the applicant.

(9) Land application plans, as required under WAC 173-308-310.

(10) The amount of biosolids produced and the amount of biosolids applied to the land during the previous year, and estimated to be produced or applied to the land on an annual basis during the life of the permit.

(11) Any information required to determine the appropriate standards for permitting under this chapter, and any other information the department may request and reasonably require to assess biosolids use or sewage sludge disposal practices, to determine whether or not to issue a permit, or to ascertain appropriate permit requirements under this chapter.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-90001, filed 5/24/07, effective 6/24/07.]

WAC 173-308-90002 Appendix 2—Minimum content for a notice of intent to be covered under a general permit. (1) The name of the general permit under which coverage is being sought, and a statement declaring the applicant's intent to comply with the requirements of the permit.

(2) The activities conducted by the applicant that require it to obtain coverage.

(3) Name, mailing address, and location of the facility for which the application is submitted.

(4) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity.

(5) The location and a description of any site(s) where biosolids or sewage sludge are treated, stored, disposed, or applied, and whether or not any permit, including a local solid waste permit has been issued for a site.

(6) Any information specifically required for a notice of intent under the applicable general permit.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-90002, filed 5/24/07, effective 6/24/07.]

WAC 173-308-90003 Appendix 3—Minimum content for a site specific land application plan. (1) Whether or not it is known or can be determined that biosolids containing pollutants in excess of the values WAC 173-308-160 Table 3 have ever been applied to the site, and if so:

(a) The date(s) when the biosolids were applied (if known).

(b) The amount of biosolids applied (if known).

(c) The concentrations of the pollutants in the biosolids (if known).

(d) The area(s) of the site to which the biosolids were applied (if known).

(2) A discussion of the types of crops grown or expected to be grown, their intended end use (e.g., pasture grass for a feed crop, corn as a food crop), and the current distribution of crops on the site.

(3) An explanation of how agronomic rates will be determined during the life of the site, along with any currently available calculations. Whenever agronomic rates or the method used to determine agronomic rates change, an update of the agronomic rate calculations must be filed with the department.

(4) Method(s) of application.

(5) Seasonal and daily timing of biosolids applications.

(6) Provisions for conducting any sampling of soils, surface waters, or ground water and any available data collected from the site within the last two years.

(7) The name of the county and water resource inventory area where biosolids will be applied.

(8) A description of how biosolids will be stored at the site that also addresses related off-site storage.

(9) Map(s) for the site(s) must be submitted. Maps must be of an appropriate scale to show the detail necessary for evaluation of the proposed application areas and so that a person may reasonably be able to locate the sites and any appli-

cation units within a site (for example, 1:7,920 (eight inches to the mile) for detailed information with an overview map at 1:63,360 (one inch to the mile)). Minimally, maps must provide the following information:

(a) A legend.

(b) The location and means of access.

(c) Specific areas of the site where biosolids may be applied. If there is more than one site or more than one application unit within a site, a site or unit ID number should be included.

(d) The number of acres in the site or in any distinct application unit within a site.

(e) Location and extent of any wetlands on the site.

(f) A topographic relief of the application site and surrounding area.

(g) Adjacent properties and uses and their zoning classification.

(h) Any seasonal surface water bodies located on the site.

(i) Any perennial surface water bodies located on or within one-quarter mile (402 meters) of the site.

(j) The location of any wells located on or within one-quarter mile (402 meters) of the site that are listed in public records or otherwise known to the applicant, whether for domestic, irrigation, or other purposes.

(k) Buffer zones to features such as surface waters, wells, property boundaries, and roadways and the width of the buffer zones.

(l) The presence and extent of any threatened or endangered species or related critical habitat.

(m) The location of any critical areas on site, as required to be identified under chapter 36.70A RCW in the county's growth management plan.

(n) The location and size of any areas that will be used to store biosolids.

(10) If the seasonal ground water is three feet (0.91 meters) or less below the surface, a management plan describing how you will protect ground water. For example, you may propose to limit applications to the time of year when ground water has receded to less than three feet (0.91 meters) below the surface.

(11) A description of how access to the site will be restricted (e.g., signs posted around the site or other approved method of access restriction).

(12) A copy of the landowner agreement required under WAC 173-308-120(6).

(13) Any additional information requested by the department that is needed to evaluate the appropriateness of the site for biosolids application.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-90003, filed 5/24/07, effective 6/24/07.]

WAC 173-308-90004 Appendix 4—Minimum content for a general land application plan. (1) Describes the geographical area covered by the plan, including the names of all counties and water resource inventory areas where biosolids may be applied.

(2) Identifies site selection criteria.

(3) Describes how sites will be managed.

(4) Provides for not less than thirty days advance notice to the department of new or expanded land application sites, including those subject to provisional approval under WAC 173-308-310(18), to allow time for the department to object prior to the biosolids application.

(5) Provides for advance public notice as required in WAC 173-308-310(13), and that is reasonably calculated to reach potentially interested adjacent and abutting property owners.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-90004, filed 5/24/07, effective 6/24/07.]

WAC 173-308-90005 Appendix 5—Procedures for issuing general permits. When the department issues general permits, it will do so in accordance with the procedures in this section.

(1) **General permit coverage.**

(a) The director may issue general permits to satisfy any or all of the biosolids management requirements in chapter 70.95J RCW or other applicable state or federal biosolids management requirements.

(b) The director may issue general permits to cover categories or subcategories of facilities within appropriate geographic areas.

(c) General permits may be written to cover categories of treatment works treating domestic sewage that meet all of the following requirements:

(i) Involve the same or substantially similar types of operations.

(ii) Engage in the same types of biosolids use or sewage sludge disposal practices.

(iii) Require the same or substantially similar operating conditions or standards for biosolids use or sewage sludge disposal.

(iv) Require the same or substantially similar monitoring.

(v) In the opinion of the director are more appropriately controlled under a general permit than under individual permits.

(2) **General permit preparation - preliminary determination.**

(a) For all general permits, the department must make a preliminary determination to develop a general permit.

(i) Interested persons may petition the director requesting that a category of facilities be considered for the development of a general permit.

(ii) The department must respond to such a petition within ninety days of receipt.

(b) The department must provide public notice of all preliminary determinations to develop a general permit pursuant to subsection (5)(a) of this section.

(c) In the event that the department determines not to develop a general permit after publishing a preliminary determination pursuant to subsection (5)(a) of this section, the department must provide public notice to that effect in the same manner as the preliminary determination public notice was provided.

(3) **Fact sheets.**

(a) The department must prepare a fact sheet for every draft general permit determination. Such fact sheets must summarize the following:

(i) The legal basis of the permitting program.

(ii) The type of facility or activity which is the subject of the general permit.

(iii) The geographical area for which the general permit is valid.

(iv) The criteria for which coverage under a general permit will be approved.

(v) If available, a listing or some other means of identifying the facilities proposed to be covered under the general permit.

(vi) The information required to be submitted as part of the application for coverage under the general permit.

(vii) The general characteristics of the facilities being authorized under the general permit.

(viii) Standards and limitations imposed in the general permit.

(ix) A general description of the conditions in the general permit.

(x) Any compliance schedules proposed as part of the general permit.

(xi) The procedures for the formulation of final determinations, including:

(A) The thirty-day comment period required in subsection (5)(c)(iv) of this section, including the date and time after which public comments will not be considered by the department in formulating the final determination on the draft general permit.

(B) The time and place of the public hearing(s) required in subsection (7) of this section.

(C) Any other procedures by which the public may participate in the formulation of the final determination.

(xii) A summary of the economic impact analysis required in subsection (4) of this section, including any mitigation proposed for small business.

(b) The department must provide copies of general permit fact sheets to any interested person upon request.

(4) **Economic impact analysis.**

(a) The department must prepare an economic impact analysis on all draft general permits which are intended to directly cover small business. The economic impact analysis must be prepared on the draft general permit for which public notice is being provided pursuant to subsection (5)(c) of this section.

(b) The purpose of the economic impact analysis is to reduce the economic impact of the general permit on small business by doing one or more of the following when it is legal and feasible in meeting the stated objectives of chapter 70.95J RCW:

(i) Establishing differing compliance or reporting requirements or timetables for small businesses.

(ii) Clarifying, consolidating, or simplifying the compliance and reporting requirements under the general permit for small businesses.

(iii) Establishing performance rather than design standards.

(iv) Exempting small businesses from parts of the general permit.

(c) The contents of an economic impact analysis of a proposed general permit must include, at a minimum, the following:

(i) A brief description of the compliance requirements of the general permit, including:

(A) The minimum quality requirements.

(B) The monitoring requirements contained in the general permit.

(C) The reporting and recordkeeping requirements.

(D) Any plan submittal requirements.

(ii) The estimated costs of compliance, based upon existing data for facilities intended to be covered under the general permit. Costs must include:

(A) The costs associated with (c)(i) of this subsection.

(B) The costs of equipment, supplies, labor, and any increased administrative costs.

(iii) A comparison, to the greatest extent possible, of the cost of compliance for small businesses with the cost of compliance for the largest ten percent of the facilities intended to be covered under the general permit. The economic impact analysis must use one or more of the following as a basis for comparing costs:

(A) Cost per employee.

(B) Cost per hour of labor.

(C) Cost per one hundred dollars of sales.

(d) The following compliance costs associated with a general permit must not be included in the economic impact analysis:

(i) The costs necessary to comply with chapter 173-308 WAC.

(ii) The costs associated with requirements of the general permit which result from conformity or compliance, or both, with federal law or regulations.

(5) **Public notice.** The department must provide public notice of all preliminary determinations to develop a general permit, all determinations not to develop a general permit after publishing such a preliminary determination, all draft general permit determinations, and the issuance of a final general permit. All public notices must be circulated in a manner designed to inform interested and potentially affected persons of the proposed general permit.

(a) ***Public notice for preliminary determinations.*** The department must provide public notice of all preliminary determinations to develop a general permit as follows:

(i) The public notice must be circulated within the geographical area of the proposed general permit. Such notice may include any or all of the following:

(A) Publishing, as a paid advertisement or legal notice, the department's preliminary determination in one or more major local newspapers throughout the area of proposed coverage.

(B) Issuance of news releases, focus sheets, or newsletters.

(C) Publication in the State Register.

(ii) The department must request comments on whether a general permit is appropriate for the proposed category of facilities or whether individual permits are necessary.

(iii) The public notice must provide an opportunity for any interested or potentially affected party to submit information on facilities proposed to be covered under a general permit including:

(A) Any documented information on the characteristics of the biosolids including quantity, quality, and any land application sites. Information may be from an individual facility or be representative of the category as a whole.

(B) Any other relevant information.

(iv) The department must add the name of any person upon request to a general permit specific mailing list to receive information and notices related to the development of the general permit.

(b) In the event that the department determines not to develop a general permit after publishing a preliminary determination pursuant to (a) of this subsection, the department must provide public notice to that effect.

(c) ***Public notice for draft general permits.*** The department must provide public notice of every draft general permit as follows:

(i) The notice must be circulated throughout the geographical area covered by the general permit. Such circulation may include any or all of the following:

(A) Posting for a period of thirty days in post offices, public libraries, and public places within the geographical area covered by the general permit.

(B) Publishing the notice as a paid advertisement, display advertisement, or legal notice, in one or more major local newspapers of general circulation serving the area covered by the general permit.

(C) Issuance of news releases, focus sheets, or newsletters.

(ii) Notice must be mailed to any person upon request, including all persons on the general permit specific mailing list established pursuant to (a)(iv) of this subsection and all known, potential permittees.

(iii) At least thirty days before the public hearing(s) required in subsection (7) of this section, the department must have the following published in the State Register:

(A) The public notice contents contained in (c)(vi) of this subsection.

(B) A reference to the relevant sections of chapter 70.95J RCW as the statutory authority for issuing the general permit.

(C) The date on which the agency intends to issue the general permit.

(D) A short explanation of the permit, its purpose, and anticipated effects.

(E) A summary of the economic impact analysis required in subsection (4) of this section.

(iv) *Public comment period*. The department must provide a period of not less than thirty days following the last publication of the public notice, during which time interested persons may submit their written views on a draft general permit determination. All written comments submitted during the comment period must be retained by the department and considered in the formulation of its final determination with respect to the draft general permit. The period for comment may be extended at the discretion of the department.

(v) The department must make available during the public comment period:

(A) The draft general permit.

(B) The fact sheet on the draft general permit required pursuant to subsection (3) of this section.

(C) The economic impact analysis required pursuant to subsection (4) of this section.

(D) A copy of the proposed application for coverage.

(E) The notice required pursuant to (c)(iii) of this subsection.

(vi) The contents of the draft general permit public notice must, at a minimum, summarize the following:

(A) The name, address, and phone number of the agency issuing the public notice.

(B) The type of facilities and activities which are the subject of the general permit.

(C) The geographical area for which the general permit is valid.

(D) The criteria for which coverage under a general permit will be approved.

(E) If available, a listing or some other means of generally identifying the facilities proposed to be covered under the general permit.

(F) The tentative determination to issue a general permit.

(G) The procedures for the formulation of final determinations, including the thirty-day comment period required in (c)(iv) of this subsection and any other means by which interested persons may comment upon those determinations.

(H) The date, time, and place when the public hearing(s) required in subsection (7) of this section will be held.

(I) The address and phone number of state premises at which interested persons may obtain further information.

(J) The date and time after which comments will not be considered by the department in formulating the final determination on the draft general permit.

(d) ***Public notice for final general permits.*** The department must provide public notice of the issuance of a final general permit as follows:

(i) The notice of general permit issuance must be circulated in a manner similar to that used to circulate the notice on the draft general permit in (c)(i) of this subsection and must be published in the State Register.

(ii) The notice of general permit issuance must be provided to all persons on the general permit specific mailing list established pursuant to (a)(iv) of this subsection and all known, potential permittees.

(iii) The public notice of the issuance of a general permit must contain:

(A) The name, address, and phone number of the agency issuing the public notice.

(B) The type of facilities and activities which are the subject of the general permit.

(C) The geographical area for which the general permit is valid.

(D) The criteria for which coverage under a general permit will be approved.

(E) If available, a listing or some other means of generally identifying the facilities proposed to be covered under the general permit.

(F) A summary of the application process by which eligible facilities may obtain coverage under the general permit.

(G) An explanation of any changes to the final general permit, other than editing changes, and the principal reasons for adopting the changes.

(H) A notice that the terms and conditions of the general permit may be appealed only by filing an appeal with the pollution control hearings board and by serving it upon the department within thirty days, and the process for doing so as contained in RCW 43.21B.310.

(I) The date after which the general permit will be effective. The effective date of a general permit must be no sooner than thirty days after the publication in the State Register of

the public notice required pursuant to (d)(i) of this subsection.

(6) **Notice to other government agencies.** The department must notify other appropriate government agencies of each draft general permit determination and must provide such agencies an opportunity to submit their written views and recommendations.

(7) **Public hearings.**

(a) The department must hold one or more public hearing(s) on all draft general permits. The public hearing must be held during the public comment period provided pursuant to subsection (5)(c)(iv) of this section.

(b) The date, time, and place will be at the discretion of the department provided:

(i) At least thirty days is provided between the time the public notice is published pursuant to subsection (5)(c)(i) and (iii) of this section, and the time the hearing is held.

(ii) The hearing location is within the geographical area covered by the general permit.

(c) The department must cause a record to be made of all hearings required pursuant to this section. The record may be stenographic, mechanical, or electronic.

(8) **Public access to information.**

(a) In accordance with chapter 42.17 RCW and its published policy describing disclosure of public records, the department must make identifiable public records relating to all general permits available to the public for inspection and copying.

(b) The department must designate a general permit coordinator for each general permit. The coordinator must:

(i) Have knowledge of the general permit being prepared.

(ii) Maintain the records associated with the development of the general permit including the general permit file required pursuant to (c) of this subsection.

(iii) Be identified as the department contact in public notices regarding the general permit.

(c) ***General permit development file.*** The department must prepare a general permit development file for each issued general permit. The general permit development file must be available for public inspection subject to the provisions of this section. The general permit development file must contain:

(i) Copies of all public notices required pursuant to subsection (5) of this section.

(ii) A copy of the fact sheet required pursuant to subsection (3) of this section and any other documents not readily available to the public which were used in developing the terms and conditions of the general permit.

(iii) A copy of the economic impact analysis required pursuant to subsection (4) of this section.

(iv) Copies of the draft and final general permits and the application for coverage.

(v) All written comments received during the public comment period required pursuant to subsection (5)(c)(iv) of this section, on the draft general permit, fact sheet, economic impact analysis, and application for coverage.

(vi) The record of public hearings produced pursuant to subsection (7)(c) of this section.

(vii) The response to comments prepared pursuant to subsection (9)(a) of this section.

(d) The department must add the name of any person, upon request, to a mailing list to receive notices of department actions associated with a general permit.

(e) The department must provide facilities for the inspection of information relating to general permits and must ensure that employees honor requests for such inspection promptly without undue requirements or restrictions. The department must do either:

(i) Ensure that a machine or device for the copying of papers and documents is available for a reasonable fee.

(ii) Otherwise provide for, or coordinate with copying facilities or services such that requests for copies of nonconfidential, identifiable public records be honored promptly.

(9) **Issuance of general permits.**

(a) At the close of the public comment period required pursuant to subsection (5)(c)(iv) of this section, the department must prepare a response to all relevant comments received (both written and oral) and must briefly describe any changes, other than editing changes, and the principal reasons for making the changes to the draft general permit.

(b) General permits must be deemed issued upon signing by the director or by a person delegated the authority to issue general permits pursuant to chapter 173-06 WAC.

(c) The department must provide public notice of the issuance of all final general permits pursuant to subsection (5)(d) of this section.

(d) General permits become effective thirty days after the date of publication in the State Register of the public notice required pursuant to subsection (5)(d) of this section unless a later date is specified by the department.

(10) **Appeals.**

(a) The terms and conditions of a general permit as they apply to the appropriate class of facilities are subject to appeal within thirty days of issuance of a general permit in accordance with chapter 43.21B RCW.

(b) The terms and conditions of a general permit, as they apply to an individual facility, are appealable, within thirty days of the effective date of coverage of that facility, in accordance with chapter 43.21B RCW. This appeal is limited to the general permit's applicability or nonapplicability to that individual facility.

(c) The appeal of general permit coverage of an individual facility does not affect any other facilities covered under the general permit. If the terms and conditions of a general permit are found to be inapplicable to any individual facility, the matter must be remanded to the department for consideration of issuance of an individual permit or permits.

(11) **Modification, revocation and reissuance, and termination of general permits.** A general permit may be modified, revoked and reissued, or terminated, during its term for cause including, but not limited to, the following:

(a) A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of facilities covered under the general permit.

(b) New biosolids or sewage sludge guidelines or standards are promulgated pursuant to the Clean Water Act or chapter 70.95J RCW, for the category of facilities covered under the general permit.

(c) Information is obtained which indicates that cumulative effects on the environment from facilities covered under the general permit are unacceptable.

(12) **Notice for determinations to modify or revoke.** In the event that the director has determined to modify or revoke, in whole or in part, a general permit pursuant to subsection (11) of this section the director must notify, in writing, all facilities covered under the general permit. The notification must include:

(a) The reason(s) why the general permit is being revoked or modified.

(b) The process for appealing the determination pursuant to RCW 43.21B.310.

(c) An application form and a time limit for submitting the application.

(d) Any other information determined to be relevant by the department.

[Statutory Authority: Chapters 70.95J and 70.95 RCW. 07-12-010 (Order 06-06), § 173-308-90005, filed 5/24/07, effective 6/24/07.]

Chapter 173-310 WAC
LITTER RECEPTACLES

WAC

173-310-010	Purpose.
173-310-020	Definitions.
173-310-030	Responsibility to obtain and place litter receptacle.
173-310-040	Litter receptacles, where required.
173-310-050	Number of litter receptacles required.
173-310-060	Minimum standards.
173-310-070	Anti-litter symbol.
173-310-080	Prohibited acts.
173-310-090	Penalties.
173-310-100	Effective date and compliance.
173-310-990	Appendix A—Anti-litter symbol.

WAC 173-310-010 Purpose. By the provisions of chapter 70.93 RCW, the department of ecology has been delegated authority to conduct a permanent and continuous program to control and remove litter from this state to the maximum practical extent possible. The purpose of this chapter is to provide minimum standards for litter receptacles and to prescribe the use, placement and distribution of litter receptacles throughout the state, under the authority set forth in RCW 70.93.040 and 70.93.090.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-010, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-010, filed 5/15/72, effective 9/1/72.]

WAC 173-310-020 Definitions. The following words and phrases as used herein have the following meanings, unless context clearly dictates otherwise:

(1) "Anti-litter symbol" means the standard symbol adopted herein by the department.

(2) "Department" means the Washington state department of ecology.

(3) "Litter" means all waste materials including, but not limited to, disposable packages or containers susceptible to being dropped, deposited, discarded or otherwise disposed of upon any property in the state, and solid waste that is illegally dumped, but not including the wastes of primary processes of mining, logging, sawmilling, farming or manufacturing.

(4) "Litter receptacle" means containers for the disposal of litter of not more than 60-gallon capacity: Provided, That special containers of larger capacity such as those referred to as "dumpsters," and garbage containers, or other waste containers serving single or multifamily residences are not included within this definition and their use is in no way regulated or affected by this chapter.

(5) "Person" means any industry, public or private corporation, copartnership, association, firm, individual, or other entity whatsoever.

(6) "Public place" means any area that is used or held out for the use of the public whether owned and operated by public or private interests, but not including indoor areas. An indoor area means any enclosed area covered with a roof and protected from moisture and wind.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-020, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-020, filed 5/15/72, effective 9/1/72.]

WAC 173-310-030 Responsibility to obtain and place litter receptacle. It is the responsibility of any person owning or operating any establishment or public place in which litter receptacles are required by this chapter to obtain, place and maintain litter receptacles at their own expense on the premises in accordance with the provisions of this chapter.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-030, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-030, filed 5/15/72, effective 9/1/72.]

WAC 173-310-040 Litter receptacles, where required. Litter receptacles meeting the standards established by this chapter must be placed in the following public places in the state:

(1) Along public highways lying outside the limits of incorporated cities and towns;

(2) Parks;

(3) Campgrounds;

(4) Trailer park facilities for transient habitation;

(5) Drive-in restaurants;

(6) Gasoline service stations;

(7) Tavern parking lots;

(8) Shopping centers;

(9) Grocery store parking lots;

(10) Marinas;

(11) Boat launching areas;

(12) Boat moorage and fueling stations;

(13) Public and private piers

(14) Beaches and bathing areas;

(15) Outdoor parking lots, other than those specifically designated above, that have a capacity of more than 50 automobiles;

(16) Fairgrounds;

(17) Schoolgrounds;

(18) Racetracks;

(19) Sporting event sites with seating capacity for more than 200 spectators;

(20) Sites for carnivals, festivals, circuses, shows or events of any kind to which the public is invited;

(21) Business district sidewalks.

Litter receptacles must be placed in the above public places only during times those places or the events held at them are open to the public.

Litter receptacles must be placed in conformance with laws, ordinances, resolutions and rules pertaining to fire, safety, public health or welfare.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-040, filed 9/8/00, effective 10/9/00; Order 73-7, § 173-310-040, filed 4/23/73; Order 72-10, § 173-310-040, filed 5/15/72, effective 9/1/72.]

WAC 173-310-050 Number of litter receptacles required. The minimum number of receptacles meeting the standards established by this chapter required in public places listed in the preceding section is as follows:

(1) Along public highways lying outside the limits of incorporated cities and towns - one receptacle at each rest area, view point or similar turnout, officially designated as such by the primary jurisdictional authority;

(2) Parks, campgrounds and trailer park facilities for transient habitation - one receptacle at each public restroom facility, and one receptacle at each established trailhead that gives access by foot, motorcycle, bicycle or a similar trail for excursion or exploration out of or away from the central activity area;

(3) Gasoline service stations - one litter receptacle placed in plain view of each gasoline service island, with a minimum of one receptacle for each side of the station on which gasoline pumps are located;

(4) Drive-in restaurants, tavern parking lots, shopping centers, grocery store parking lots and outdoor parking lots that have a capacity of more than 50 automobiles - one receptacle, plus one additional receptacle for each 200 parking spaces in excess of 50 spaces;

(5) Marinas, boat launching areas, boat moorage and fueling stations and public and private piers - one receptacle at each area;

(6) Beaches and bathing areas - one receptacle at each public restroom facility, and one receptacle at each access point officially designated as such by the primary jurisdictional authority;

(7) Schoolgrounds - one receptacle at each schoolground bus loading zone officially designated as such by the primary jurisdictional authority;

(8) Racetracks and sporting event sites with seating capacity for more than 200 spectators - one receptacle, plus one additional receptacle for each 1000 seating capacity in excess of 200;

(9) Fairgrounds and sites for carnivals, festivals, circuses, shows or events of any kind to which the public is invited - one receptacle at the entrance to each ride, and one receptacle at each end of walk-through exhibit buildings;

(10) Along the sidewalks of business districts of incorporated cities and towns - one receptacle per 800 feet of sidewalk curbing.

No variance from the provisions of this section may be allowed except with the express permission of the department of ecology.

Notwithstanding the minimum requirements of this section, any public place in which litter receptacles meeting the standards of this chapter are required that is found to have an accumulation of uncontained litter under circumstances that the person responsible for placing receptacles could have reasonably anticipated the litter is deemed to have an insufficient number of receptacles to be in compliance with this rule.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-050, filed 9/8/00, effective 10/9/00; Order DE 76-34, § 173-310-050, filed 9/13/76; Order 73-7, § 173-310-050, filed 4/23/73; Order 72-10, § 173-310-050, filed 5/15/72, effective 9/1/72.]

WAC 173-310-060 Minimum standards. Litter receptacles obtained and placed in public places as required by this chapter shall meet the following minimum standards:

(1) General specifications.

(a) The body of each litter receptacle must be constructed of a minimum of 24-gauge galvanized metal or other material of equivalent strength, that will with normal wear and tear, reasonably resist corrosion and acts of vandalism.

(b) All outside edges of each litter receptacle must be rounded.

(c) Openings in covered litter receptacles must be readily identifiable and readily accessible for the deposit of litter.

(d) Construction and general configuration of litter receptacles must be in conformance with all pertinent laws, ordinances, resolutions or rules pertaining to fire, safety, public health or welfare.

(2) Color and marking.

(a) The entire outer surface of each litter receptacle must be colored medium green conforming with Federal Color Standard No. 595A, Color No. 24424, or Color No. 34424.

(b) Each litter receptacle shall bear the official anti-litter symbol, as adopted herein. The symbol must be colored deep blue conforming with Federal Color Standard No. 595A, Color No. 15180. The symbol may not be distorted as to proportion and may not be incorporated into a commercial advertisement on the receptacle. For litter receptacles along the right of way of public highways, the symbol must be of a size so as to be distinguishable from a minimum distance of 75 feet.

(c) The words **"Deposit Litter"** must be placed on the litter receptacle. Lettering used for these two words must be block-type capital letters to be readily legible at a distance of 30 feet.

(d) No commercial advertisement may be placed on any litter receptacle. However, the person owning any receptacle may place a single line on the receptacle identifying his ownership, and a single credit line designating any donor of the litter receptacle other than the owner may also be placed on the receptacle: Provided, That the lettering does not exceed the size specified for the words **"Deposit Litter,"** and does not interfere with or distract from the prominence of the anti-litter symbol.

(3) Maintenance. Compliance with these minimum standards shall include proper upkeep, maintenance and repair of litter receptacles sufficient to permit the receptacles to serve the functions for which they were designed and to prevent the appearance of the receptacles from becoming unsightly. Inadequately maintained or unsightly litter receptacles are in violation of these minimum standards.

(4) Wherever litter receptacles are placed in any public place other than where required by this chapter, the receptacles shall conform to the provisions of this chapter.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-060, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-060, filed 5/15/72, effective 9/1/72.]

WAC 173-310-070 Anti-litter symbol. The official state anti-litter symbol is the symbol depicted in Appendix A

to this chapter and shall conform to the Federal Color Standard No. 595A, Color No. 15180, which appendix is hereby incorporated into this chapter and made part hereof. Permission to use this symbol in the manner required by this chapter has been obtained from the copyright holder and any other use without the express permission of the copyright holder is prohibited.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-070, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-070, filed 5/15/72, effective 9/1/72.]

WAC 173-310-080 Prohibited acts. (1) No person may damage, deface, abuse or misuse any litter receptacle not owned by him or her so as to interfere with its proper function or to detract from its proper appearance.

(2) No person may deposit leaves, clippings, prunings or gardening refuse in any litter receptacle.

(3) No person may deposit household garbage in any litter receptacle: Provided, That this subsection may not be construed to mean that wastes of food consumed on the premises at any public place may not be deposited in litter receptacles.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-080, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-080, filed 5/15/72, effective 9/1/72.]

WAC 173-310-090 Penalties. Penalties for violation of this chapter must be imposed in accordance with chapter 70.93 RCW.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-090, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-090, filed 5/15/72, effective 9/1/72.]

WAC 173-310-100 Effective date and compliance. (1) This chapter shall become effective on September 1, 1972.

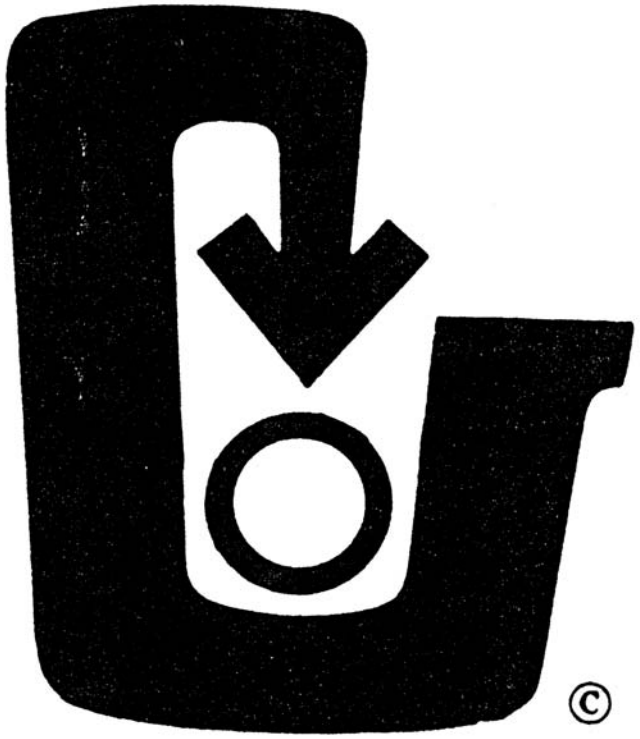
(2) All litter receptacles in any public place designated in this chapter that are placed after the effective date hereof shall conform to the provisions of this chapter.

(3) Litter receptacles in any public place designated in this chapter that were in place before the effective date hereof must be modified to conform with marking requirements of this chapter no later than January 1, 1973.

(4) All litter receptacles in any public place designated in this chapter must be modified or replaced so as to fully conform with all requirements of this chapter no later than July 1, 1975.

[Statutory Authority: Chapter 70.93 RCW. 00-19-015 (Order 00-18), § 173-310-100, filed 9/8/00, effective 10/9/00; Order 72-10, § 173-310-100, filed 5/15/72, effective 9/1/72.]

WAC 173-310-990 Appendix A—Anti-litter symbol.



[Order 72-10, Appendix A (codified as WAC 173-310-990), filed 5/15/72, effective 9/1/72.]

Chapter 173-312 WAC
COORDINATED PREVENTION GRANTS

WAC

173-312-010	Purpose and authority.
173-312-020	Definitions.
173-312-030	Relation to other legislation and administrative rules.
173-312-040	Applicant eligibility.
173-312-050	Project eligibility.
173-312-060	Application process.
173-312-070	Application evaluation.
173-312-080	Allocation of grant funding.
173-312-090	State assistance share and local cash match.
173-312-100	Grant administration.

WAC 173-312-010 Purpose and authority. (1) The purpose of this chapter is to set forth requirements for the conduct of a financial assistance program to provide grants to local governments for local hazardous waste plans and programs and solid waste plans and programs, under the Model Toxics Control Act, RCW 70.105D.070(3). The plans and programs referenced in RCW 70.105D.070(3) are designed to prevent or minimize environmental contamination. Therefor, the grants are designated "coordinated prevention grants" under this chapter.

(2) A further purpose of this chapter is to establish a structure for the administration of coordinated prevention grants funded from the local toxics control account authorized by RCW 82.21.030. The administrative structure may be extended to other waste management grant programs using other funding sources including the litter control account authorized by chapter 70.93 RCW, the hazardous waste assistance account authorized by chapter 70.95E RCW,

and other waste management funding sources that may be established in the future by the legislature.

(3) The purposes of the coordinated prevention grants program are to:

(a) Consolidate all grant programs funded from the local toxics control account, and other programs in subsection (2) of this section that may be selected, into a single program, except for remedial action, public participation, and citizen proponent negotiations grants.

(b) Promote regional solutions and intergovernmental cooperation.

(c) Prevent or minimize environmental contamination by providing financial assistance to local governments to help them comply with state solid and hazardous waste laws and rules.

(d) Provide funding assistance for local solid and hazardous waste planning and for implementation of some programs and projects in those plans.

(e) Encourage local responsibility for solid and hazardous waste management.

(f) Improve efficiency, consistency, reliability, and accountability of grant administration.

Note: Copies of all cited statutes, rules, and guidelines are available at the Department of Ecology, Records Management, P.O. Box 47600, Olympia, Washington 98504-7600.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-010, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-010, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-010, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-010, filed 9/4/90, effective 10/5/90. Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-010, filed 8/4/88.]

WAC 173-312-020 Definitions. "Cash expenditure" means any cash outlay by the recipient, regardless of the source of funds, for direct costs of goods and/or services; salaries and benefits of recipient employees, including force account; overhead cash; and payments made to contractors.

"Department" means the department of ecology.

"Grant" means the portion of the project costs borne by the department.

"In-kind contributions" are property or services that benefit a project and that are contributed by a third party, without direct monetary compensation, to the recipient (or to any contractor under the agreement). In-kind contributions include donated or loaned real or personal property, volunteer services, and employee services donated by a third party.

"Incineration" means a process of reducing the volume of solid waste by use of an enclosed device using controlled flame combustion, operating under federal and state environmental laws and rules.

"Interlocal costs" are in-kind contributions made to a project by another local government under a valid written agreement between the recipient and the other government that details the work to be accomplished, the goods and services to be provided, and the value thereof. If the recipient reimburses another governmental entity for any portion of its contributions, the amount paid to the other entity is not an interlocal cost. It is a cash expenditure on the part of the recipient. Only the nonreimbursed portion of the other governmental entity's contributions is an interlocal cost.

"Landfill" means a disposal facility or part of a facility at which solid waste is permanently placed in or on land and which is not a landspreading disposal facility.

"Lead implementation agency" means the agency designated in the adopted local solid or hazardous waste plan as having the principal responsibility for the execution of all or most of the plan, and/or the coordinating agency that delegates responsibility to other agencies to execute portions of the plan.

"Local government" means any political subdivision, regional governmental unit, district, municipal or public corporation, including cities, towns, and counties. The term encompasses but does not refer specifically to the departments within a city, town, or county.

"Local hazardous waste plan" means the plan to manage moderate-risk waste that a local government is required to prepare under RCW 70.105.220.

"Match" means that portion of the cash expenditures borne by recipient funds and interlocal costs.

"Moderate-risk waste" means (a) any waste that exhibits any of the properties of hazardous waste but is exempt from regulation under chapter 70.105 RCW solely because the waste is generated in quantities below the threshold for regulation, and (b) any household wastes that are generated from the disposal of substances identified by the department as hazardous household substances or substances that exhibit any of the properties of hazardous waste.

"Recipient" means the entity to which the funding is awarded and that is accountable for the use of the funds provided. The recipient is the entire legal entity even if only one component or department is designated in the agreement document.

"Recyclable materials" means those solid wastes separated for recycling or reuse, such as papers, metals and glass, that are identified as recyclable material under a local comprehensive solid waste plan.

"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration.

"Solid waste" or "wastes" means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, and recyclable materials.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-020, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-020, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-020, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-020, filed 9/4/90, effective 10/5/90. Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-020, filed 8/4/88.]

WAC 173-312-030 Relation to other legislation and administrative rules. (1) This rule shall, together with chapters 173-322 and 173-321 WAC, and WAC 173-303-902, fulfill the requirement for rule making set forth in RCW 70.105D.070(7).

(2) The local government receiving a grant shall comply fully with all applicable federal, state, and local laws, orders, rules, and permits.

(3) Grants will be awarded within the limits of available funds. The obligation of the department to make grant payments is contingent upon the availability of funds through legislative appropriation and allotment, and other conditions not reasonably foreseeable by the department, which may render performance impossible.

(4) Nothing in this chapter may influence, affect, or modify existing department programs, rules, or enforcement of applicable laws relating to solid and hazardous waste management and cleanup.

(5) All grants are subject to existing applicable accounting and auditing requirements of state laws and rules.

[Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-030, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-030, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-030, filed 9/4/90, effective 10/5/90. Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-030, filed 8/4/88.]

WAC 173-312-040 Applicant eligibility. (1) Eligibility for solid waste planning grants. Counties that are required by chapter 70.95 RCW to adopt or update local solid waste plans are eligible to apply for coordinated prevention grants to help pay for those plans. This eligibility extends to cities that have submitted an independent city plan, a joint city plan, or joint city-county plan to the department by the effective date of this rule. This eligibility also extends to any city subsequently requesting funding for the preparation of an independent plan, if the city provides for disposal sites wholly within its jurisdiction.

(2) Eligibility for solid waste enforcement grants. Jurisdictional health departments/districts are eligible to apply for coordinated prevention grants to pay for the enforcement of rules adopted under chapter 70.95 RCW.

(3) Eligibility for solid waste implementation grants. Counties whose solid waste plans are adopted and approved by the department as required by chapter 70.95 RCW are eligible to apply for coordinated prevention grants to help pay for the implementation of waste reduction and recycling projects in the most recently approved and adopted plan: Provided, That those projects are eligible as defined in WAC 173-312-050. This eligibility also extends to cities that are eligible for funding to do local solid waste plans or updates as provided by subsection (1) of this section.

If the adopted plans designate lead implementation agencies to implement the plans, those agencies are also eligible to apply for coordinated prevention grants.

(4) Eligibility for hazardous waste planning grants. Local governments that are required by chapter 70.105 RCW to adopt or update local hazardous waste plans are eligible to apply for coordinated prevention grants to help pay for those plans.

(5) Eligibility for hazardous waste plan implementation grants. Local governments with department-approved local hazardous waste plans as required by chapter 70.105 RCW are eligible to apply for coordinated prevention grants to help pay for the implementation of projects in the plan. If the plans designate lead implementation agencies to implement the plans, those agencies are also eligible to apply for coordinated prevention grants.

(6) Any grant-eligible entities as defined in this section may submit their requests in a coordinated application as described in WAC 173-312-060 (4)(a), or may submit separate applications as provided in WAC 173-312-060 (4)(b).

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-040, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-040, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-040, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-040, filed 9/4/90, effective 10/5/90. Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-040, filed 8/4/88.]

WAC 173-312-050 Project eligibility. (1) Eligible project costs are those costs which are necessary and reasonable to fund required local planning and the implementation of some projects and programs contained in those plans, including innovative approaches implementing policies of the plan. These are:

(a) Local hazardous waste planning as required by chapter 70.105 RCW.

(b) Local solid waste planning as required by chapter 70.95 RCW.

(c) Local hazardous waste plan implementation projects.

(d) Local solid waste enforcement by the jurisdictional health departments and districts.

(e) Local solid waste plan implementation projects, which are limited to waste reduction and recycling projects and programs.

(2) Eligible project costs do not include:

(a) Solid waste incinerator feasibility studies, construction, maintenance, or operation.

(b) New landfill construction or landfill expansion, or landfill upgrading at an operating facility to meet the requirements of chapters 173-350 and 173-351 WAC.

(c) Landfill closure as required by chapters 173-350 and 173-351 WAC.

(d) Garbage collection and disposal, except start up and operational costs for waste reduction and recycling programs.

(e) Solid and hazardous waste expenses not directly related to compliance with state solid and hazardous waste laws and rules.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-050, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-050, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-050, filed 5/21/91, effective 6/21/91. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-064 (Order 90-17), § 173-312-050, filed 9/4/90, effective 10/5/90. Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-050, filed 8/4/88.]

WAC 173-312-060 Application process. (1) The department shall set forth in its grant guidelines the base funding levels estimated to be available for each county for coordinated prevention grants and the process by which applications will be submitted.

(2) The application must be submitted by the county agency or department having responsibility for solid waste,

unless the county executive department selects another agency or department to submit the application.

(3) Coordinated prevention grant applications must:

(a) Include a commitment by the applicants to use local funds to match grant funds according to the requirements of WAC 173-312-090.

(b) Be for eligible projects as defined in WAC 173-312-050.

(c) Include a scope of work that is sufficiently detailed for the department to monitor grant performance.

(d) Include documentation that all cities in the county and lead implementation agencies that have approved the adopted local hazardous waste plan or solid waste plan have had the opportunity to request that projects that meet the requirements of WAC 173-312-050 be included in the application.

(4) To obtain coordinated prevention grant funding, a county shall submit an application, as defined herein:

(a) A coordinated grant application means that the county, the health department or district and any other grant eligible entities as defined in WAC 173-312-040 have reached agreement regarding the requested projects and funding allocations for both local solid and local hazardous waste plans and projects. Coordinated applications will receive financial incentives for administrative coordination set forth in WAC 173-312-080.

The coordinated application shall include a maximum grant request for no more than the base funding level for the county, plus the financial incentive.

(b) In the event a county fails to submit a coordinated application, indicating grant eligible entities have not reached agreement regarding projects and funding allocations, they will lose the incentive as set forth in WAC 173-312-080. This money shall be made available for supplemental funding as specified in WAC 173-312-080.

(5) The application must be signed, indicating approval by responsible officials from the county, local health department or district and any other grant-eligible entities as defined in WAC 173-312-040.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-060, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-060, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-060, filed 5/21/91, effective 6/21/91.]

WAC 173-312-070 Application evaluation. (1) In evaluating coordinated prevention grant applications, the department may require that funding of certain projects take precedence over other projects. The department will refer to the following priority order in evaluating projects:

(a) Required hazardous waste planning under chapter 70.105 RCW and required solid waste planning under chapter 70.95 RCW.

(b) Programs and projects to implement adopted local hazardous waste plans, including waste reduction and recycling.

(c) Solid waste enforcement programs.

(d) Programs and projects to implement adopted local solid waste plans, including waste reduction and recycling.

(2) The department will evaluate each application according to the extent to which it:

(a) Conforms to the adopted local hazardous waste and solid waste plans.

(b) Advances regional solutions and intergovernmental cooperation.

(c) Supports the state's goal to achieve a fifty percent recycling rate.

(d) Confers broad benefit on residents of the county, whether they reside in incorporated areas or unincorporated areas.

(e) Meets the needs of local government for projects that prevent environmental contamination from solid and hazardous waste.

(f) Uses the state's resources efficiently.

(g) For solid waste enforcement funding, takes into account the number of disposal sites and the geographic area requiring enforcement activity.

(3) The department may fund all or portions of a coordinated prevention grant application.

(4) The department may award grants to any local government in order to execute all or portions of a coordinated prevention grant program.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-070, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-070, filed 5/21/91, effective 6/21/91.]

WAC 173-312-080 Allocation of grant funding. (1) The department shall consider the following factors in calculating base funding levels, supplemental grant levels, and grant amounts for recipients:

(a) Projected and actual revenue to the local toxics control account, and other funding sources cited in WAC 173-312-010(2), as determined by the department.

(b) The number of people served by a local government.

(2) Grants that may be awarded to eligible cities under WAC 173-312-040 may not exceed a city's proportionate share, based on population, of a county's base funding level as defined in subsection (3)(a) of this section, unless the department, the county, the health department or district and the grant-eligible entities as defined in WAC 173-312-040 agree otherwise.

(3) Projected revenues to the local toxics control account that are available each biennium for coordinated prevention grant purposes must be divided into two portions, one for solid waste enforcement grants, and one for solid and hazardous waste implementation grants. Allocations will be calculated as follows:

(a) For solid waste enforcement grants, an amount sufficient to provide each single-county jurisdictional health department with one hundred thousand dollars and each multicounty jurisdictional health department with one hundred fifty thousand dollars will be set aside. In future biennia the amount set aside for solid waste enforcement will be twenty percent of the total coordinated prevention grant allocation, and the single-county and multicounty solid waste enforcement grant allocation will be increased or decreased proportionately.

(b) For solid and hazardous waste implementation grants, the remaining eighty percent is divided among counties by means of a formula that shall consist of two elements:

(i) A fixed amount for each county, regardless of size; and

(ii) A per capita amount based on county population size as determined by the United States census data or by the official estimates of the state office of financial management.

(c) Counties that submit a coordinated application as defined in WAC 173-312-060 shall receive a ten percent increase if base level funding as defined in (b) of this subsection is an incentive.

(d) After initial grant amounts have been determined for both categories of coordinated prevention grants based upon the applications, the unallocated funds shall become supplemental funds used to promote strategic initiatives that meet needs defined by the state solid waste planning process. Supplemental funds for solid and hazardous waste implementation grants will first be awarded within the initial solid and hazardous waste implementation coordinated prevention grant portion. Supplemental funds for solid waste enforcement grants will first be awarded within the initial solid waste enforcement coordinated prevention grant portion. Only when supplemental funds still remain in either category after the initial supplemental awards have been given shall the funds be awarded to the other portion.

(4) Applicants must meet the requirements of this chapter to the satisfaction of the department in order to secure grant awards.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-080, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-080, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-080, filed 5/21/91, effective 6/21/91.]

WAC 173-312-090 State assistance share and local cash match. (1) Costs eligible under WAC 173-312-050 will be considered for grant funding at a level of seventy-five percent. Twenty-five percent of eligible costs must be provided as local cash match.

(2) Local cash match may be met by cash expenditures and interlocal costs. Interlocal costs are the only type of in-kind contributions that may be used for local cash match.

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-090, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-090, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-090, filed 5/21/91, effective 6/21/91.]

WAC 173-312-100 Grant administration. (1) The department shall prepare guidelines to facilitate compliance with and interpretation of this rule.

(2) Coordinated prevention grants shall operate on a biennial funding cycle. Applications will be due in the first quarter of the biennium. Eligible applicant governments will apply for grant funds up to the base funding level set forth in WAC 173-312-080 plus the incentive, and at the same time shall submit requests for additional funds to assist ongoing or new projects. Supplemental funds, if awarded, shall be supplied as part of the new grant. New grants will begin in the third quarter of the biennium, and will run for two calendar years.

(3) The department will obligate coordinated prevention grant funds to a recipient for a maximum period of two years. If the recipient has not accomplished the scope of work in the time period set forth in the agreement, the recipient must use a portion of its next biennial base funding level to complete the project(s).

(4) No costs incurred before the effective date of a grant agreement are eligible unless specific provision is made in the grant agreement for those costs.

(5) All grants under this chapter must be consistent with Administrative Requirements for Ecology Grants and Loans WDOE #91-18 (Revised October 2000).

[Statutory Authority: Chapters 70.105D and 43.21 RCW. 02-05-070 (Order 01-11), § 173-312-100, filed 2/19/02, effective 3/22/02. Statutory Authority: RCW 70.105D.070(3). 00-19-016 (Order 00-19), § 173-312-100, filed 9/8/00, effective 10/9/00. Statutory Authority: RCW 43.21A.080. 91-11-090 (Order 90-65), § 173-312-100, filed 5/21/91, effective 6/21/91.]

Chapter 173-313 WAC

LOCAL SOLID WASTE ENFORCEMENT GRANT REGULATION

WAC

173-313-010	Introduction.
173-313-020	Purpose and authority.
173-313-030	Applicant eligibility.
173-313-040	Application.
173-313-050	Criteria for allocation of funds.

WAC 173-313-010 Introduction. RCW 70.95.220 provides that any jurisdictional health department may apply to the department of ecology for financial aid for the enforcement of rules and regulations promulgated under chapter 70.95 RCW. RCW 70.95.220 further provides that after receipt of such applications, the department may allocate available funds according to criteria established by regulation. Such criteria shall consider or be based upon population, urban development, the number of disposal sites, and geographical area.

[Statutory Authority: RCW 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-010, filed 8/17/89, effective 9/17/89.]

WAC 173-313-020 Purpose and authority. The purpose of this regulation is to establish criteria by which the department of ecology shall allocate financial aid, pursuant to the Model Toxics Control Act, to jurisdictional health departments for enforcement of rules and regulations promulgated under chapter 70.95 RCW.

[Statutory Authority: RCW 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-020, filed 8/17/89, effective 9/17/89.]

WAC 173-313-030 Applicant eligibility. In order to be eligible for grant funding, the local health department must:

(1) Be a "jurisdictional health department" as defined by RCW 70.95.030;

(2) Have a program to achieve the goals of chapter 70.95 RCW;

(3) Have a solid waste ordinance per chapter 70.95 RCW, or be in the process of adoption.

[Statutory Authority: RCW 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-030, filed 8/17/89, effective 9/17/89.]

WAC 173-313-040 Application. Application for funds shall be made on forms provided by the department and shall include detailed information specified in a guidance docu-

ment also provided by the department. This detailed information shall include a confirmation of the applicant's eligibility, and a description of the program and budget.

[Statutory Authority: RCW 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-040, filed 8/17/89, effective 9/17/89.]

WAC 173-313-050 Criteria for allocation of funds. As specified in RCW 70.95.220, first priority will be to provide funds exclusively for solid waste inspection activities, including staff for administration of the local inspection program. The following criteria will be used to assist in the allocation of those funds:

(1) Protection of public health and environment.

(2) Cost to residential ratepayers without state assistance.

(3) Actions required under federal, state and local regulations, and consent decrees.

(4) Commitment/readiness to proceed.

(5) Degree of local solid waste problems, as measured by these factors:

(a) Number of existing disposal sites, open and closed;

(b) Environmental sensitivity of the geographical area;

(c) Disposal sites and other waste management facilities, open and closed;

(d) Current enforcement actions;

(e) Extent of urban development and its relationship to industrial, commercial, and residential development; and

(f) Population.

[Statutory Authority: RCW 70.95.220 and 1989 c 2. 89-17-073 (Order 89-12), § 173-313-050, filed 8/17/89, effective 9/17/89.]

Chapter 173-321 WAC
PUBLIC PARTICIPATION GRANTS

WAC

173-321-010	Purpose and authority.
173-321-020	Definitions.
173-321-030	Relationship to other legislation and administrative rules.
173-321-040	Applicant eligibility.
173-321-050	Application evaluation criteria.
173-321-060	Eligible project costs.
173-321-070	Grant funding.
173-321-080	Grant administration.

WAC 173-321-010 Purpose and authority. (1) The department is directed by the Model Toxics Control Act to provide grants up to sixty thousand dollars to persons who may be adversely affected by a release or threatened release of a hazardous substance and to not-for-profit public interest groups. These grants shall be used to facilitate public participation in the investigation and remediation of a release or threatened release of a hazardous substance and to facilitate public participation in the implementation of the state's solid and hazardous waste management priorities.

(2) The purpose of this chapter is to set forth eligibility criteria and funding requirements for grant projects.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-010, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-010, filed 10/17/89, effective 11/17/89.]

WAC 173-321-020 Definitions. As used in this chapter:

(1) "Department" means the department of ecology.

(2) "Director" means the director of the department of ecology or such person authorized to act for the director.

(3) "Emergency" means an occurrence warranting public participation which occurs after the deadline for grant applications and before the opening of a new grant application period, such as:

(a) An unforeseen release of a hazardous substance at an existing site or a newly discovered site;

(b) An unanticipated decision by the department concerning remedial action at a site or publication of a remedial investigation, feasibility study or risk assessment; or

(c) Discovery of a technical assistance need which could not have been foreseen before the grant application deadline.

(4) "Emergency grant" means a public participation grant in the hazardous substance release category for an emergency as defined in this section.

(5) "Expendable personal property" means all tangible personal property other than nonexpendable personal property.

(6) "Facility" means:

(a) Any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, waste pile, pond, lagoon, impoundment, ditch, landfill, tank, storage container, motor vehicle, rolling stock, vessel, or aircraft; or

(b) Any site or area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located.

(7) "Grant applicant" means any person requesting a public participation grant.

(8) "Hazardous substance" means:

(a) Any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6) or any dangerous or extremely hazardous waste designated by rule pursuant to chapter 70.105 RCW;

(b) Any hazardous substance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule pursuant to chapter 70.105 RCW;

(c) Any substance that, on March 1, 1989, is a hazardous substance under 101 (14) of the Federal Cleanup Law, 42 U.S.C. Sec. 960(14);

(d) Petroleum or petroleum products; and

(e) Any substance or category of substances including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment. Except that:

The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: Crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local laws.

(9) "Hazardous waste management priorities" as defined in RCW 70.105.150 are the priorities in the management of hazardous waste which should be followed in descending order as applicable:

(a) Waste reduction;

(b) Waste recycling;

(c) Physical, chemical, and biological treatment;

(d) Incineration;

(e) Solidification/stabilization treatment;

(f) Landfill.

(10) "Nonexpendable personal property" means tangible personal property having a useful life of more than one year and an acquisition cost of three hundred dollars or more per unit.

(11) "Not-for-profit public interest organization" means any corporation, trust, association, cooperative, or other organization which:

(a) Is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest;

(b) Is not organized primarily for profit; and

(c) Uses its net proceeds to maintain, improve, and/or expand its operations.

(12) "Owner/operator" means any person defined as an owner or operator under RCW 70.105D.020(12).

(13) "Person" means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, state government agency, unit of local government, federal government agency, or Indian tribe.

(14) "Personal property" means property of any kind except real property. It may be tangible (having physical existence) or intangible (having no physical existence), such as patents, inventions, and copyrights.

(15) "Potentially liable person" means any person whom the department finds, based on credible evidence, to be liable under RCW 70.105D.040. The department shall give notice to any such person and allow an opportunity for comment before making the finding, unless an emergency requires otherwise.

(16) "Real property" means land, land improvements, structures, and appurtenances thereto, excluding moveable machinery and equipment.

(17) "Release" means any intentional or unintentional entry of any hazardous substance into the environment, including but not limited to the abandonment or disposal of containers of hazardous substances.

(18) "Remedy, remediation, or remedial action" means any action or expenditure consistent with the purposes of this chapter to identify, eliminate, or minimize any threat or potential threat posed by hazardous substances to human health or the environment including any investigative and monitoring activities with respect to any release or threatened release of a hazardous substance and any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health.

(19) "Solid waste management priorities" as defined in chapter 70.95 RCW are the priorities in the management of solid waste which should be followed in order of descending priority as applicable:

(a) Waste reduction;

(b) Recycling with source separation of recyclable materials as the preferred method;

(c) Energy recovery, incineration, or landfill of separated waste;

(d) Energy recovery, incineration, or landfill of mixed waste.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-020, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-020, filed 10/17/89, effective 11/17/89.]

WAC 173-321-030 Relationship to other legislation and administrative rules. (1) The organization receiving a grant shall comply fully with all applicable federal, state, and local laws, orders, regulations, and permits.

(2) Nothing in this chapter shall influence, affect, or modify existing department programs, regulations, or enforcement of applicable laws relating to solid and hazardous waste management and cleanup.

(3) All grants shall be subject to the existing, applicable accounting and auditing requirements of state laws and regulations.

(4) The department will prepare a guidance manual to facilitate compliance with these regulations.

[Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-030, filed 10/17/89, effective 11/17/89.]

WAC 173-321-040 Applicant eligibility. (1) Public participation grants may only be awarded to groups of three or more unrelated persons or to not-for-profit public interest organizations.

(2) All applicants must demonstrate their ability to appropriately administer grant funds.

(3) Applications for a hazardous substance release grant, including emergency grants, must include information on:

(a) The nature of the release or threatened release of the hazardous substance;

(b) The location of the release or threatened release of the hazardous substance;

(c) How the applicant group may be adversely affected by the release or threatened release of the hazardous substance;

(d) How the applicant group will promote public participation in the investigation or remediation of the release or threatened release of the hazardous substance;

(e) A complete project description;

(f) How the applicant group represents the environmental, health, and economic interests of individuals affected by the release or threatened release of the hazardous substance;

(g) The applicant group's history and experience, if any, in conducting activities similar to those described in the grant application;

(h) For emergency grants, a description of why an emergency exists, as defined in WAC 173-321-020(3); and

(i) Any other information specified by the department as needed to award a grant.

(4) Applications for a waste management priorities grant must include information on:

(a) How the applicant group will promote or implement the state solid or hazardous waste management priorities;

(b) How the applicant group will promote public participation in the grant project described in the application;

(c) A complete project description;

(d) The applicant group's history and experience, if any, in conducting activities similar to those described in the grant application;

(e) Any other information specified by the department as needed to award a grant.

(5) The following persons or groups of persons shall be ineligible for grant funding:

(a) Any person potentially liable, as defined under RCW 70.105D.040;

(b) Local governments including any political subdivision, regional governmental unit, district, municipal or public corporation, including cities, towns, and counties. The term encompasses but does not refer specifically to the departments within a city, town, or county;

(c) Federal and state governments, or agencies thereof;

(d) Federally recognized Indian tribes, as a governing body. Individual tribe members of three or more persons are eligible to apply for a public participation grant;

(e) Organizations sustained by public funding;

(f) Public and private universities; and

(g) Any organization located outside of Washington state boundaries.

(6) Grant applications failing to qualify may be resubmitted.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-040, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-065 (Order 90-20), § 173-321-040, filed 9/4/90, effective 10/5/90. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-040, filed 10/17/89, effective 11/17/89.]

WAC 173-321-050 Application evaluation criteria. (1) Except for emergency grants which will be reviewed and evaluated by the department within twenty working days of receipt of the application, all other grant applications received will be reviewed and evaluated by the department within thirty working days after the close of the regular grant application period. Incomplete applications will not be evaluated. Applications will be ranked according to how each application meets the criteria set forth below. Grants will be awarded, within the limits of available funds, to the highest ranking applications. The department may fund all or portions of eligible grant applications.

(2) Priority consideration for public participation grant funding will be given to:

(a) Applicants requesting a hazardous substance release grant;

(b) New applicants; and

(c) Applicants that demonstrate the ability to provide accurate technical information on complex waste management issues.

(3) General criteria. All public participation grants will be evaluated against the following criteria:

(a) The type and extent of the applicant group's past history and experience conducting activities similar to those described in the grant application;

(b) The group's basic funding, with consideration given to groups with limited resources;

(c) The group's ability to appropriately manage grant funds;

(d) Except for emergency grants, if more than one group is interested in the same project, priority consideration will be given to groups who consolidate;

(e) Availability of funding sources for the project;

(f) Past performance under a public participation grant;

(g) The group's ability to define the environmental issue and identify what changes will occur in the problem as a result of the project; and

(h) Demonstration of the use of Bennett's hierarchy or similar methodology with a focus on outcome and clear commitment to follow through to end results.

(4) Special criteria.

(a) Hazardous substance release grants. Hazardous substance release grants, including emergency grants, will be evaluated against the following criteria:

(i) The degree to which the applicant group may be adversely or potentially adversely impacted by the release or threatened release of the hazardous substance, including but not limited to adverse or potential adverse impacts to surface and drinking waters, soils, flora or fauna, species diversity, air quality, property values, marketability of agricultural crops, and recreational areas;

(ii) The degree to which the applicant group represents the environmental, health, and economic interests of individual group members;

(iii) The degree to which the proposed project will promote public participation in the investigation or remediation of the release or threatened release of the hazardous substance.

(b) Waste management priorities grants. Waste management priorities grants will be evaluated against the following criteria:

(i) The degree to which the proposed public participation activity will promote or implement the state solid or hazardous waste management priorities;

(ii) The degree to which the proposed project will facilitate public understanding of the state solid and hazardous waste management priorities;

(iii) The degree to which the proposed public participation activities are consistent with or improve upon existing solid or hazardous waste management plans.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-050, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080 and chapter 70.105D RCW. 90-18-065 (Order 90-20), § 173-321-050, filed 9/4/90, effective 10/5/90. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-050, filed 10/17/89, effective 11/17/89.]

WAC 173-321-060 Eligible project costs. (1) Eligible project costs for substance release grants shall include but not be limited to:

(a) Hiring technical assistants to review and interpret documents;

(b) Public involvement and public education activities;

(c) Reviewing specific plans for environmental testing and analysis, reviewing reports summarizing the results of such plans and making recommendations for modifications to such plans.

(d) Expendable personal property;

(e) Other public participation activities as determined by the department on a case-by-case basis.

(2) Eligible project costs for waste management priority grants shall include but not be limited to:

(a) Assisting in developing and implementing programs that promote or improve state or local solid or hazardous waste management plans;

(b) Assisting in developing programs or activities that promote and are consistent with the state solid or hazardous waste management priorities;

(c) Expendable personal property;

(d) Other public participation activities as determined by the department on a case-by-case basis.

(3) Ineligible projects and grant costs shall include but not be limited to:

(a) Independently collecting or analyzing samples at facility sites;

(b) Hiring attorneys for legal actions against potentially liable persons, facility owners, or the department. Applicants who receive a grant award shall notify the department if legal action is intended or taken on the subject of the grant project or application;

(c) Legislative lobbying activities;

(d) Real property;

(e) Nonexpendable personal property.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-060, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-060, filed 10/17/89, effective 11/17/89.]

WAC 173-321-070 Grant funding. (1) The department may fund up to one hundred percent of eligible project costs.

(2) The maximum grant allowance shall be sixty thousand dollars.

(3) Public participation grants may be renewed annually. A new grant application must be submitted to be evaluated and ranked for additional funding.

(4) The department reserves the right to refuse funding to any and all applications failing to meet the grant eligibility criteria and may reopen the application period for additional applications.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-070, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-070, filed 10/17/89, effective 11/17/89.]

WAC 173-321-080 Grant administration. (1) The department shall establish grant application funding cycles each year.

(2) Public notice of application funding cycles shall be published statewide.

(3) A grant application package will be sent to all persons interested in applying for public participation grants. Grant application packages will include notice of grant application deadlines, grant guidelines, and application forms.

(4) Grant applications will be evaluated by the department. To be funded, applications must include all required elements as outlined in the guidelines.

(5) The obligation of the department to make grant payments is contingent upon the availability of funds through legislative appropriation, and such other conditions not reasonably foreseeable which may preclude awarding such grants.

(6) The department, on at least a biennial basis, will determine the amount of funding available for public participation grants and establish an application and funding cycle. The minimum amount of money available for public participation grants established by the Model Toxics Control Act shall be one percent of the moneys deposited into the state and the local toxics control accounts.

(7) The department shall not be held responsible for payment of salaries, consultant fees, or other costs related to a contract of the grantee.

(8) To the extent that the Constitution and laws of the state of Washington permit, the grantee shall indemnify and hold the department harmless, from and against, any liability for any or all injuries to persons or property arising from the negligent act or omission of the grantee arising out of a grant contract.

(9) All grants under this chapter shall be consistent with "*Administrative Requirements for Ecology Grants and Loans*" WDOE publication No. 91-18, revised October 2000.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-321-080, filed 2/12/01, effective 3/15/01. Statutory Authority: 1989 c 2. 89-21-072 (Order 89-26), § 173-321-080, filed 10/17/89, effective 11/17/89.]

Chapter 173-322 WAC
REMEDIAL ACTION GRANTS AND LOANS

WAC

173-322-010	Purpose and authority.
173-322-020	Definitions.
173-322-030	Relation to other legislation and administrative rules.
173-322-040	Administration.
173-322-050	Fiscal controls.
173-322-060	Site hazard assessment grants.
173-322-070	Oversight remedial action grants.
173-322-080	Independent remedial action grants.
173-322-090	Area-wide ground water remedial action grants.
173-322-100	Safe drinking water action grants.
173-322-110	Methamphetamine lab site assessment and cleanup grants.
173-322-120	Derelict vessel remedial action grants.
173-322-130	Loans.

WAC 173-322-010 Purpose and authority. This chapter recognizes that the state contains hundreds of hazardous waste sites which threaten the state's water resources, including those used for public drinking water; that many of our municipal landfills are current or potential hazardous waste sites and present serious threats to human health and the environment; and that the costs of eliminating these threats in many cases are beyond the financial means of local governments and ratepayers.

This chapter establishes requirements for a program of grants and loans to local governments for remedial action pursuant to RCW 70.105D.070 (3)(a) and (7). The intent of the remedial action grants and loans is to encourage and expedite the cleanup of hazardous waste sites and to lessen the impact of the cleanup on ratepayers and taxpayers. The remedial action grants and loans shall be used to supplement local government funding and funding from other sources to carry out remedial actions.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-010, filed 3/18/05, effective 4/18/05. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-010, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-010, filed 5/1/90, effective 6/1/90.]

WAC 173-322-020 Definitions. Unless otherwise defined in this chapter, words and phrases used in this chapter shall be defined according to WAC 173-340-200.

"Abandoned or derelict vessels" means vessels that have little or no value and either have no identified owner or have an identified owner lacking financial resources to clean up and dispose of the vessel.

"Area-wide ground water contamination" means multiple adjacent properties with different ownership affected by hazardous substances from multiple sources that have resulted in commingled plumes of contaminated ground water that are not practicable to address separately.

"Cleanup action" means any remedial action, except interim actions, taken at a site to eliminate, render less toxic, stabilize, contain, immobilize, isolate, treat, destroy, or remove a hazardous substance that complies with WAC 173-340-350 through 173-340-390.

"Coordinated water system plan" means a plan for public water systems within a critical water supply service area which identifies the present and future water system concerns and sets forth a means for meeting those concerns in the most efficient manner possible pursuant to chapter 246-293 WAC.

"Decree" or "consent decree" means a consent decree issued under WAC 173-340-520 or the federal cleanup law.

"Department" means the department of ecology.

"Director" means the director of the department of ecology.

"Economically disadvantaged county" means a county that meets the following criteria:

• The per capita income of the county, as measured by the latest official estimate of the Washington state office of financial management, is in the lower twenty counties in the state; and

• The county is economically distressed, as defined by chapter 43.168 RCW.

The department will include a list of counties which are economically disadvantaged in the following publication: Washington state department of ecology, "*Remedial Action Program Guidelines*," Publication No. 99-505.

"Federal cleanup law" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. 9601 et seq.

"Grant agreement" means a binding agreement between the local government and the department that authorizes the disbursement of funds to the local government to reimburse it for a portion of expenditures in support of a specified scope of services.

"Hazard ranking" means the ranking for hazardous waste sites used by the department pursuant to RCW 70.105D.030 (2)(b) and WAC 173-340-330.

"Hazardous substances" means any hazardous substance as defined in WAC 173-340-200.

"Hazardous waste site" means any facility where there has been confirmation of a release or threatened release of a hazardous substance that requires remedial action.

"Independent remedial actions" means remedial actions conducted without department oversight or approval and not under an order or consent decree.

"Initial containment of methamphetamine lab sites" means the first location where hazardous substances are confined by a container, vessel, barrier, or structure, whether natural or constructed, with a defined boundary, and that prevents or minimizes its release into the environment.

"Innovative technology" means new technologies that have been demonstrated to be technically feasible under certain site conditions, but have not been widely used under different site conditions. Innovative technology also means the innovative use of existing technologies that have been established for use under certain site conditions, but not the conditions that exist at the hazardous waste site for which a remedial action grant is sought. Innovative technology has limited performance and cost data available.

"Interim action" means a remedial action conducted under WAC 173-340-430.

"Loan agreement" means a binding agreement between the local government and the department that authorizes the disbursement of funds to the local government that must be repaid. The loan agreement includes terms such as interest rates and repayment schedule, scope of work, performance schedule, and project budget.

"Local government" means any political subdivision, regional governmental unit, district, municipal or public corporation, including cities, towns, and counties. The term encompasses but does not refer specifically to the departments within a city, town, or county.

"Methamphetamine lab site assessment" means the actions taken by a local health department or district under WAC 246-205-520 through 246-205-560, including posting the property, inspecting the property, determining whether the property is contaminated, posting contaminated property, and notifying occupants, property owners, and other persons with an interest in the contaminated property.

"Model Toxics Control Act" or "act" means chapter 70.105D RCW, first passed by the voters in the November 1988 general election as Initiative 97 and as since amended by the legislature.

"National Priorities List" or "NPL" means a list of hazardous waste sites at which the U.S. Environmental Protection Agency intends to proceed with enforcement or cleanup action.

"No further action (NFA) determination" means a written opinion issued by the department under WAC 173-340-515 (5)(b) that the independent remedial actions performed at a hazardous waste site meet the substantive requirements of chapter 173-340 WAC and that no further remedial action is required at the hazardous waste site. The opinion is advisory only and not binding on the department.

"Order" means an order issued under chapter 70.105D RCW, including enforcement orders issued under WAC 173-340-540 and agreed orders issued under WAC 173-340-530, or an order issued under the federal cleanup law, including unilateral administrative orders (UAO) and administrative orders on consent (AOC).

"Oversight costs" are remedial action costs of the department or the U.S. Environmental Protection Agency reasonably attributable to the administration of an order or decree for remedial action at a hazardous waste site.

"Oversight remedial actions" means remedial actions conducted under an order or decree.

"Partial funding" means funding less than the maximum percentage of eligible costs allowed under this chapter.

"Pilot study" means an experiment in remedial action method, with the purpose of testing the suitability of a particular cleanup technology or process for remedial action at a particular site.

"Potentially liable person" or "PLP" means any person whom the department finds, based on credible evidence, to be liable under RCW 70.105D.040.

"Potentially responsible party" or "PRP" means "covered persons" as defined under section 9607 (a)(1) through (4) of the federal cleanup law (42 U.S.C. Sec. 9607(a)).

"Public water system" means any system, excluding a system serving only one single-family residence and a system with four or fewer connections all of which serve residences on the same farm, providing piped water for human consumption, including any collection, treatment, storage, or distribution facilities under control of the purveyor and used primarily in connection with the system and collection or pretreatment storage facilities not under control of the purveyor but primarily used in connection with such system.

"Purveyor" means an agency or subdivision of the state or a municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or any other entity that owns or operates a public water system, or the authorized agent of such entities.

"Recycling" means a remedial action which permanently removes hazardous substances from the site and successfully directs the material into a new product suitable for further industrial or consumer use.

"Remedial action" means any action or expenditure consistent with the purposes of chapter 70.105D RCW to identify, eliminate, or minimize any threat posed by hazardous substances to human health or the environment including any investigative and monitoring activities with respect to any release or threatened release of a hazardous substance and any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health.

"Remedial design (RD)" means an engineering study during which technical plans and specifications are developed to guide subsequent cleanup action at a hazardous waste site.

"Remedial investigation/feasibility study" or "RI/FS" means a remedial action that consists of activities conducted under WAC 173-340-350 intended to collect, develop, and evaluate sufficient information regarding a site to enable the selection of a cleanup action under WAC 173-340-360 through 173-340-390.

"Retroactive costs" means costs incurred before the date of the grant agreement.

"Safe drinking water" means water meeting drinking water quality standards set by chapter 246-290 WAC.

"Safe drinking water action" means an action by a local government purveyor or other purveyor to provide safe drinking water through public water systems to areas contaminated by or threatened by contamination from hazardous waste sites.

"Site" means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, or aircraft; or any site or area where a hazardous substance, other than a legal consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located.

"Site hazard assessment" means a remedial action that consists of an investigation performed under WAC 173-340-320.

"Treatment" means a remedial action which permanently destroys, detoxifies, or recycles hazardous substances.

[Statutory Authority: RCW 70.105D.070. 07-08-010 (Order 06-13), § 173-322-020, filed 3/22/07, effective 4/22/07; 05-07-104 (Order 04-06), § 173-322-020, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-020, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-020, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-020, filed 5/1/90, effective 6/1/90.]

WAC 173-322-030 Relation to other legislation and administrative rules. (1) Nothing in this chapter shall influence, affect, or modify department programs, regulations, or enforcement of applicable laws relating to hazardous waste investigation and cleanup.

(2) Nothing in this chapter shall modify the order or decree the department has secured with potentially liable persons for remedial action. The execution of remedies pursuant to the order or decree shall in no way be contingent upon the availability of grant funding.

(3) All grants and loans shall be subject to existing accounting and auditing requirements of state laws and regulations applicable to the issuance of grants and loans.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-030, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-030, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-030, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-030, filed 5/1/90, effective 6/1/90.]

WAC 173-322-040 Administration. (1) **Notice of availability.** Local governments will be periodically informed of the availability of remedial action grant and loan funding.

(2) **Application package.** An application package will be sent to all parties expressing interest in remedial action grants or loans and to all local governments that have been required by decree or order to perform remedial actions. Application packages will include guidelines and application forms.

(3) **Application guidance.** The department will prepare a guidance manual on a biennial basis to assist grant and loan applicants and to facilitate compliance with this regulation.

(4) **Application period.** The application for a remedial action grant or loan must be submitted to the department within the period specified in this chapter for the particular type of grant or loan.

(5) **Application form.** The application for a remedial action grant or loan must be completed on forms provided by the department.

(6) **Appropriation of funds.** Grants and loans will be awarded within the limits of available funds. The obligation of the department to make grant payments or provide loans is contingent upon the availability of funds through legislative appropriation and allotment, and such other conditions not reasonably foreseeable by the department rendering performance impossible. When the grant or loan crosses over bienniums, the obligation of the department is contingent upon the legislative appropriation of funds for the next biennium.

(7) **Allocation of funds.** In conjunction with the biennial program report and program plan required by WAC 173-340-340, the department will prepare an administrative allocation from the legislative appropriation of the local toxics

control account for funding remedial action grants and loans. Within that administrative allocation, the department will allocate subamounts for each type of remedial action grant or loan. The allocations shall be based on estimated costs for work on eligible sites which are identified in the program plan for the biennium.

(8) **Funding.** Remedial action grants and loans shall be used to supplement local government funding and funding from other sources to carry out required remedial action.

(9) **Department discretion.** The department may fund all or portions of eligible grant or loan applications.

(10) **Indemnification.** To the extent that the Constitution and laws of the state of Washington permit, the grantee or loan recipient shall indemnify and hold the department harmless, from and against, any liability for any or all injuries to persons or property arising from the negligent act or omission of the grantee or loan recipient arising out of a grant or loan contract.

(11) **Administrative requirements.** All grants and loans administered by the department under this chapter shall comply with the requirements set forth in the following publication: Washington state department of ecology, "*Administrative Requirements for Ecology Grants and Loans*," Publication No. 91-18.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-040, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-040, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-040, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-040, filed 5/1/90, effective 6/1/90.]

WAC 173-322-050 Fiscal controls. (1) **General.** The department will establish reasonable costs for all grants and loans, require local governments to manage projects in a cost-effective manner, and ensure that all potentially liable persons assume responsibility for remedial action.

(2) **Partial funding.** The department retains the authority to issue grants or loans which reimburse the local government for less than the maximum percentage allowable under WAC 173-322-060 through 173-322-130.

(3) **Limit on funding for a hazardous waste site.**

(a) For hazardous waste sites where oversight remedial actions are being conducted, the department and the local government will establish a final cleanup budget and negotiate grant and loan agreements after the remedial investigation and feasibility study have been completed and a final remedial action plan has been developed by the local government. The funding provided under these agreements will be the final department remedial action fund commitment for cleanup at that hazardous waste site. Grant and loan agreements may be amended, but requests to increase the remedial action budget at that site will receive a lower priority than other applications.

(b) For hazardous waste sites where independent remedial actions have been conducted, the remedial action costs eligible for grant funding at a hazardous waste site shall not exceed four hundred thousand dollars.

(4) **Retroactive funding.** Retroactive costs are not eligible for funding, except as provided under this chapter for each type of grant or loan.

(5) **Consideration of contribution claims.** The local government may not use proceeds from contribution claims to meet the match requirement for the grant. If the local government receives proceeds from a contribution claim before the effective date of the grant agreement, then the department shall deduct those proceeds from the amount eligible for grant funding, after subtracting from those proceeds the legal costs incurred by the local government pursuing the contribution claim. If the local government receives proceeds from a contribution claim after the effective date of the grant agreement, then the local government shall reimburse the department for a proportional share of those proceeds, after subtracting from those proceeds the legal costs incurred by the local government pursuing the contribution claim.

(6) **Consideration of insurance claims.** The local government may use proceeds from insurance claims to meet the match requirement for the grant. If those proceeds exceed the match requirement for the grant, then the department may reduce grant funding or require a reimbursement of grant funding by up to the amount that those proceeds exceed the match requirement, after subtracting from that amount the legal costs incurred by the local government pursuing the insurance claims.

(7) **Repayment of area-wide ground water remedial action grant funds.** If the department provides the local government with an area-wide ground water remedial action grant for conducting remedial action on property owned by private parties, then the grant amount shall be partially repaid to the department. The terms and amount of repayment shall be included in the grant agreement between the local government and the department.

(8) **Financial reporting.**

(a) **Grant application.** The local government shall specify in the grant application any proceeds it has received from contribution claims. The local government shall also specify in the grant application any current or potential sources of local funding to meet the match requirement for the grant including, but not limited to, other grants or loans and proceeds from insurance claims.

(b) **Grant agreement.** If the department provides the local government with a remedial action grant or loan, then the local government shall:

(i) Submit a copy of the local government's "Comprehensive Annual Financial Report" following its publication, for the year in which the grant is issued and for each year the grant is in effect; and

(ii) Notify the department of any proceeds the local government receives from a contribution or insurance claim within ninety days of receipt of those proceeds.

(9) **Financial responsibility.** As established by the Model Toxics Control Act, chapter 70.105D RCW, and implementing regulations, the potentially liable persons (PLPs) bear financial responsibility for remedial action costs. The remedial action grant and loan programs may not be used to circumvent the responsibility of a PLP.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-050, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-050, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-050, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-050, filed 5/1/90, effective 6/1/90.]

WAC 173-322-060 Site hazard assessment grants. (1) **Purpose.** The purpose of the site hazard assessment grant program is to involve local health districts and departments in assessing the degree of contamination at suspected hazardous waste sites according to WAC 173-340-320. While enabling local health districts or departments to participate in the scoring and ranking process, the department retains the authority to review and verify the results of a site hazard assessment and to establish the hazard ranking of the site.

(2) **Applicant eligibility.** To be eligible for a site hazard assessment grant, the applicant must meet the following requirements:

(a) The applicant must be a local health district or department;

(b) The site must be located within the jurisdiction of the applicant;

(c) The department has agreed that the applicant may conduct the site hazard assessment; and

(d) The scope of work for the site hazard assessment must conform to WAC 173-340-320 and applicable department guidelines.

(3) **Application process.**

(a) **Submittal.** The application for a site hazard assessment grant may be submitted to the department at any time.

(b) **Content.** The grant application must be completed on forms provided by the department and include the following:

(i) Sufficient evidence to demonstrate compliance with the applicant eligibility requirements in subsection (2) of this section;

(ii) A description of the environmental benefits of the project;

(iii) A copy of the scope of work which conforms to the requirements of WAC 173-340-320 and applicable department guidelines;

(iv) A budget for the scope of work; and

(v) A description of all current or potential sources of funding, including other grants or loans.

(4) **Application evaluation and prioritization.**

(a) The grant application will be evaluated by the department for completeness and adequacy. After the application has been completed, the department and the applicant will negotiate the scope of work and budget for the grant. The department will consider cost eligibility and other sources of funding when negotiating the scope of work and budget for the grant.

(b) When pending grant applications or anticipated demand for site hazard assessment grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the following:

(i) Potential public health or environmental threat from the sites;

(ii) Ownership of the sites. Publicly owned sites will receive priority over privately owned sites; and

(iii) Relative readiness of the applicant to proceed promptly to accomplish the scope of work.

(5) **Cost eligibility.** Costs must be eligible under this section and must be approved by the department in order to be eligible for reimbursement. Eligible costs include costs for activities performed pursuant to WAC 173-340-320 and enabling local health districts or departments to participate in the department's site ranking and priority-setting process.

(6) **Retroactive cost eligibility.** Retroactive costs are not eligible for reimbursement unless:

(a) The department unreasonably delays the processing of the grant application; or

(b) The department provided only partial funding under a prior grant agreement because funds were not available.

(7) **Funding.** The applicant shall be eligible to receive funding for up to one hundred percent of eligible costs.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-060, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-060, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-060, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-060, filed 5/1/90, effective 6/1/90.]

WAC 173-322-070 Oversight remedial action grants. (1) **Purpose.** The purpose of the oversight remedial action grant program is to provide funding to local governments that conduct remedial actions under an order or decree. The grants are intended to encourage and expedite remedial action and to lessen the impact of the cost of such action on ratepayers and taxpayers.

(2) **Applicant eligibility.** Except as provided under subsection (3) of this section, to be eligible for an oversight remedial action grant, the applicant must meet the following requirements:

(a) The applicant must be a local government, as defined in WAC 173-322-020;

(b) The applicant must be a potentially liable person or a potentially responsible party at the hazardous waste site; and

(c) The applicant must meet one of the following criteria:

(i) The applicant is required by the department to conduct remedial action under an order or decree issued under chapter 70.105D RCW;

(ii) The applicant is required by the U.S. Environmental Protection Agency to conduct remedial action under an order or decree issued under the federal cleanup law and the order or decree has been signed or acknowledged in writing by the department as a sufficient basis for remedial action grant funding; or

(iii) The applicant has signed an order or decree issued under chapter 70.105D RCW requiring a potentially liable person (PLP) other than the applicant to conduct remedial action at a landfill site and the applicant has entered into an agreement with the PLP to reimburse the PLP for a portion of the remedial action costs incurred under the order or decree for the sole purpose of providing relief to ratepayers and/or taxpayers from remedial action costs.

(3) **Retroactive applicant eligibility.** To be eligible to receive an oversight remedial action grant for an order issued under the federal cleanup law before the effective date of the 2005 amendments to this chapter, the applicant must meet the following requirements:

(a) The applicant must be a local government, as defined in WAC 173-322-020;

(b) The applicant was required by the U.S. Environmental Protection Agency to conduct remedial action under an order issued under the federal cleanup law;

(c) The order has been signed or acknowledged in writing by the department as a sufficient basis for remedial action grant funding; and

(d) The applicant must submit to the department a grant application within six months after the effective date of the 2005 amendments to this chapter.

(4) **Application process.**

(a) **Submittal.** Except as provided under subsection (3) of this section, the application for an oversight remedial action grant must be submitted to the department within sixty days of the effective date of the order or decree.

(b) **Content.** The grant application must be completed on forms provided by the department and include the following:

(i) Sufficient evidence to demonstrate compliance with the eligibility requirements in subsection (2) of this section;

(ii) A description of the history of the site, the current status of the site, and the remedial actions to be performed at the site under the order or decree;

(iii) A description of the environmental benefits of the project;

(iv) A copy of the order or decree;

(v) A copy of the scope of work which accomplishes the requirements of the order or decree;

(vi) A budget for the scope of work;

(vii) A description of all current or potential sources of funding including, but not limited to, other grants or loans and proceeds from contribution or insurance claims;

(viii) A commitment by the applicant to provide the required matching funds and a description of the sources of those funds; and

(ix) If the applicant claims the use of innovative technology under subsection (7)(c)(i) of this section, a justification for the claim.

(5) **Application evaluation and prioritization.**

(a) The grant application will be evaluated by the department for completeness and adequacy. After the application has been completed, the department and the applicant will negotiate the scope of work and budget for the grant. The department will consider cost eligibility and other sources of funding when negotiating the scope of work and budget for the grant.

(b) When pending grant applications or anticipated demand for oversight remedial action grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the following:

(i) Relative hazard ranking as determined by the department in accordance with WAC 173-340-330 or the U.S. Environmental Protection Agency's National Priorities List ranking. Higher ranking sites will receive a higher funding priority;

(ii) Evidence that the grant will expedite cleanup;

(iii) Relative readiness of the applicant to proceed promptly to accomplish the scope of work.

(6) **Cost eligibility.** Costs must be eligible under this section and be approved by the department in order to be eligible for reimbursement.

(a) **Eligible costs.** Eligible costs for oversight remedial action grants include, but are not limited to, the reasonable costs for the following:

(i) Remedial investigations;

(ii) Feasibility studies;

(iii) Remedial designs;

(iv) Pilot studies;

(v) Interim actions;

(vi) Cleanup actions;

(vii) Landfill closures required under chapters 173-304, 173-350 and 173-351 WAC, if also required as a remedial action under the order or decree;

(viii) Capital costs of long-term monitoring systems; and

(ix) Operating and maintenance costs incurred during the first year of accomplishing the cleanup action after facilities and equipment have been installed or constructed.

(b) **Ineligible costs.** Ineligible costs for oversight remedial action grants include, but are not limited to, the following:

(i) Retroactive costs, except as provided under subsection (7) of this section;

(ii) Oversight costs;

(iii) Operating and maintenance costs of long-term monitoring systems;

(iv) Operating and maintenance costs incurred after the first year of accomplishing the cleanup action;

(v) Natural resource damage assessment costs and natural resource damages;

(vi) Legal costs including, but not limited to, the cost of pursuing contribution or insurance claims, the cost of administrative hearings, the cost of pursuing penalties or civil or criminal actions against persons, the cost of penalties incurred by the applicant, the cost of defending actions taken against the applicant, and attorney fees; and

(vii) In-kind services.

(7) **Retroactive cost eligibility.** Retroactive costs are not eligible for reimbursement unless:

(a) The department unreasonably delays the processing of the grant application;

(b) The department provided only partial funding under a prior grant agreement because funds were not available;

(c) The costs were incurred conducting independent remedial actions and those actions are incorporated as part of the order or decree; or

(d) The applicant is eligible under subsection (3) of this section.

(8) **Funding and reimbursement.**

(a) **Adjustment of eligible costs.** If an order or decree requires a potentially liable person (PLP) or a potentially responsible party (PRP) other than a local government to conduct remedial action, then the department shall deduct the financial contribution of that PLP or PRP from the amount eligible for grant funding. If the applicant receives proceeds from a contribution claim before the effective date of the grant agreement, then the department shall deduct those proceeds from the amount eligible for grant funding, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

(b) **Funding of eligible costs.** Except as provided under (c) of this subsection, the applicant shall be eligible to receive funding for up to fifty percent of eligible costs.

(c) **Additional funding.** The applicant shall be eligible to receive funding in excess of the limit set forth in (b) of this subsection under the following circumstances:

(i) **The applicant used innovative technology.** If the applicant utilizes innovative technology, as defined in WAC 173-322-020, as part of the cleanup action and the eligible costs exceed four hundred thousand dollars, then the applicant shall be eligible to receive additional funding up to fifteen percent of eligible costs. The applicant must include justification for the innovative technology claim in the grant application.

(ii) **The county is economically disadvantaged.** If the applicant is a county, or is located within a county, that is economically disadvantaged, as defined in WAC 173-322-020, then the applicant shall be eligible to receive additional funding up to twenty-five percent of eligible costs.

(d) **Match requirement.** The applicant shall fund those eligible costs not funded by the department under the grant. The applicant may not use in-kind services or proceeds from contribution claims to meet the match requirement.

(e) **Reimbursement of grant funds.** If the applicant receives proceeds from a contribution claim after the effective date of the grant agreement, then the applicant shall reimburse the department for a proportional share of those proceeds, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-070, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-070, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-070, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-070, filed 5/1/90, effective 6/1/90.]

WAC 173-322-080 Independent remedial action grants. (1) **Purpose.** The purpose of the independent remedial action grant program is to provide funding to local governments that have successfully cleaned up hazardous waste sites through independent remedial action. Independent remedial actions are remedial actions that are voluntarily initiated and conducted without department oversight or approval. The grants are intended to encourage and expedite independent remedial action and to lessen the impact of the cost of such action on ratepayers and taxpayers.

(2) **Applicant eligibility.** To be eligible for an independent remedial action grant, the applicant must meet the following requirements:

(a) The applicant must be a local government, as defined in WAC 173-322-020;

(b) The applicant must be a potentially liable person or potentially responsible party at the hazardous waste site or have an ownership interest in the hazardous waste site; and

(c) The applicant must have completed independent remedial actions at the hazardous waste site and received from the department a no further action (NFA) determination.

(3) **Application process.**

(a) **Submittal.** The application for an independent remedial action grant must be submitted to the department within sixty days of receipt of the no further action (NFA) determination.

(b) **Content.** The grant application must be completed on forms provided by the department and include the following:

(i) Sufficient evidence to demonstrate compliance with the eligibility requirements in subsection (2) of this section;

(ii) A description of the independent remedial action for which the department issued a no further action (NFA) determination;

(iii) A description of the environmental benefits of the project;

(iv) A copy of the independent remedial action report required under WAC 173-340-515(4);

(v) A copy of the document containing the no further action (NFA) determination;

(vi) A description of the costs incurred in performing the independent remedial actions;

(vii) A description of all current or potential sources of funding including, but not limited to, other grants or loans and proceeds from contribution or insurance claims; and

(viii) A commitment by the applicant to provide the required matching funds and a description of the sources of those funds.

(4) **Application evaluation and prioritization.**

(a) The grant application will be evaluated by the department for completeness and adequacy. After the application has been completed, the department and the applicant will negotiate the budget for the grant. The department will consider cost eligibility and other sources of funding when negotiating the budget for the grant.

(b) When pending grant applications or anticipated demand for independent remedial action grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the date the department receives completed applications.

(5) **Cost eligibility.** Costs must be eligible under this section and be approved by the department in order to be eligible for reimbursement.

(a) **Eligible costs.** Eligible costs for independent remedial action grants include, but are not limited to, the reasonable costs for the following:

(i) Remedial investigations;

(ii) Feasibility studies;

(iii) Remedial designs;

(iv) Pilot studies;

(v) Interim actions;

(vi) Cleanup actions;

(vii) Capital costs of long-term monitoring systems;

(viii) Operating and maintenance costs incurred during the first year of accomplishing the cleanup action after facilities and equipment have been installed or constructed; and

(ix) Development of the independent remedial action report required under WAC 173-340-515(4).

(b) **Ineligible costs.** Ineligible costs for independent remedial action grants include, but are not limited to, the following:

(i) Retroactive costs, except as provided under subsection (6) of this section;

(ii) Cost of technical consultations provided by the department under WAC 173-340-515(5), including any deposit for such consultations;

(iii) Operating and maintenance costs of long-term monitoring systems;

(iv) Operating and maintenance costs incurred after the first year of accomplishing the cleanup action;

(v) Natural resource damage assessment costs and natural resource damages;

(vi) Legal costs including, but not limited to, the cost of pursuing contribution or insurance claims, the cost of administrative hearings, the cost of pursuing penalties or civil or criminal actions against persons, the cost of penalties incurred by the applicant, the cost of defending actions taken against the applicant, and attorney fees; and

(vii) In-kind services.

(6) **Retroactive cost eligibility.** Retroactive costs are eligible for reimbursement if the costs were incurred within five years of the date of the grant application. Retroactive costs incurred more than five years before the date of the grant application are not eligible for reimbursement unless:

(a) The department unreasonably delayed the processing of the grant application; or

(b) The department provided only partial funding under a prior grant agreement because funds were not available.

(7) **Funding and reimbursement.**

(a) **Adjustment of eligible costs.** If the applicant receives proceeds from a contribution claim before the effective date of the grant agreement, then the department shall deduct those proceeds from the amount eligible for grant funding, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim. If the eligible costs exceed four hundred thousand dollars after the department has deducted any contribution claim proceeds, then the department shall limit the eligible costs to four hundred thousand dollars.

(b) **Funding of eligible costs.** Except as provided under (c) of this subsection, the applicant shall be eligible to receive funding for up to fifty percent of eligible costs.

(c) **Additional funding.** If the applicant is a county, or is located within a county, that is economically disadvantaged, as defined in WAC 173-322-020, then the applicant shall be eligible to receive funding for up to seventy-five percent of eligible costs.

(d) **Match requirement.** The applicant shall fund those eligible costs not funded by the department under the grant. The applicant may not use in-kind services or proceeds from contribution claims to meet the match requirement.

(e) **Reimbursement of grant funds.** If the applicant receives proceeds from a contribution claim after the effective date of the grant agreement, then the applicant shall reimburse the department for a proportional share of those proceeds, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-080, filed 3/18/05, effective 4/18/05. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-080, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-080, filed 5/1/90, effective 6/1/90.]

WAC 173-322-090 Area-wide ground water remedial action grants. (1) **Purpose.** The purpose of the area-wide ground water remedial action grant program is to provide funding to local governments that facilitate the cleanup and redevelopment of property within their jurisdictions where the ground water has been contaminated by hazardous substances from multiple sources. The grants are intended to encourage and expedite the investigation and cleanup of area-wide ground water contamination.

(2) **Applicant eligibility.** To be eligible for an area-wide ground water remedial action grant, the applicant must meet the following requirements:

(a) The applicant must be a local government, as defined in WAC 173-322-020;

(b) The hazardous waste site must involve area-wide ground water contamination, as defined in WAC 173-322-020;

(c) The applicant must be a potentially liable person or a potentially responsible party at the hazardous waste site, have an ownership interest in the hazardous waste site, or apply on behalf of property owners affected by the hazardous waste site to facilitate area-wide ground water action;

(d) The area-wide ground water action must be required under an order or decree or be approved by the department. If the action is required under an order or decree issued under the federal cleanup law, then the order or decree must have been signed or acknowledged in writing by the department as a sufficient basis for remedial action grant funding; and

(e) The applicant must agree to conduct or manage the area-wide ground water action specified in the grant agreement.

(3) **Application process.**

(a) **Submittal.** If the area-wide ground water remedial actions are required under an order or decree, then the grant application must be submitted to the department within sixty days of the effective date of the order or decree. If the area-wide ground water remedial actions are not required under an order or decree, then the grant application may be submitted to the department at any time.

(b) **Content.** The grant application must be completed on forms provided by the department and include the following:

(i) Sufficient evidence to demonstrate compliance with the eligibility requirements in subsection (2) of this section;

(ii) A description of the history of the site, the sources of the area-wide ground water contamination, the current status of the site, and the remedial actions to be performed at the site to address the area-wide ground water contamination;

(iii) A description of the environmental benefits of the project;

(iv) A copy of the order or decree, if applicable;

(v) A copy of the scope of work that specifies the remedial actions to be performed at the site to address the area-wide ground water contamination;

(vi) A budget for the scope of work;

(vii) A description of all current or potential sources of funding including, but not limited to, other grants or loans and proceeds from contribution or insurance claims;

(viii) A copy of any reimbursement agreement with affected property owners;

(ix) A commitment by the applicant to partially reimburse the department from any current or future funds obtained from affected property owners; and

(x) A commitment by the applicant to provide the required matching funds and a description of the sources of those funds.

(4) **Application evaluation and prioritization.**

(a) The grant application will be evaluated by the department for completeness and adequacy. After the application has been completed, the department and the applicant will negotiate the scope of work and budget for the grant. The department will consider cost eligibility and other sources of funding when negotiating the scope of work and budget for the grant.

(b) When pending grant applications or anticipated demand for area-wide ground water remedial action grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the following:

(i) Relative hazard ranking as determined by the department in accordance with WAC 173-340-330 or the U.S. Environmental Protection Agency's National Priorities List ranking. Higher ranking sites will receive a higher funding priority;

(ii) Evidence that the grant will expedite cleanup; and

(iii) Relative readiness of the applicant to proceed promptly to accomplish the scope of work.

(5) **Cost eligibility.** Costs must be eligible under this section and be approved by the department in order to be eligible for reimbursement.

(a) **Eligible costs.** Eligible costs for area-wide ground water remedial action grants include, but are not limited to, the reasonable costs for the following:

(i) Remedial investigations;

(ii) Feasibility studies;

(iii) Remedial designs;

(iv) Pilot studies;

(v) Interim actions;

(vi) Cleanup actions;

(vii) Capital costs of long-term monitoring systems; and

(viii) Operating and maintenance costs incurred during the first year of accomplishing the cleanup action after facilities and equipment have been installed or constructed.

(b) **Ineligible costs.** Ineligible costs for area-wide ground water remedial action grants include, but are not limited to, the following:

(i) Retroactive costs, except as provided under subsection (6) of this section;

(ii) Oversight costs;

(iii) Operating and maintenance costs of long-term monitoring systems;

(iv) Operating and maintenance costs incurred after the first year of accomplishing the cleanup action;

(v) Natural resource damage assessment costs and natural resource damages;

(vi) Legal costs including, but not limited to, the cost of pursuing contribution or insurance claims, the cost of administrative hearings, the cost of pursuing penalties or civil or criminal actions against persons, the cost of penalties incurred by the applicant, the cost of defending actions taken against the applicant, and attorney fees; and

(vii) In-kind services.

(6) **Retroactive cost eligibility.** Retroactive costs are not eligible for reimbursement unless:

(a) The department unreasonably delays the processing of the grant application;

(b) The department provided only partial funding under a prior grant agreement because funds were not available; or

(c) The costs were incurred conducting independent remedial actions and those actions are incorporated as part of the order or decree.

(7) **Funding and reimbursement.**

(a) **Adjustment of eligible costs.** If an order or decree requires a potentially liable person (PLP) or a potentially responsible party (PRP) other than a local government to conduct remedial action, then the department shall deduct the financial contribution of that PLP or PRP from the amount eligible for grant funding. If the applicant receives proceeds from a contribution claim before the effective date of the grant agreement, then the department shall deduct those proceeds from the amount eligible for grant funding, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

(b) **Funding of eligible costs.** The applicant shall be eligible to receive funding for up to one hundred percent of eligible costs.

(c) **Match requirement.** The applicant shall fund those eligible costs not funded by the department under the grant. The applicant may not use in-kind services or proceeds from contribution claims to meet the match requirement.

(d) **Reimbursement of grant funds.** If the applicant receives proceeds from a contribution claim after the effective date of the grant agreement, then the applicant shall reimburse the department for a proportional share of those proceeds, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

(e) **Repayment of grant funds.** If the property impacted by the area-wide ground water contamination is owned by private parties, then the grant amount shall be partially repaid to the department. The terms and amount of repayment shall be included in the grant agreement between the applicant and the department. The applicant shall obtain partial reimbursement from potentially liable persons and potentially responsible parties. Reasonable measures shall be taken by the applicant to maximize reimbursement.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-090, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-090, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-090, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-090, filed 5/1/90, effective 6/1/90.]

WAC 173-322-100 Safe drinking water action grants. (1) **Purpose.** The purpose of the safe drinking water action grant program is to assist local governments, or a local government applying on behalf of a purveyor, in providing safe drinking water to areas contaminated by, or threatened by contamination from, hazardous waste sites.

(2) **Applicant eligibility.** To be eligible for a safe drinking water action grant, the applicant must meet the following requirements:

(a) The applicant must be a local government, as defined in WAC 173-322-020;

(b) The applicant must be a purveyor, as defined in WAC 173-322-020, or the applicant must be applying on behalf of a purveyor;

(c) The applicant must be in substantial compliance, as determined by the department of health, with applicable rules of the state board of health or the department of health, as contained in chapter 246-290 WAC (Public water supplies), chapter 246-292 WAC (Water works operator certification), chapter 246-293 WAC (Water System Coordination Act), and chapter 246-294 WAC (Drinking water operating permits);

(d) The public water system must be located in an area determined by the department to be a hazardous waste site or threatened by contamination from a hazardous waste site;

(e) The public water system must exhibit levels of contamination which exceed the primary maximum contaminant levels (MCLs) established by the state board of health and set forth in WAC 246-290-310, exhibit levels of contamination which exceed the cleanup standards established by the department of ecology under WAC 173-340-700 through 173-340-760, or be certified by the state department of health that a contaminant threatens the safety and reliability of a public water system which cannot be remedied solely by operational solutions. Contaminants must include at least one hazardous substance. If the contaminant is a nitrate or trihalomethane, it must be determined to have originated from a hazardous waste site;

(f) An order or decree must require safe drinking water action. The department may waive this requirement if it has determined that no viable potentially liable person (PLP) exists or that public health would be threatened from unreasonable delays associated with the search for PLPs or the development of an order or decree. If the safe drinking water action is required under an order or decree issued under the federal cleanup law, then the order or decree must have been signed or acknowledged in writing by the department as a sufficient basis for remedial action grant funding; and

(g) If the safe drinking water action includes water line extensions, then the extensions must be consistent with the coordinated water system plan and growth management plan for the geographic area containing the affected water supplies.

(3) **Application process.**

(a) **Submittal.** If the safe drinking water actions are required under an order or decree, then the grant application must be submitted to the department within sixty days of the effective date of the order or decree. If the safe drinking water actions are not required under an order or decree, then the grant application may be submitted to the department at any time.

(b) **Content.** The grant application must be completed on forms provided by the department and include the following:

(i) Sufficient evidence to demonstrate compliance with the eligibility requirements in subsection (2) of this section;

(ii) A description of the history of the site, the current status of the site, the threat posed by the site to the public water system, and the remedial actions to be performed at the site to address that threat;

(iii) A description of the environmental benefits of the project;

(iv) A copy of the order or decree, if applicable;

(v) A copy of the scope of work that specifies the remedial actions to be performed at the site to address the threat to the public water system;

(vi) A budget for the scope of work;

(vii) A description of all current or potential sources of funding including, but not limited to, other grants or loans and proceeds from contribution or insurance claims; and

(viii) A commitment by the applicant to provide the required matching funds and a description of the sources of those funds.

(4) **Application evaluation and prioritization.**

(a) The grant application will be evaluated by the department for completeness and adequacy. After the application has been completed, the department and the applicant will negotiate the scope of work and budget for the grant. The department will consider cost eligibility and other sources of funding when negotiating the scope of work and budget for the grant.

(b) When pending grant applications or anticipated demand for safe drinking water action grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the following:

(i) Relative risk to human health as jointly determined by the department of ecology, in accordance with WAC 173-340-330, and the department of health, in accordance with WAC 246-290-310. Sites with greater risk will receive higher funding priority;

(ii) Relative readiness of the applicant to proceed promptly to accomplish the scope of work;

(iii) Ownership of the water system to be extended or improved. Local government-owned systems will receive higher funding priority than other systems; and

(iv) Number of people served by the water system and per capita cost of remediation.

(5) **Cost eligibility.** Costs must be eligible under this section and be approved by the department in order to be eligible for reimbursement.

(a) **Eligible costs.** Eligible costs for safe drinking water action grants include, but are not limited to, the reasonable costs for the following:

(i) Water supply source development and replacement, including pumping and storage facilities, source meters, and reasonable appurtenances;

(ii) Transmission lines between major system components, including inter-ties with other water systems;

(iii) Treatment equipment and facilities;

(iv) Distribution lines from major system components to system customers or service connections;

(v) Bottled water, as an interim action;

(vi) Fire hydrants;

(vii) Service meters;

(viii) Project inspection, engineering, and administration;

(ix) Individual service connections, including any fees and charges, provided that property owners substantially participate in financing the cost of such connections;

(x) Drinking water well abandonment for wells identified by the department as an environmental safety or health hazard and decommissioned in accordance with WAC 173-160-381;

(xi) Interim financing where necessary as a prerequisite to local government issuance of revenue bonds;

(xii) Other costs identified by the department of health as necessary to provide a system that operates in compliance with federal and state standards, or by the coordinated water system plan as necessary to meet required standards; and

(xiii) Other costs identified by the department as necessary to protect a public water system from contamination from a hazardous waste site or to determine the source of such contamination.

(b) **Ineligible costs.** Ineligible costs for safe drinking water action grants include, but are not limited to, the following:

(i) Retroactive costs, except as provided under subsection (6) of this section;

(ii) Oversight costs;

(iii) Operating and maintenance costs;

(iv) Natural resource damage assessment costs and natural resource damages;

(v) Legal costs including, but not limited to, the cost of pursuing contribution or insurance claims, the cost of administrative hearings, the cost of pursuing penalties or civil or criminal actions against persons, the cost of penalties incurred by the applicant, the cost of defending actions taken against the applicant, and attorney fees; and

(vi) In-kind services.

(6) **Retroactive cost eligibility.** Retroactive costs are not eligible for reimbursement unless:

(a) The department unreasonably delays the processing of the grant application;

(b) The department provided only partial funding under a prior grant agreement because funds were not available; or

(c) The costs were incurred conducting independent remedial actions and those actions are incorporated as part of the order or decree.

(7) **Funding and reimbursement.**

(a) **Adjustment of eligible costs.** If an order or decree requires a potentially liable person (PLP) or a potentially responsible party (PRP) other than a local government to conduct remedial action, then the department shall deduct the financial contribution of that PLP or PRP from the amount eligible for grant funding. If the applicant receives proceeds from a contribution claim before the effective date of the grant agreement, then the department shall deduct those proceeds from the amount eligible for grant funding, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

(b) **Funding of eligible costs.** Except as provided under (c) of this subsection, the applicant shall be eligible to receive funding for up to fifty percent of eligible costs.

(c) **Additional funding.** If the applicant is a county, or is located within a county, that is economically disadvantaged, as defined in WAC 173-322-020, then the applicant shall be eligible to receive funding for up to seventy-five percent of eligible costs.

(d) **Match requirement.** The applicant shall fund those eligible costs not funded by the department under the grant. The applicant may not use in-kind services or proceeds from contribution claims to meet the match requirement.

(e) **Reimbursement of grant funds.** If the applicant receives proceeds from a contribution claim after the effective date of the grant agreement, then the applicant shall reimburse the department for a proportional share of those proceeds, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-100, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-100, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-100, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-100, filed 5/1/90, effective 6/1/90.]

WAC 173-322-110 Methamphetamine lab site assessment and cleanup grants. (1) **Purpose.** The purpose of the methamphetamine lab site assessment and cleanup grant program is to provide funding to local health districts and departments that assess and cleanup sites of methamphetamine production. The program is not intended to assist local health districts and departments in the initial containment of methamphetamine lab sites.

(2) **Applicant eligibility.** To be eligible for a methamphetamine lab site assessment and cleanup grant, the applicant must meet the following requirements:

(a) The applicant must be a local health district or department;

(b) The methamphetamine lab site must be located within the jurisdiction of the applicant; and

(c) The scope of work for the assessment or cleanup of a methamphetamine lab site must conform to chapter 246-205 WAC and applicable board of health and department of health guidelines. The scope of work for the methamphetamine lab site assessment must also conform to WAC 173-340-320 and applicable department of ecology guidelines.

(3) **Application process.**

(a) **Submittal.** The application for a methamphetamine lab site assessment and cleanup grant may be submitted to the department at any time.

(b) **Content.** The grant application must be completed on forms provided by the department and include the following:

(i) Sufficient evidence to demonstrate compliance with the applicant eligibility requirements in subsection (2) of this section;

(ii) A description of the work completed under the prior grant agreement, if applicable;

(iii) A description of the anticipated work to be completed under the grant;

(iv) A budget for the anticipated work;

(v) A description of the environmental benefits of the project;

(vi) A description of all current or potential sources of funding including, but not limited to, other grants or loans and proceeds from contribution or insurance claims; and

(vii) A commitment by the applicant to provide the required matching funds and a description of the sources of those funds.

(4) **Application evaluation and prioritization.**

(a) The grant application will be evaluated by the department for completeness and adequacy. After the application has been completed, the department and the applicant will negotiate the scope of work and budget for the grant. The

department will consider cost eligibility and other sources of funding when negotiating the scope of work and budget for the grant.

(b) When pending grant applications or anticipated demand for methamphetamine lab site assessment and cleanup grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the following:

(i) Potential public health or environmental threat from the methamphetamine lab sites;

(ii) Ownership of the methamphetamine lab sites. Publicly owned sites will receive priority over privately owned sites; and

(iii) Relative readiness of the applicant to proceed promptly to accomplish the scope of work.

(5) **Cost eligibility.** Costs must be eligible under this section and be approved by the department in order to be eligible for reimbursement.

(a) **Eligible costs.** Eligible costs for methamphetamine lab site assessment and cleanup grants include, but are not limited to, the reasonable costs for the following:

(i) Posting the property, as defined in WAC 246-205-010 and required under WAC 246-205-520;

(ii) Inspecting the property and determining whether the property is contaminated, as required under WAC 246-205-530;

(iii) Posting contaminated property, as defined in WAC 246-205-010 and required under WAC 246-205-560;

(iv) Notifying occupants, property owners, and other persons with an interest in the contaminated property, as required under WAC 246-205-560;

(v) Cleaning up contaminated publicly owned property, as required under WAC 246-205-570, including performing a precleanup site assessment, developing and implementing the cleanup work plan, performing a post-cleanup site assessment, and developing a cleanup report. Eligible costs include the costs incurred by an authorized contractor and the cost of overseeing the work performed by the contractor;

(vi) Overseeing the cleanup of contaminated privately owned property, as required under WAC 246-205-570 and 246-205-580, including reviewing cleanup work plans and reports and inspecting the property during and subsequent to the cleanup;

(vii) Disposal of contaminated property, as defined in WAC 246-205-010, if the property is publicly owned;

(viii) Releasing the property for use, as required under WAC 246-205-580;

(ix) County fees related to deed notification; and

(x) Equipment and training, if approved by the department in advance.

(b) **Ineligible costs.** Ineligible costs for methamphetamine lab site assessment and cleanup grants include, but are not limited to, the following:

(i) Retroactive costs, except as provided under subsection (6) of this section;

(ii) Initial containment of methamphetamine lab sites, as defined in WAC 173-322-020;

(iii) Restricting access to privately owned property, except as required under chapter 246-205 WAC;

(iv) Cleaning up privately owned contaminated property;

(v) Disposal of contaminated property, as defined in WAC 246-205-010, if the property is privately owned;

(vi) Disposal of property that is not contaminated, as defined in WAC 246-205-010;

(vii) Natural resource damage assessment costs and natural resource damages;

(viii) Legal costs including, but not limited to, the cost of pursuing contribution or insurance claims, the cost of administrative hearings, the cost of pursuing penalties or civil or criminal actions against persons, the cost of penalties incurred by the applicant, the cost of defending actions taken against the applicant, and attorney fees;

(ix) Education and outreach activities; and

(x) In-kind services.

(6) **Retroactive cost eligibility.** Retroactive costs are not eligible for reimbursement unless:

(a) The department unreasonably delays the processing of the grant application; or

(b) The department provided only partial funding under a prior grant agreement because funds were not available.

(7) **Funding and reimbursement.**

(a) **Adjustment of eligible costs.** If the applicant receives proceeds from a contribution claim before the effective date of the grant agreement, then the department shall deduct those proceeds from the amount eligible for grant funding, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

(b) **Funding of eligible costs.** The applicant shall be eligible to receive funding for up to one hundred percent of eligible methamphetamine lab site assessment costs. Except as provided under (c) of this subsection, the applicant shall also be eligible to receive funding for up to fifty percent of eligible methamphetamine lab site cleanup costs.

(c) **Additional funding.** If the applicant is a county, or is located within a county, that is economically disadvantaged, as defined in WAC 173-322-020, then the applicant shall be eligible to receive funding for up to seventy-five percent of eligible methamphetamine lab site cleanup costs.

(d) **Match requirement.** The applicant shall fund those eligible costs not funded by the department under the grant. The applicant may not use in-kind services or proceeds from contribution claims to meet the match requirement.

(e) **Reimbursement of grant funds.** If the applicant receives proceeds from a contribution claim after the effective date of the grant agreement, then the applicant shall reimburse the department for a proportional share of those proceeds, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-110, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-110, filed 2/12/01, effective 3/15/01. Statutory Authority: RCW 43.21A.080. 93-24-047, § 173-322-110, filed 11/23/93, effective 12/24/93. Statutory Authority: Chapter 70.105D RCW. 90-10-057 (Order 89-45), § 173-322-110, filed 5/1/90, effective 6/1/90.]

WAC 173-322-120 Derelict vessel remedial action grants. (1) **Purpose.** The purpose of the derelict vessel remedial action grant program is to provide funding to local governments that clean up and dispose of hazardous sub-

stances from abandoned or derelict vessels that pose a threat to human health or the environment.

(2) **Applicant eligibility.** To be eligible for a derelict vessel remedial action grant, the applicant must meet the following requirements:

(a) The applicant must be a local government, as defined in WAC 173-322-020;

(b) The vessel must be an abandoned or derelict vessel, as defined in WAC 173-322-020; and

(c) The applicant must be the owner of the abandoned or derelict vessel.

(3) **Application process.**

(a) **Submittal.** The application for a derelict vessel remedial action grant may be submitted to the department at any time.

(b) **Content.** The grant application must be completed on forms provided by the department and include the following:

(i) Sufficient evidence to demonstrate compliance with the applicant eligibility requirements in subsection (2) of this section;

(ii) A description of the vessel, the types and quantities of hazardous substances located within the vessel, the threat posed by the vessel to human health and the environment, the remedial actions to be performed to address that threat, and the authority under which the remedial action will be performed;

(iii) A copy of the scope of work that specifies the remedial actions to be performed to address the threat;

(iv) A description of the environmental benefits of the project;

(v) A budget for the scope of work;

(vi) A description of all current or potential sources of funding including, but not limited to, other grants or loans and proceeds from contribution or insurance claims; and

(vii) A commitment by the applicant to provide the required matching funds and a description of the sources of those funds.

(4) **Application evaluation and prioritization.**

(a) The grant application will be evaluated by the department for completeness and adequacy. After the application has been completed, the department and the applicant will negotiate the scope of work and budget for the grant. The department will consider cost eligibility and other sources of funding when negotiating the scope of work and budget for the grant.

(b) When pending grant applications or anticipated demand for derelict vessel remedial action grants exceed the amount of funds available, the department may prioritize applications or limit grant awards based on the following:

(i) Relative risk to human health and the environment;

(ii) Evidence that the grant will expedite cleanup; and

(iii) Relative readiness of the applicant to proceed promptly to accomplish the scope of work.

(5) **Cost eligibility.** Costs must be eligible under this section and be approved by the department in order to be eligible for reimbursement.

(a) **Eligible costs.** Eligible costs for a derelict vessel remedial action grant include, but are not limited to, the reasonable costs for the following:

(i) Remedial investigation of the vessel, including sampling and analysis; and

(ii) Removal and disposal of hazardous substances and materials designated as dangerous wastes under chapter 173-303 WAC.

(b) **Ineligible costs.** Ineligible costs for a derelict vessel remedial action grant include, but are not limited to, the following:

(i) Retroactive costs, except as provided in subsection (6) of this section;

(ii) Administrative cost of taking ownership of the vessel;

(iii) Removal and disposal of materials that are not hazardous substances or designated as dangerous wastes under chapter 173-303 WAC;

(iv) Disposal of the vessel at a landfill, including transport of the vessel;

(v) Disposal of the vessel at sea;

(vi) Natural resource damage assessment costs and natural resource damages;

(vii) Legal costs including, but not limited to, the cost of pursuing contribution or insurance claims, the cost of administrative hearings, the cost of pursuing penalties or civil or criminal actions against persons, the cost of penalties incurred by the applicant, the cost of defending actions taken against the applicant, and attorney fees; and

(viii) In-kind services.

(6) **Retroactive cost eligibility.** Retroactive costs are not eligible for reimbursement unless:

(a) The department unreasonably delays the processing of the grant application; or

(b) The department provided only partial funding under a prior grant agreement because funds were not available.

(7) **Funding and reimbursement.**

(a) **Adjustment of eligible costs.** If the applicant receives proceeds from a contribution claim before the effective date of the grant agreement, then the department shall deduct those proceeds from the amount eligible for grant funding, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

(b) **Funding of eligible costs.** Except as provided under (c) of this subsection, the applicant shall be eligible to receive funding for up to fifty percent of eligible costs, not to exceed twenty-five thousand dollars.

(c) **Additional funding.** If the applicant is a county, or is located within a county, that is economically disadvantaged, as defined in WAC 173-322-020, then the applicant shall be eligible to receive funding for up to seventy-five percent of eligible costs, not to exceed twenty-five thousand dollars.

(d) **Match requirement.** The applicant shall fund those eligible costs not funded by the department under the grant. The applicant may not use in-kind services or proceeds from contribution claims to meet the match requirement.

(e) **Reimbursement of grant funds.** If the applicant receives proceeds from a contribution claim after the effective date of the grant agreement, then the applicant shall reimburse the department for a proportional share of those proceeds, after subtracting from those proceeds the legal costs incurred by the applicant pursuing the contribution claim.

[Statutory Authority: RCW 70.105D.070. 05-07-104 (Order 04-06), § 173-322-120, filed 3/18/05, effective 4/18/05. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-322-120, filed 2/12/01, effective 3/15/01; 90-10-057 (Order 89-45), § 173-322-120, filed 5/1/90, effective 6/1/90.]

WAC 173-322-130 Loans. (1) **Purpose.** This section establishes requirements for a program of remedial action loans to local governments under RCW 70.105D.070 (3)(a) and (7). The loan program shall be limited to providing loans to supplement local government funding and funding from other sources to meet the match requirements for oversight remedial action grants. The intent of the loan program is to encourage and expedite the cleanup of hazardous waste sites and to lessen the impact of the cleanup cost on ratepayers and taxpayers.

(2) **Types of loans.** The loan program includes two different types of loans, a standard loan and an extraordinary financial hardship loan. The two types of loans have different applicant eligibility requirements and different terms and conditions for repayment based upon the applicant's ability to repay the loan.

(a) **Standard loan.** A standard loan is a loan that includes the terms and conditions for repayment.

(b) **Extraordinary financial hardship loan.** An extraordinary financial hardship loan is a loan that includes deferred terms and conditions for repayment. Deferred terms and conditions may not be indefinite. Any such loan must be approved by the director.

(3) **Applicant eligibility.** To be eligible for a loan, the applicant must meet the following requirements:

(a) The applicant must be a local government, as defined in WAC 173-322-020;

(b) The applicant must meet the eligibility requirements for an oversight remedial action grant set forth in WAC 173-322-070(2);

(c) The applicant must agree to undergo an independent third-party financial review to determine its financial need for the loan, ability to repay the loan, and inability to obtain funds from other sources. The financial review shall be conducted at the direction and cost of the department. Based on that financial review, the applicant must demonstrate the following:

(i) For a standard loan, its financial need for the loan, ability to repay the loan, and inability to obtain funds from any other source;

(ii) For an extraordinary financial hardship loan, its financial need for the loan, inability to repay the loan under present circumstances, inability to obtain funds from any other source, and inability to bond or raise its tax base;

(d) The hazardous waste site must present an immediate danger to human health and the environment; and

(e) The inability to obtain a loan would significantly delay the cleanup and subsequent use, sale or redevelopment of the properties affected by the hazardous waste site.

(4) **Application process.**

(a) **Submittal.** The loan application must be submitted to the department at the same time as the associated oversight remedial action grant application.

(b) **Content.** The loan application must be completed on forms provided by the department and include the following:

(i) Sufficient evidence to demonstrate the following:

(A) For a standard loan, the applicant's financial need for the loan, ability to repay the loan, and inability to obtain matching funds from any other source;

(B) For an extraordinary financial hardship loan, the applicant's financial need for the loan, inability to repay the loan under present circumstances, inability to obtain funds from any other source, and inability to bond or raise its tax base;

(ii) Sufficient evidence that the hazardous waste site presents an immediate danger to human health and the environment;

(iii) Sufficient evidence that the inability to obtain a loan would significantly delay the cleanup and subsequent use, sale or redevelopment of the properties affected by the hazardous waste site; and

(iv) A copy of the applicant's most recent Comprehensive Annual Financial Report.

(5) **Application evaluation and prioritization.**

(a) The department will evaluate the loan application together with the associated oversight remedial action grant application. The grant and loan applications will be evaluated by the department for completeness and adequacy. After the grant and loan applications have been completed, the department and the applicant will negotiate a scope of work and budget for the grant and loan. The department will consider cost eligibility and other sources of funding when negotiating the scope of work and budget for the grant and loan.

(b) If the department determines that the applicant meets eligibility requirements for an extraordinary financial hardship loan in subsection (3) of this section, then the department may, upon the approval by the director, provide such a loan to the applicant instead of a standard loan.

(c) The department will fund the loan from the same fund allocation used to fund the associated oversight remedial action grant. When the demand for funds allocated for oversight remedial action grants and loans exceeds the amount of funds available, the department will prioritize the associated grant and loan applications together using the criteria set forth in WAC 173-322-070(5).

(6) **Cost eligibility.** The eligible costs for the loan program shall be the same as the eligible costs for the oversight remedial action grant program set forth in WAC 173-322-070(6).

(7) **Retroactive cost eligibility.** The eligibility of retroactive costs for the loan program shall be the same as the eligibility of retroactive costs for the oversight remedial action grant program set forth in WAC 173-322-070(7).

(8) **Funding and repayment.**

(a) **General.** If the department provides the applicant an oversight remedial action grant and the grant is funded to the maximum extent allowed under WAC 173-322-070(8), then the department may also provide the applicant a loan to enable the applicant to meet the match requirement for the grant. The loan shall be used to supplement local government funding and funding from other sources to meet the match requirement.

(b) **Department funding of match requirement.** The department may provide a loan to the applicant for up to one hundred percent of the match requirement for the oversight remedial action grant.

(c) **Local government funding of match requirement.** The applicant shall fund those eligible costs not funded by the department under the grant or loan. The applicant may not use in-kind services or proceeds from contribution claims to meet the match requirement.

(d) **Repayment of loan.** The terms and conditions for repayment of the loan shall be based on the applicant's ability to repay the loan, as determined by an independent third-party financial review. The independent third-party financial review shall be conducted at the direction and cost of the department. For extraordinary financial hardship loans, the repayment terms and conditions can be deferred. Deferred terms are dependent on periodic review of the applicant's ability to pay. Deferred terms and conditions may not be indefinite.

[Statutory Authority: RCW 70.105D.070. 07-08-010 (Order 06-13), § 173-322-130, filed 3/22/07, effective 4/22/07; 05-07-104 (Order 04-06), § 173-322-130, filed 3/18/05, effective 4/18/05.]

Chapter 173-325 WAC
LOW-LEVEL RADIOACTIVE WASTE DISPOSAL

WAC

173-325-010	Purpose.
173-325-020	Definitions.
173-325-030	Requirements for generators and brokers.
173-325-040	Requirements for site operator.
173-325-050	Effective dates.

WAC 173-325-010 Purpose. The purpose of this chapter is to implement section 4, chapter 2, Laws of 1986, which implements the Federal Low-Level Radioactive Waste Policy Amendments Act of 1985.

[Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-010, filed 7/7/86.]

WAC 173-325-020 Definitions. (1) "Site" means the commercial low-level radioactive waste disposal site located near Richland, Washington.

(2) "Low-level radioactive waste" means radioactive material that:

(a) Is not high-level radioactive waste, spent nuclear fuel, or byproduct material (as defined in section 11e.(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(3)(2))); and

(b) The Nuclear Regulatory Commission, consistent with existing law and in accordance with paragraph (A), classifies as low-level radioactive waste.

(3) "Northwest compact region" means the states of Washington, Oregon, Idaho, Utah, Montana, Alaska, and Hawaii.

(4) "Southeast compact region" means the states of South Carolina, North Carolina, Virginia, Tennessee, Florida, Mississippi, Alabama, and Georgia.

(5) "Rocky Mountain compact region" means the states of Nevada, Colorado, Wyoming, and New Mexico.

(6) "Department" means the department of ecology.

(7) "P.L. 99-240" means the Federal Low-Level Radioactive Waste Policy Amendments Act of 1985, 99 Stat. 1842.

[Statutory Authority: RCW 43.200.180 and 43.200.070. 99-22-078 (Order 99-21), § 173-325-020, filed 11/2/99, effective 12/3/99. Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-020, filed 7/7/86.]

WAC 173-325-030 Requirements for generators and brokers. (1) Any generator or broker shipping waste that originated outside the northwest compact region for disposal at the site shall pay to the state of Washington a surcharge as follows:

(a) From March 1, 1986 through December 31, 1987, $10 per cubic foot of waste.

(b) From January 1, 1988 through December 31, 1989, $20 per cubic foot of waste.

(c) From January 1, 1990, through December 31, 1992, $40 per cubic foot of waste.

(2) In addition, the department may impose penalty surcharges up to the maximum extent allowed by P.L. 99-240.

(3) Surcharge payments must be mailed or electronically transferred no later than the day the respective waste shipment leaves the state of origin. In the lower left hand corner of the check, the valid site use permit number and shipment manifest number must be recorded. For electronic transfers, the valid site use permit number, and shipment manifest number, followed by the name of the facility (limited to 35 characters) must be transmitted at the time of the transfer. A copy of the face of the check, or of the receipt for wire transfer must be attached to the shipping manifest when the shipment arrives at the disposal site.

(4) Surcharge payment may be made by a check payable to the state of Washington or by electronic transfer. Checks should be mailed to:

"LLW SURCHARGE"
Cashier
Fiscal Office
Department of Ecology
P.O. Box 5128
Olympia, WA 98509-5128

Electronic transfers should be directed to:

State Treasurer
Concentration Account
Seafirst National Bank
P.O. Box 24678
Seattle, WA 98124
Account #125000024

(5) Prenotification forms (#A-1 and #B-1) are no longer required.

(6) Brokers are required to attach to the shipping manifest a tabulated list of those generators whose waste is being shipped. The tabulated list must include the following information in the format specified:

Date of Shipment: . . . . . .

Valid Site Use Permit #	Generator	State	Compact Region	Volume	Surcharge

(7) Any generator or broker shipping waste that was originally generated in the southeast compact region for disposal at the site must attach to the shipping manifest a copy of the letter granting certification to export waste from the southeast compact region.

(8) Any generator or broker shipping waste that was originally generated in the Rocky Mountain compact region for disposal at the site must attach to the shipping manifest a

copy of the letter granting approval to export waste from the Rocky Mountain compact region.

(9) Violation of any of these requirements may result in revocation of a generator's or broker's Washington State site use permit. Upon revocation of a site use permit, subsequent reissuance may be conditioned upon agreement to comply with appropriate conditions, such as a condition that surcharge payments be made by certified or cashier's check, and be received in advance, and a condition that the state of Washington be provided specific information at least three days before the shipment.

[Statutory Authority: RCW 43.200.180 and 43.200.070. 99-22-078 (Order 99-21), § 173-325-030, filed 11/2/99, effective 12/3/99. Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-030, filed 7/7/86.]

WAC 173-325-040 Requirements for site operator. (1) For each waste shipment for which a surcharge is due (as required by WAC 173-325-030 (1)-(2)), arriving at the facility, obtain a copy of the surcharge payment check or receipt of electronic wire transfer before receiving the waste shipment for disposal.

(2) For each waste shipment of a broker arriving at the facility, obtain the written information required by WAC 173-325-030(5) before receiving the waste shipment for disposal.

(3) For each waste shipment that contains waste that was originally generated in the southeast compact region arriving at the facility, obtain a copy of the letter granting certification to export waste from the southeast compact region.

(4) For each waste shipment that contains waste that was originally generated in the Rocky Mountain compact region arriving at the facility, obtain a copy of the letter granting approval to export waste from the Rocky Mountain compact region.

(5) Provide to the Washington state department of ecology information on each waste shipment received for disposal at the facility, as requested by the department.

[Statutory Authority: RCW 43.200.180 and 43.200.070. 99-22-078 (Order 99-21), § 173-325-040, filed 11/2/99, effective 12/3/99. Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-040, filed 7/7/86.]

WAC 173-325-050 Effective dates. This chapter shall take effect April 21, 1986, (1) except the requirements in WAC 173-325-030 (1)-(2), which took effect March 1, 1986, and (2) WAC 173-325-040(3), which takes effect immediately.

[Statutory Authority: RCW 43.200.180 and 43.200.070. 99-22-078 (Order 99-21), § 173-325-050, filed 11/2/99, effective 12/3/99. Statutory Authority: 1986 c 2 § 5. 86-15-008 (Order 86-14), § 173-325-050, filed 7/7/86.]

Chapter 173-326 WAC

COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL—SITE USE PERMITS

WAC

173-326-010	Purpose.
173-326-020	Definitions.
173-326-030	Requirements for generators and brokers using the Hanford low-level radioactive waste disposal facility.
173-326-040	Payment procedures.
173-326-050	Permit fees.
173-326-060	Requirements for site operator.

WAC 173-326-010 Purpose. The purpose of this chapter is to institute a user permit system and issue site use permits, consistent with regulatory practices, for generators, packagers, or brokers using the Hanford low-level radioactive waste disposal facility (RCW 43.200.080(4)). These rules are in addition to applicable requirements of the United States Nuclear Regulatory Commission (NRC), the United States Department of Transportation (DOT), the requirements of the department of health, Title 246 WAC, other requirements of Title 173 WAC, and conditions of the license issued to the disposal site operator(s).

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-010, filed 12/2/92, effective 3/1/93. Statutory Authority: RCW 43.200.080. 88-18-098 (Order 88-27), § 173-326-010, filed 9/7/88; 87-14-078 (Order 87-11), § 173-326-010, filed 7/1/87.]

WAC 173-326-020 Definitions. (1) For the purposes of chapter 173-326 WAC, "low-level radioactive waste" means any radioactive waste which is acceptable for disposal at the Hanford commercial radioactive waste disposal facility.

(2) "Broker" means a person who performs one or more of the following functions for a low-level radioactive waste generator, provided it shall not mean a carrier whose sole function is to transport such low-level radioactive waste:

(a) Arranges for transportation of the low-level radioactive waste;

(b) Collects and/or consolidates shipments of such low-level radioactive waste;

(c) Processes such low-level radioactive waste in some manner.

(3) "Department" means the department of ecology.

(4) "Generator" means the last person who puts radioactive material to practical use, and who then declares it to be no longer of use or value.

(5) "Shipment" means the total low-level radioactive waste material transported in one vehicle.

(6) "Packager" means broker for the purposes of chapter 173-326 WAC.

(7) "Nuclear utility" means any operating or inactive nuclear utility.

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-020, filed 12/2/92, effective 3/1/93. Statutory Authority: RCW 43.200.080. 87-14-078 (Order 87-11), § 173-326-020, filed 7/1/87.]

WAC 173-326-030 Requirements for generators and brokers using the Hanford low-level radioactive waste disposal facility. (1) Each generator and broker of low-level radioactive waste shall obtain a new site use permit for disposal of waste at the Hanford commercial radioactive waste disposal facility by March 1, 1993. Permits shall be renewed annually to maintain the permit in active status. Failure to obtain a new permit by March 1, 1993, or to renew a permit in subsequent years, will result in the generator or broker being placed in inactive status. Reinstatement to active status will require the generator or broker to submit additional payment as specified in WAC 173-326-050 (1)(e).

(2) Generator and broker permit application requirements.

(a) Each generator and broker shall pay the site use permit fees as required in chapter 173-326 WAC.

(b) An application for a site use permit shall be filed on the department form provided.

(c) Each application must be signed by an individual authorized to sign on behalf of the organization.

(d) To ensure timely renewal, generators and brokers need to submit their applications for site use permit renewal a minimum of four weeks prior to the expiration date of their permit. Renewal notices will be sent to generators approximately three months prior to the permit expiration date.

(3) Number of permits required by each generator.

(a) Generators who own multiple facilities within the same state may apply for one permit, provided the same contact person within the generator's company will be responsible for responding to the department of ecology for matters pertaining to the waste shipments. Otherwise separate permits will be required.

(b) Facilities which are owned by the same generator and located in different states will require separate permits.

(c) Facilities who both generate and broker wastes must obtain separate generator and broker permits.

(4) Additional generator and broker requirements.

(a) Permittees must provide additional information as requested by the department of ecology for the safe management of low-level radioactive waste in the state of Washington.

(b) A broker must ensure that a generator has a current, unencumbered site use permit prior to shipment of that generator's waste to the Hanford commercial radioactive waste disposal facility located in the state of Washington, and that the waste will arrive at the disposal facility prior to the expiration date of the generator's permit.

(c) A broker shall ensure all low-level radioactive waste contained within a shipment accepted for disposal at the Hanford commercial radioactive waste disposal facility in the state of Washington is traceable to the original generators and states, regardless of whether the waste is shipped directly from the point of generation to the disposal facility, or shipped through a licensed service facility such as a facility for recycling, processing, compacting, incinerating, collecting, or brokering waste.

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-030, filed 12/2/92, effective 3/1/93. Statutory Authority: RCW 43.200.080. 88-21-072 (Order 88-41), § 173-326-030, filed 10/18/88; 87-14-078 (Order 87-11), § 173-326-030, filed 7/1/87.]

WAC 173-326-040 Payment procedures. (1) Generator payment procedures.

Each application shall be accompanied by full payment of the generator fee as required in WAC 173-326-050 (1)(c). Generators who fail to apply for a permit by March 1, 1993, or fail to maintain a permit in active status, must also include payment of the reinstatement fee as required in WAC 173-326-050 (1)(e).

(2) Broker fee payment procedures.

Each application shall be accompanied by full payment of the broker fee as required in WAC 173-326-050(2). Brokers who fail to apply for a permit by March 1, 1993, or fail to maintain a permit in active status, must also include payment of the reinstatement fee as required in WAC 173-326-050 (1)(e).

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-040, filed 12/2/92, effective 3/1/93. Statutory Authority: RCW 43.200.080. 88-18-098 (Order 88-27), § 173-326-040, filed 9/7/88; 87-14-078 (Order 87-11), § 173-326-040, filed 7/1/87.]

WAC 173-326-050 Permit fees. (1) Generator site use permit fee.

(a) For the purpose of assessing generators permit fees (other than nuclear utilities, new generators, and applicants requiring reinstatement), the total annual volume (cubic feet) deposited by each generator during the previous calendar year will be used. Nuclear utilities fees will be based on the ratio found in (b) of this subsection.

(b) The annual site use permit fee for generators shall be determined by the following ratio:

Classification	Ratio
< 50 cubic feet	1x
$\geq$ 50 < 500 cubic feet	2x
$\geq$ 500 < 1000 cubic feet	5x
$\geq$ 1000 < 2500 cubic feet	10x
$\geq$ 2500 cubic feet	35x
Nuclear Utilities	100x

The value of x, which represents the annual base fee, will be published in the *Washington State Register* pursuant to (c) of this subsection.

(c) Fees will be adjusted annually, as required, utilizing the 1x:2x:5x:10x:35x:100x ratio. Fee rates will be published in the *Washington State Register* and distributed to generators by the first day of each calendar year.

(d) A new generator's permit fees will be based on the generator's estimate of the volume (cubic feet) of waste requiring disposal during the first year. If a generator's waste deposits exceed the generator's volume projection, the permit will be suspended until additional fees are paid. Overpayment will be credited toward the site use permit fee for the subsequent year.

(e) A generator or broker who has not obtained a new permit by March 1, 1993, or fails to maintain annual renewal of the permit shall include an additional payment of one thousand dollars. The permit fee for these generators will be based on the volume of waste disposed during the most recent calendar year in which waste was disposed.

(2) Broker site use permit fee. The annual cost of a permit for a broker shall be one thousand dollars.

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-050, filed 12/2/92, effective 3/1/93.]

WAC 173-326-060 Requirements for site operator. The site operator shall provide the department of ecology with information on each waste shipment accepted for disposal at the site as requested by the department.

[Statutory Authority: Chapter 43.200 RCW. 92-24-101 (Order 91-52), § 173-326-060, filed 12/2/92, effective 3/1/93.]

Chapter 173-328 WAC
MIXED WASTE MANAGEMENT FEES

WAC

173-328-010 Purpose and authority.
173-328-020 Applicability.
173-328-030 Definitions.

173-328-040 Fee establishment.
173-328-050 Fee review and comment.
173-328-060 Fee assessment.
173-328-070 Appeals and enforcement.

WAC 173-328-010 Purpose and authority. (1) The purpose of this chapter is to implement the provisions of RCW 70.105.280, by establishing a means for the department of ecology to assess reasonable mixed waste management fees against facilities that treat, store, or dispose of mixed waste and against mixed waste facilities undergoing closure under chapter 70.105 RCW. The fee collected shall be sufficient to fund all costs of carrying out the department's duties under chapter 70.105 RCW at mixed waste facilities.

(2) This chapter establishes the method by which the department shall assess fees, describes entities subject to such fees, establishes provisions for appealing and enforcing fee assessments, and delineates associated responsibilities of the department and facility owners and operators.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-010, filed 4/20/93, effective 5/21/93.]

WAC 173-328-020 Applicability. This chapter applies to any person who owns or operates a facility that treats, stores, or disposes of mixed waste. This also applies to mixed waste facilities undergoing closure under chapter 70.105 RCW. This chapter does not apply to facilities managing only low-level radioactive waste.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-020, filed 4/20/93, effective 5/21/93.]

WAC 173-328-030 Definitions. (1) The following terms are used and shall have meanings as defined in chapter 70.105 RCW or WAC 173-303-040 as amended:

(a) Closure;

(b) Dangerous waste;

(c) Department;

(d) Disposal;

(e) Facility;

(f) Operator;

(g) Permit;

(h) Storage; and

(i) Treatment.

(2) When used in this chapter, the following terms have the meanings given below.

(a) "Manage" or "management" means to treat, store, or dispose of mixed waste, or close a mixed waste facility, or perform other activities required under chapter 70.105 RCW.

(b) "Mixed waste" means a dangerous waste that contains both a nonradioactive hazardous component and source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954.

(c) "Mixed waste management fee" or "fee" means an assessment imposed under RCW 70.105.280 against those facilities that store, treat, or dispose of mixed waste. The fee shall also apply to facilities undergoing closure under chapter 70.105 RCW.

(d) For facilities sited by the energy facility site evaluation council under chapter 80.50 RCW, the terms "owner" and "operator" in WAC 173-328-060 and 173-328-070 mean the energy facility site evaluation council.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-030, filed 4/20/93, effective 5/21/93.]

WAC 173-328-040 Fee establishment. The department shall, on a biennial basis, determine all reasonable program costs necessary to carry out the department's duties under chapter 173-303 WAC for each mixed waste facility. The fee may be assessed at a mixed waste facility for the department's regulation of both mixed waste and nonradioactive dangerous waste. The department shall include, but not be limited to, the following items to determine fee amounts:

(1) Direct and indirect cost of:

(a) Office space and supplies, administrative staff, support staff, and staff training;

(b) The development of associated regulations and guidelines;

(c) Determination, assessment, and collection of fees;

(d) Tracking and accounting services;

(e) Public involvement, education, and outreach; and

(f) Data management.

(2) Direct and indirect permitting costs of:

(a) Staff, staff support, and staff training for reviewing, approving, and issuing dangerous waste permits and closure plans;

(b) Reviewing and issuing permit modifications and renewals;

(c) Travel; and

(d) Contract services.

(3) Direct and indirect compliance activity cost of:

(a) Staff, staff support, and staff training to prepare and conduct compliance inspections;

(b) Sampling and lab analysis;

(c) Contract services;

(d) Travel; and

(e) Preparation of compliance report(s).

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-040, filed 4/20/93, effective 5/21/93.]

WAC 173-328-050 Fee review and comment. Fee review process.

(1) On or before July 1st of even-numbered calendar years, the department shall notify, by registered mail, each facility owner/operator of its biennial estimated fee assessment and provide the opportunity to review and comment prior to submittal of the department's budget to the legislature.

(2) The facility owner/operator shall have forty-five days to submit written comments to the department for consideration in the fee assessment.

(3) Prior to submittal of the department's budget to the legislature, the department shall notify the facility owner/operator of any changes to their estimated fee assessment.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-050, filed 4/20/93, effective 5/21/93.]

WAC 173-328-060 Fee assessment. (1) After legislative approval of a budget for the department, the department may bill the facility owner/operator the required fees necessary to fund all mixed waste management costs.

(2) Anticipated fees. Anticipated fees include, but are not limited to, costs for permit issuance, permit maintenance, closure plan approval, and compliance audits.

(a) The department shall annually bill the owners/operators of all mixed waste facilities on or before October 1st for anticipated department activities to be performed that fiscal year.

(b) The department shall notify a facility owner/operator of any changes to the biennial estimate prior to sending each annual bill.

(c) The fee shall be submitted by the facility owner/operator to the department within thirty days after receipt of the bill.

(d) Any fees collected in excess of the department's actual costs will be adjusted in the subsequent billing to reflect the department's actual activities.

(3) Unanticipated fees. Unanticipated fees include, but are not limited to, the direct and indirect costs, as outlined in WAC 173-328-040, for unplanned enforcement activities, compliance activities, and facility modifications.

(a) The department may bill the owner/operator of a mixed waste facility upon completion of the unanticipated activity.

(b) The facility owner/operator shall be billed the amount of all direct and indirect costs incurred by the department to complete the unplanned regulatory activity.

(c) The unanticipated fee shall be submitted by the facility owner/operator to the department within thirty days after the receipt of the bill.

(4) Fees collected by the department shall be deposited into the state toxics control account.

(5) The fee shall not exceed the amount necessary for the department to carry out its duties under chapter 173-303 WAC.

(6) The department shall maintain a system of accountability to track annual costs incurred by the department.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-060, filed 4/20/93, effective 5/21/93.]

WAC 173-328-070 Appeals and enforcement. (1) The owner/operator of a facility who is assessed a fee under this chapter may appeal the fee to the department. The appeal must be received by the department within thirty days after the facility owner/operator's receipt of the bill. Any appeal shall state the name and address of the facility to which the fee was assessed, and shall state reasons for challenging the fee.

(2) After receipt of an appeal, the department shall consider the reasons stated in the appeal and either issue a revised bill or a statement upholding the original bill. The issuance of either document shall constitute the final decision of the department.

(3) The department shall not take any enforcement action for failure to pay the assessed fee until resolution of the appeal.

(4) The fee stated in the department's final decision shall be submitted by the facility owner/operator to the department within thirty days after receipt of the final decision.

(5) Any person who fails to pay fees as required by this chapter shall be subject to enforcement actions consistent with chapter 70.105 RCW. Such enforcement may include penalties in accordance with RCW 70.105.080, 70.105.090, and 70.105.095.

(6) Payment of enforcement penalties shall not be deemed as payment of fees. Payment of fees after the assessment of an enforcement penalty shall not be deemed as a cause for reducing or eliminating the penalty.

[Statutory Authority: RCW 70.105.280. 93-09-065 (Order 91-24), § 173-328-070, filed 4/20/93, effective 5/21/93.]

Chapter 173-330 WAC

USED AUTOMOTIVE OIL RECYCLING SIGN REQUIREMENTS FOR AUTOMOTIVE OIL SELLERS

WAC

173-330-010	Purpose.
173-330-020	Applicability.
173-330-030	Definitions.
173-330-040	Responsibility to procure and post sign.
173-330-050	Sign criteria.
173-330-060	Posting and maintenance of signs.
173-330-070	Effective date and compliance.
173-330-900	Logo and sign.

WAC 173-330-010 Purpose. Pursuant to chapter 19.114 RCW it is recognized by the legislature that used automotive oil is a limited resource that can be collected and recycled. Further, improper disposal results in undesirable effects upon the economy and the environment.

These rules provide minimum requirements for the posting and maintaining of durable and legible signs informing the public of proper collection and disposal of used oil.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-010, filed 7/19/84.]

WAC 173-330-020 Applicability. All sellers as defined in WAC 173-330-030 shall conform to the provisions of this chapter.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-020, filed 7/19/84.]

WAC 173-330-030 Definitions. Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

(1) "Used oil" means automotive oil which through use, storage, or handling has become unsuitable for its original purpose due to the presence of impurities or the loss of original properties.

(2) "Recycle" means to prepare used oil for reuse as a petroleum product by refining, rerefining, reclaiming, reprocessing, or other means or to use used oil as a substitute for a petroleum product made from new oil, provided that the preparation or use is operationally safe, environmentally sound, and complies with all laws and rules.

(3) "Department" means the department of ecology.

(4) "Director" means the director of the department of ecology.

(5) "Person" means an individual, private or public corporation, partnership, cooperative, association, estate, municipality, political subdivision or governmental agency or instrumentality.

(6) "Seller" means any person selling oil within the state of Washington who sells 100 gallons or more of automotive oil per year for use off their premises.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-030, filed 7/19/84.]

WAC 173-330-040 Responsibility to procure and post sign. It shall be the responsibility of all sellers to procure, post and maintain a sign in accordance with the provisions within this chapter. Signs will be provided by the department.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-040, filed 7/19/84.]

WAC 173-330-050 Sign criteria. (1) A sign shall be constructed of white card stock - 80# or of equal or better weight and quality material and:

a. Be commercially printed;
b. Be size 11" x 14" or 3" x 5" shelf hangers;
c. Have type style - Helvetica;
d. Have type color - Green #345; and
e. Carry the recycling logo.

(2) ALL SIGNS WILL CARRY THIS MESSAGE:

RECYCLE USED OIL

* Prevent water pollution
* Protect public health
* Reuse limited resources

FOR MORE INFORMATION CALL 1-800-RECYCLE

(3) The sign shall indicate how and where used oil may be properly disposed of including the location and hours of operation of conveniently located used oil collection facilities. This information may be clearly handwritten in an information block on the sign.

(4) The sign shall be substantially in the form shown in WAC 173-330-900 contained herein.

(5) Oil sellers may provide their own signs. Limited variances from the sign criteria will be allowed, subject to the department's approval. Proofs of the seller-provided signs must be submitted to the department for written approval prior to posting.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-050, filed 7/19/84.]

WAC 173-330-060 Posting and maintenance of signs. (1) Signs shall be posted in a location visible to the public at or near the point of sale. This location shall either be at the automotive oil display location within the store, at the cash register or on the exterior window facing.

(2) Signs shall be maintained at the required location and shall remain fully visible and legible at all times.

(3) Requests for replacement of damaged, lost or misplaced signs will be made in a timely manner not to exceed two business days. Seller-provided signs should be replaced as soon as practical but not to exceed fourteen days.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-060, filed 7/19/84.]

WAC 173-330-070 Effective date and compliance. (1) This chapter shall become effective October 1, 1984. Sellers shall post signs in accordance with the provisions of this chapter as of that date.

(2) Sellers shall notify the department in writing by January 1, 1985 of compliance.

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-070, filed 7/19/84.]

WAC 173-330-900 Logo and sign.



"IMPROPER DISPOSAL OF USED OIL IS A SIGNIFICANT SOURCE OF WATER POLLUTION, CONTRIBUTES TO THE OVERALL SHORTAGE OF ENERGY RESOURCES AND HAS A DETRIMENTAL IMPACT ON GENERAL PUBLIC HEALTH"
-CHAPTER 173-330 WAC

RECYCLE USED OIL AT:
LOCATION _____
TIMES _____

FOR MORE INFORMATION CALL
THE WASHINGTON STATE DEPT. OF ECOLOGY
LITTER CONTROL AND RECYCLING PROGRAM
1-800-RECYCLE

[Statutory Authority: Chapter 19.114 RCW. 84-16-005 (Order DE 84-24), § 173-330-900, filed 7/19/84.]

Chapter 173-331 WAC
VEHICLE BATTERY RECYCLING

WAC

173-331-010	Authority and purpose.
173-331-100	Definitions.
173-331-200	Posting of retail notices.
173-331-210	Optional exemption to the core charge.
173-331-220	Condition of used batteries.

173-331-300 Conditions for suspending the acceptance requirements.
173-331-400 Authorization of used battery collectors.
173-331-410 Reporting requirements.
173-331-500 Handling of used vehicle batteries.
173-331-600 Severability.

WAC 173-331-010 Authority and purpose. The department of ecology has been authorized under RCW 70.95.670 to implement and enforce a vehicle battery recycling program. The purpose of this chapter is to establish procedures for implementation and enforcement of RCW 70.95.610 through 70.95.660, which is designed to accomplish the recycling of used vehicle batteries through a system of exchanging batteries at the point of sale.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-010, filed 2/11/91, effective 3/14/91.]

WAC 173-331-100 Definitions. The following words, terms, and phrases shall, for the purposes of this chapter, have the meanings given below:

(1) The terms wholesale and retail shall have the same meanings provided in Title 82 RCW, Excise taxes. For example, wholesale refers to the sale of vehicle batteries to retail establishments, and retail refers to sale of vehicle batteries that require payment of the retail sales tax.

(2) Authorization means the license issued by the department of licensing and approved by the department of ecology as authorized by RCW 70.95.610.

(3) Business location means the premises where business is conducted.

(4) Core charge means an added charge applied during a retail sale to be refunded to the purchaser when a used battery of equivalent size is offered in exchange.

(5) Department means the department of ecology.

(6) Disposal means to deposit, dump, abandon, or spill any vehicle battery into or on any land, water, solid waste landfill, or solid waste incinerator.

(7) Equivalent size means weighing fifty to one hundred fifty percent of the vehicle battery purchased.

(8) New vehicle battery means any vehicle battery intended for use as an electrical energy storage device.

(9) Original battery installation means any new vehicle or device that requires a vehicle battery to be connected or installed before use is possible.

(10) Replacement vehicle battery means any vehicle battery sold at retail (a) that is not sale of an original battery installation, or (b) without verifiable proof that the buyer needs the battery for an original battery installation.

(11) Secondary lead smelter means any facility licensed by a state or federal government to reclaim lead from vehicle batteries.

(12) Unified business identifier service location means:

(a) The field offices of the departments of revenue and labor and industries.

(b) The tax offices of employment security.

(c) The Olympia office of the secretary of state.

(d) The business license service office of the department of licensing.

(13) Used vehicle battery means any vehicle battery intended for reclamation, separate from a vehicle or other installation.

(14) Vehicle battery means any battery used or capable of use, without modification, in any vehicle, truck, mobile home, recreational vehicle, boat, airplane, or utility vehicle, having a core of elemental lead, with the capability to produce six or more volts. For purposes of application of the core charge only, a vehicle battery shall be a replacement battery and the core charge shall not apply to original battery installations.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-100, filed 2/11/91, effective 3/14/91.]

WAC 173-331-200 Posting of retail notices. (1) This section refers to the notices required by RCW 70.95.630(2).

(2) All required notices must be posted in the main vehicle battery display area or other area clearly visible to battery purchasers. Notices must be posted no lower than four feet and no higher than seven feet, level to the floor. Notices must be maintained free of any viewing obstructions.

Note: Notices are available by calling 1-800-RECYCLE.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-200, filed 2/11/91, effective 3/14/91.]

WAC 173-331-210 Optional exemption to the core charge. A retailer is not required to apply a core charge to a battery sale when the buyer submits verifiable proof that the battery is needed for an original battery installation. Verifiable proof shall consist of a voucher issued by the seller of the vehicle or device containing the following:

(1) Title, address, and phone of the retail establishment;

(2) Brief description of the vehicle or device sold with indication that a battery(s) was not included;

(3) Date of issuance;

(4) Name of the purchaser; and

(5) Signature of the sales agent.

Vouchers shall be valid for ninety days following the date of issuance and must be surrendered to the retailer during the battery sale.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-210, filed 2/11/91, effective 3/14/91.]

WAC 173-331-220 Condition of used batteries. (1) A purchaser must provide a used battery in a fully-capped, unbroken condition to qualify for waiver of the core charge. A retailer may refuse to accept a broken or uncapped battery, or may condition acceptance upon provision of a leak proof, acid resistant container, such as a plastic pail, holding the broken or uncapped battery.

(2) The department shall provide on its 1-800-RECYCLE Hotline a list of recycling outlets available for broken and uncapped batteries.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-220, filed 2/11/91, effective 3/14/91.]

WAC 173-331-300 Conditions for suspending the acceptance requirements. (1) This section refers to the suspension order required by RCW 70.95.650(3).

(2) When the department deems it necessary, the department shall determine the market price paid for used lead batteries by contacting agents of the secondary smelters historically used to process used vehicle batteries originating in

Washington. The department shall determine transportation costs by contacting at least three trucking firms and at least three shipping firms for estimated unit costs to transport batteries to each secondary smelter. If the lowest estimated transportation costs are higher than market price paid for all of the secondary smelters, the department will order a suspension.

(3) The department will notify retailers of any suspension by sending notice to trade organization representatives and other businesses on our vehicle battery program mailing list. (To get on the vehicle battery mailing list call (360) 438-7541.)

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-300, filed 2/11/91, effective 3/14/91.]

WAC 173-331-400 Authorization of used battery collectors. (1) This section refers to RCW 70.95.610(1).

(2) Beginning May 1, 1991, any person who collects used vehicle batteries nonincidental to accepting exchanges during sale of new batteries, excluding local governments with approved local hazardous waste plans pursuant to RCW 70.105.220, must have a department approved authorization issued by the department of licensing.

(3) License fees for each business location shall be fifteen dollars annually.

(4) Application forms for a used vehicle battery collector authorization will be available at unified business identifier service locations located throughout the state.

Note: Assistance finding the nearest unified business identifier service is available by calling 1-800-562-8203.

(5) Ecology review of application for authorization as a used vehicle battery collector:

(a) Any application for authorization or reauthorization as a used vehicle battery collector is subject to review and final approval or disapproval by the department of ecology.

(b) The applicant will be notified if the department has evidence that the applicant has failed to comply with environmental regulations affecting the handling, storage, transport, reclamation, or disposal of vehicle batteries. Such failure is sufficient reason for the department to disapprove or rescind authorization as a vehicle battery collector.

(c) Notification shall be in writing and shall include a statement of the basis for the department's belief that failure to comply has occurred and an indication of the department's intentions regarding authorization.

(d) The applicant may submit to the department comments on the department's intended action and basis for that action. Any comments shall be submitted in writing to the department within fifteen days from date of receipt of the department's notice letter unless the department provides an extension.

(e) After reviewing any comments, the department shall issue a letter notifying the applicant of its decision whether to authorize the applicant as a vehicle battery collector. Such decision may be appealed to the department by written application for review within fifteen days of receipt by the applicant of the department's decision. The department shall issue a notice of its decision on the application for review within fifteen days of the receipt of such application. This notice shall be the department's final decision.

(f) Pursuant to RCW 43.21B.110 (1)(c), the department's final decision is appealable to the pollution control hearings board.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-400, filed 2/11/91, effective 3/14/91.]

WAC 173-331-410 Reporting requirements. (1) Consistent with RCW 70.95.280, persons who collect used vehicle batteries in Washington state and recondition them, reclaim them, or arrange transport of the used batteries to out-of-state locations shall report annually to the department quantities of batteries collected and their destination(s).

Note: Reporting instructions and forms are available by calling 1-800-RECYCLE.

(2) Requests for confidentiality will be honored if the reporting business shows that publication of the information may affect adversely its competitive position and if the department determines that confidentiality is not detrimental to public interest.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-410, filed 2/11/91, effective 3/14/91.]

WAC 173-331-500 Handling of used vehicle batteries. Nothing in this chapter shall exempt wholesalers, retailers, or used battery collectors from the sections pertaining to lead-acid battery handling in the state's dangerous waste regulations, chapter 173-303 WAC, including WAC 173-303-050 (Department of ecology cleanup authority), WAC 173-303-145 (Spills and discharges into the environment), and WAC 173-303-960 (Special powers and authorities of the department). All shall use prudent procedures of handling and storing used vehicle batteries.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-500, filed 2/11/91, effective 3/14/91.]

WAC 173-331-600 Severability. If any provision of this chapter or its application to any person is held invalid, the remainder of the chapter or the application of the provision to other persons or circumstances is not affected.

Note: Copies of RCW 70.95.280 and 70.95.610 through 70.95.-670, WAC 173-303-050, 173-303-145 and 173-303-960, and additional copies of this chapter, chapter 173-331 WAC, are available from the Department of Ecology, Office of Waste Reduction, Recycling, and Litter Control, Mailstop PV-11, Olympia, WA 98504-8711, (360) 438-7541, 1-800-RECYCLE, 1-800-732-9253.

[Statutory Authority: RCW 70.95.670. 91-05-020 (Order 90-36), § 173-331-600, filed 2/11/91, effective 3/14/91.]

Chapter 173-333 WAC

PERSISTENT BIOACCUMULATIVE TOXINS

WAC

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PART I
GENERAL PROVISIONS

WAC 173-333-100 Introduction. Persistent, bioaccumulative toxins (PBTs) are chemicals that pose a unique threat to human health and the environment in Washington state. They remain in the environment for long periods of time, are hazardous to the health of humans and wildlife, can build up in the food chain, and can be transported long distances and readily move between air, land and water media.

Because of the unique threat that these PBTs pose, special attention is necessary to identify actions that will reduce and eliminate threats to human health and the environment. While ecology addresses PBTs through existing regulatory and nonregulatory programs, there remains a need for multimedia, cross-program measures that will reduce and phase-out releases and uses of PBTs over time.

The goal of this chapter is to reduce and phase-out PBT uses, releases and exposures in Washington. Ecology recognizes that many factors will influence whether and when this goal can be attained and that those factors will often vary depending on the PBT and the uses of the PBT. These factors include environmental and human health benefits, economic and social costs, technical feasibility, availability of safer substitutes, and consistency with other regulatory requirements. This chapter establishes a process that ecology will use to evaluate and identify actions that should be taken for particular PBTs. This process is designed to enhance actions being taken under other environmental laws and regulations.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-100, filed 1/13/06, effective 2/13/06.]

WAC 173-333-110 What is the purpose of this chapter? The purpose of this chapter is to:

(1) Establish criteria ecology will use to identify persistent bioaccumulative toxins that pose human health or environmental threats in Washington state;

(2) Establish a list of persistent bioaccumulative toxins;

(3) Establish procedures ecology will use to review and periodically update the list;

(4) Establish criteria for selecting persistent bioaccumulative toxins and metals of concern for which ecology will prepare chemical action plans;

(5) Define the scope and content of chemical action plans and establish the process ecology will use to prepare those plans; and

(6) Define the processes ecology will use to coordinate the implementation of this chapter with the department of health and other agencies.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-110, filed 1/13/06, effective 2/13/06.]

WAC 173-333-120 Applicability. (1) This chapter applies to the department of ecology (ecology). This chapter does not impose new requirements on persons using or releasing PBTs, and it does not create new authorities nor does it constrain existing authorities for ecology.

(2) This chapter provides for public involvement opportunities to allow interested persons to participate in the ecology processes for identifying PBTs and developing recommendations on measures to address uses and releases of PBTs.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-120, filed 1/13/06, effective 2/13/06.]

WAC 173-333-130 Exemptions to the PBT list. Any pesticide with a currently valid registration that has been issued by the Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. 136 et seq., or any fertilizer regulated under the Washington Fertilizer Act, chapter 15.54 RCW, will not be included on the persistent bioaccumulative toxin list established under this chapter.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-130, filed 1/13/06, effective 2/13/06.]

WAC 173-333-140 Administrative principles. (1) **Scientific information.** Ecology will base decisions on PBTs on sound public policy and credible scientific information. However, ecology believes that lack of full scientific consensus should not be used as a justification for delaying reasonable measures to prevent harm to human health or the environment.

(2) **Public involvement.** Ecology will provide opportunities for public involvement during the decision-making processes for identifying PBTs and preparing a CAP.

(3) **Clear documentation.** Ecology will provide clear and understandable descriptions and rationale for decisions implementing this chapter.

(4) **Predictability.** Ecology will implement this chapter in ways that allow stakeholders, interest groups, and the public to plan their participation in decision-making processes and future responses to recommendations that result from those processes.

(5) **Coordination.** Ecology will coordinate with federal and state agencies, local governments, tribes, and other interested parties in the development and implementation of CAPs and when revising the PBT list.

(6) **Rule amendments.** When amending any portion of this rule, ecology will follow the requirements of the Administrative Procedure Act (APA), chapter 34.05 RCW.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-140, filed 1/13/06, effective 2/13/06.]

PART II
DEFINITIONS

WAC 173-333-200 Definitions. For the purposes of this chapter, the following definitions shall apply:

"Administrative Procedure Act" or **"APA"** means the Washington Administrative Procedure Act, chapter 34.05 RCW.

"Bioaccumulation" means the process by which substances increase in concentration in living organisms as they take in contaminated air, water, soil, sediment or food because the substances are very slowly metabolized or excreted.

"Bioaccumulation factor" or **"BAF"** means the ratio of the concentration of a chemical in an organism to the concentration of the chemical in the surrounding environment. The BAF is a measure of the extent to which the organism accumulates the chemical as a result of uptake through ingestion as well as contact from contaminated media, such as water.

"Bioconcentration factor" or **"BCF"** means the ratio of the concentration of a chemical in an aquatic organism to the concentration of the chemical in water. The BCF is a measure of the extent of chemical partitioning between an aquatic organism and water.

"Carcinogen" means a chemical or chemical group that has been identified as "carcinogenic to humans" or "likely to be carcinogenic to humans" by the Environmental Protection Agency, as a Group 1, 2A or 2B carcinogen by the International Agency for Research on Cancer or as a "known to be a human carcinogen" or "reasonably anticipated to be a human carcinogen" by the National Toxicology Program.

"Chemical" means a naturally occurring element, mixture, or group of organic and inorganic compounds that is produced by or used in a chemical process.

"Chemical action plan" or **"CAP"** means a plan that identifies, characterizes and evaluates uses and releases of a specific PBT, a group of PBTs or metals of concern and recommends actions to protect human health or the environment.

"Chemical group" means a grouping of chemicals which share a common chemical structure and common toxicological properties.

"Credible scientific information" means information that is based on a theory or technique that is generally accepted in the relevant scientific community or has been collected or derived using standard or generally accepted methods and protocols and appropriate quality assurance and control procedures.

"Cross-media transfer of chemicals" means the movement of a chemical from one medium, such as air, water, soil, or sediment, to another.

"Degradation" means the processes by which organic chemicals are transformed into derivative chemicals and ultimately broken down.

"Developmental or reproductive toxicant" means a chemical or chemical group identified as posing developmental or reproductive hazards by the National Toxicology Program or chemicals or chemical groups with sufficient evidence of a developmental or reproductive hazard in humans or experimental animals consistent with the United States Environmental Protection Agency's Guidelines for Reproductive Toxicity Risk Assessment and Guidelines for Developmental Toxicity Risk Assessment as set forth in 61 FR 56274 et seq. and 56 FR 63798 et seq., respectively.

"Ecology" means the department of ecology.

"Environment" means any plant, animal, natural resource, surface water (including underlying sediments), ground water, drinking water supply, land surface (including tidelands and shorelands) or subsurface strata, or ambient air.

"Environmental half-life" means the time required for the concentration of a chemical to diminish to half its original value. The environmental half-life of a chemical is a measure of a chemical's persistence in the environment.

"Feasible" means reasonably capable of being accomplished or brought about or capable of being utilized or dealt with successfully.

"High-exposure populations" means groups of people that have a higher potential for exposure than the general population.

"Log-octanol water partition coefficient" or **"Log K_{ow}"** means the ratio of a chemical's concentration in the octanol phase to its concentration in the aqueous phase of a two-phase octanol/water system as expressed in a logarithmic format.

"Media" or **"medium"** means a component of the environment (air, water, soil or sediment) in which a contaminant is measured and an organism lives its life, and from which an organism can accumulate contaminants.

"Neurotoxicant" means a chemical or chemical group with sufficient evidence of a neurotoxic hazard in humans or experimental animals consistent with the United States Environmental Protection Agency's Guidelines for Neurotoxicity Risk Assessment as set forth in 63 FR 26926 et seq.

"No observed effect concentration" or **"NOEC"** means the highest concentration of a chemical evaluated in an aquatic toxicity test that does not cause a statistically and biologically significant difference in effects compared with controls.

"Persistent bioaccumulative toxin" or **"PBT"** means a chemical or chemical group that meets or exceeds the criteria for persistence, bioaccumulation and toxicity criteria established in WAC 173-33-320.

"Persistence" means the tendency of a chemical to remain in the environment without transformation or breakdown into another chemical form. It refers to the length of time a chemical is expected to reside in the environment and be available for exposure.

"Reference dose" means a numerical estimate of a daily exposure to the human population, including sensitive subgroups such as children, that is likely to be without harmful effects during a lifetime.

"Sensitive population group" means groups of people that exhibit a different or enhanced response to a chemical than most people exposed to a similar level of the chemical

because of genetic makeup, age, nutritional status or exposure to other toxic substances.

"Toxicity" means the degree to which a substance or mixture of substances can harm humans, plants or wildlife.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-200, filed 1/13/06, effective 2/13/06.]

PART III
THE PBT LIST AND CRITERIA AND PROCEDURES FOR REVISING THE LIST

WAC 173-333-300 What is the purpose of the PBT list? (1) **Purpose.** The purpose of the PBT list is to identify toxic chemicals that require further action because they remain ("persist") in the environment for long periods of time where they can bioaccumulate to levels that pose threats to human health and environment in Washington.

(2) **Intended uses of the PBT list.** Ecology will use the PBT list in the following ways:

(a) **Chemical action plans.** To select chemicals for chemical action plan development.

(b) **Ambient monitoring.** To help guide decisions on the design and implementation of ecology programs for characterizing chemical concentrations in the ambient environment.

(c) **Biomonitoring.** To encourage and inform the department of health regarding their efforts to monitor chemicals in human tissue.

(d) **Public awareness.** To promote greater public awareness on the problems associated with PBT chemicals, the uses and sources of individual PBTs and steps that individuals and organizations can take to reduce PBT uses, releases and exposure.

(e) **Voluntary measures.** To help identify opportunities for government agencies, businesses and individuals to implement voluntary measures for reducing and phasing out PBT uses and releases.

(3) **Relationship to actions addressing chemical uses and releases.** Ecology has determined that the chemicals on the PBT list pose a potential threat to human health and the environment in Washington.

(a) Ecology's decision to include a particular chemical on the PBT list does not represent a final determination that all uses and releases of that chemical should be reduced and phased-out. Any recommendations on uses and releases of a particular chemical will be made in the CAP process.

(b) Ecology will not use the PBT list as the sole basis for establishing discharge monitoring requirements that are not required under current permits. Ecology will evaluate and, if necessary, prepare recommendations for additional monitoring requirements when preparing chemical action plans (WAC 173-333-420 and 173-333-430).

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-300, filed 1/13/06, effective 2/13/06.]

WAC 173-333-310 What chemicals or chemical groups are included on the PBT list? (1) **Purpose.** This section identifies the chemicals and chemical groups that ecology has determined meet the criteria specified in WAC 173-333-320.

(2) **PBT list.** Ecology has determined that the following chemicals or chemical groups meet the criteria specified in WAC 173-333-320.

Chemicals listed in alphabetical order	**CAS Number**
Aldrin	309-00-2
Chlordane	57-74-9
Chlordecone (Kepone)	143-50-0
Dichlorodiphenyltrichloroethane (DDT)	50-29-3
Dieldrin	60-57-1
Endrin	72-20-8
Heptachlor/Heptachlor epoxide	76-44-8/1024-57-3
Hexabromobiphenyl	59536-65-1
Hexabromocyclododecane	25637-99-4
Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3
Methyl mercury	22967-92-6
Mirex	2385-85-5
Pentachlorobenzene	608-93-5
Short-chain chlorinated paraffins	85535-84-8
Tetrabromobisphenol A	79-94-7
Tetrachlorobenzene, 1,2,4,5-	95-94-3
Toxaphene	8001-35-2
Chemical groups listed in alphabetical order	
Perfluorooctane sulfonates (PFOS)	
Acid	1763-23-1
Ammonium salt	29081-56-9
Diethanolamine salt	70225-14-8
Lithium salt	29457-72-5
Potassium salt	2795-39-3
Polycyclic aromatic hydrocarbons (PAHs)	
3-Methyl chlolanthrene	56-49-5
7H-Dibenzo(c,g)carazole	194-59-2
Benzo(a)phenanthrene (Chrysene)	218-01-9
Benzo(b)fluoranthene	205-99-2
Benzo(g,h,i)perylene	191-24-2
Benzo(j)fluoranthene	205-82-3
Benzo(k)fluoranthene	207-08-9
Benzo(r,s,t)pentaphene	189-55-9
Dibenzo(a,e)pyrene	192-65-4
Dibenzo(a,h)pyrene	189-64-4
Dibenzo(a,h)acridine	226-36-8
Dibenzo(a,h)anthracene	53-70-3
Dibenzo(a,j)acridine	224-42-0
Fluoranthene	206-44-0
Indeno(1,2,3-cd)pyrene	193-39-5
Perylene	198-55-0
Polybrominated dibenzodioxins and furans	
2,3,7,8-tetrabromodibenzo-p-dioxin	50585-41-6
2,3,7,8-tetrabromodibenzofuran	67733-57-7
Polybrominated diphenyl ethers	
Pentabromodiphenyl ether	32534-81-9
Octabromodiphenyl ether	32536-52-0
Decabromodiphenyl ether	1163-19-5

Chemicals listed in alphabetical order	CAS Number
Polychlorinated biphenyls (PCBs)	
2,3',4,4',5 Pentachlorobiphenyl	31508-00-6
2,3,4,4',5 Pentachlorobiphenyl	74472-37-0
2,3,3',4,4' Pentachlorobiphenyl	32598-14-4
3,3',4,4',5,5' Hexachlorobiphenyl	32774-16-6
2,3',4,4',5,5' Hexachlorobiphenyl	52663-72-6
2,3,3',4,4',5' Hexachlorobiphenyl	69782-90-7
2,3,3',4,4',5 Hexachlorobiphenyl	38380-08-4
2,3,3',4,4',5,5' Heptachlorobiphenyl	39365-31-9
Polychlorinated dibenzo-p-dioxins	
2,3,7,8 Tetrachlorodibenzo-p-dioxin	1746-01-6
1,2,3,7,8 Pentachlorodibenzo-p-dioxin	40321-76-4
1,2,3,4,7,8 Hexachlorodibenzo-p-dioxin	39227-28-6
1,2,3,6,7,8 Hexachlorodibenzo-p-dioxin	576-53-8
1,2,3,7,8,9 Hexachlorodibenzo-p-dioxin	19408-74-3
1,2,3,4,6,7,8 Heptachlorodibenzo-p-dioxin	35822-46-9
1,2,3,4,6,7,8,9 Octachlorodibenzo-p-dioxin	3268-87-9
Polychlorinated dibenzofurans	
2,3,7,8 Tetrachlorodibenzofuran	51207-31-9
1,2,3,7,8 Pentachlorodibenzofuran	57117-41-6
2,3,4,7,8 Pentachlorodibenzofuran	57117-31-4
1,2,3,4,7,8 Hexachlorodibenzofuran	70648-26-9
1,2,3,6,7,8 Hexachlorodibenzofuran	57117-44-9
1,2,3,7,8,9 Hexachlorodibenzofuran	72918-21-9
2,3,4,6,7,8 Hexachlorodibenzofuran	60851-34-5
1,2,3,4,6,7,8 Heptachlorodibenzofuran	67562-39-4
1,2,3,4,7,8,9 Heptachlorodibenzofuran	55673-89-7
1,2,3,4,6,7,8,9 Octachlorodibenzofuran	39001-02-0
Polychlorinated naphthalenes	
Trichloronaphthalene	1321-65-9
Tetrachloronaphthalene	1335-88-2
Pentachloronaphthalene	1321-64-8
Hexachloronaphthalene	1335-87-1
Heptachloronaphthalene	32241-08-0

(3) **Revising the PBT list.** Ecology will periodically review and, as appropriate, revise the PBT list in subsection (2) of this section using the criteria and procedures in WAC 173-333-320 through 173-333-340.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-310, filed 1/13/06, effective 2/13/06.]

WAC 173-333-315 Metals of concern. (1) **Purpose.** The purpose of this section is to identify metals of concern to be addressed under this chapter. The metals of concern category was established as an interim category pending completion of EPA's inorganic metals assessment framework process.

(2) **Metals of concern.** Ecology has identified the following metals of concern based on a determination that these metals pose threats to human health and the environment in Washington.

Metals of Concern	CAS Number
Cadmium	7440-43-9
Lead	7439-92-1

(3) **Actions.** Ecology may prepare chemical action plans for one or more metals of concern using the process defined in WAC 173-333-420.

(4) **Revising the metals of concern list.** Ecology will evaluate the relationship between the metals of concern list and PBT list in WAC 173-333-310 following the completion of the EPA's inorganic metals assessment framework process.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-315, filed 1/13/06, effective 2/13/06.]

WAC 173-333-320 What criteria will ecology use to identify and add chemicals or chemical groups to the PBT list? (1) **Purpose.** This section describes the criteria that ecology will use to determine whether a chemical or group of chemicals should be included on the PBT list.

(2) **Criteria for identifying PBTs.** A chemical or group of chemicals will be included on the PBT list if ecology determines it meets each of the following criteria:

(a) **Persistence.** The chemical or chemical group can persist in the environment based on credible scientific information that:

(i) The half-life of the chemical in water is greater than or equal to sixty days; or

(ii) The half-life of the chemical in soil is greater than or equal to sixty days; or

(iii) The half-life of the chemical in sediments is greater than or equal to sixty days; and

(b) **Bioaccumulation.** The chemical or chemical group has a high potential to bioaccumulate based on credible scientific information that the bioconcentration factor or bioaccumulation factor in aquatic species for the chemical is greater than 1,000 or, in the absence of such data, that the log-octanol water partition coefficient (log K_{ow}) is greater than five; and

(c) **Toxicity.** The chemical or chemical group has the potential to be toxic to humans or plants and wildlife based on credible scientific information that:

(i) The chemical (or chemical group) is a carcinogen, a developmental or reproductive toxicant or a neurotoxicant;

(ii) The chemical (or chemical group) has a reference dose or equivalent toxicity measure that is less than 0.003 mg/kg/day; or

(iii) The chemical (or chemical group) has a chronic no observed effect concentration (NOEC) or equivalent toxicity measure that is less than 0.1 mg/L or an acute no observed effect concentration (NOEC) or equivalent toxicity measure that is less than 1.0 mg/L.

(d) **Additional criteria applicable to metals.** The chemical or chemical group is a metal and ecology determines that it is likely to be present in forms that are bioavailable.

(3) **Degradation products.** Ecology will consider both the parent chemical and its degradation products when making decisions on whether a chemical meets the criteria in subsection (2) of this section. If a parent chemical does not meet the criteria in this section but degrades into chemicals that do meet the criteria in subsection (2) of this section, the parent chemical may be considered for inclusion on the PBT list and in the development of a CAP. Alternately, ecology may decide not to include the parent chemical on the PBT list, but consider it during the development of a CAP for derivative chemicals.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-320, filed 1/13/06, effective 2/13/06.]

WAC 173-333-330 What criteria will ecology use to remove a PBT from the PBT list? (1) **Purpose.** This section describes the criteria and factors ecology will use to determine whether a chemical or group of chemicals should be removed from the PBT list.

(2) **Criteria for removing a chemical from the PBT list.** Ecology will remove a chemical or chemical group from the PBT list if the department determines that credible scientific information developed subsequent to the listing decision provides evidence that the chemical or chemical group does not meet the PBT criteria in WAC 173-333-320(2).

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-330, filed 1/13/06, effective 2/13/06.]

WAC 173-333-340 What process will ecology follow to revise the PBT list? (1) **Purpose.** This section describes the processes ecology will use to notify the public and amend the PBT list after making a determination that chemicals or groups of chemicals should be added or removed from the PBT list.

(2) **Reviewing and updating the PBT list.** Ecology will periodically review and update WAC 173-333-310. The frequency of review will be determined by credible scientific information available on individual chemicals or chemical groups, rule-making petitions submitted to ecology, and available agency resources. Ecology will comply with the requirements for reviewing and responding to rule-making petitions in the Administrative Procedure Act, chapter 34.05 RCW.

(3) **Public notification.** If ecology makes a preliminary determination that a chemical should be added or removed from the PBT list, the department will prepare a technical discussion paper that summarizes the scientific information supporting the addition or removal of a chemical and notify the public through an announcement posted on the ecology web site and published in the *Washington State Register*.

(4) **Amending the PBT list.** If ecology makes a final determination that a chemical or chemical group should be added or removed from the PBT list, the department will initiate actions to amend WAC 173-333-310 through formal rule making.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-340, filed 1/13/06, effective 2/13/06.]

PART IV
CHEMICAL ACTION PLANS (CAPs)

WAC 173-333-400 What is a chemical action plan (CAP)? (1) A chemical action plan (CAP) is a plan that identifies, characterizes and evaluates uses and releases of a specific PBT, a group of PBTs or metals of concern and recommends actions to protect human health or the environment.

(2) For the purposes of this section, the term PBT refers to both the chemicals on the PBT list (WAC 173-333-310) and the chemicals on the metals of concern list (WAC 173-333-315).

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-400, filed 1/13/06, effective 2/13/06.]

WAC 173-333-410 What evaluation factors and processes will ecology use to select PBTs or metals of concern for chemical action plan preparation? (1) **Purpose.** Ecology will consult with the department of health to develop a multiyear schedule for the preparation of chemical action plans. The purpose of this section is to describe the evaluation factors and processes ecology will use to prepare and update the multiyear schedule.

(2) **Evaluation factors.**

(a) Ecology will consider the following factors when preparing the multiyear schedule:

(i) **Relative ranking.** The relative ranking assigned to each PBT based on ecology's evaluation of information on PBT characteristics, uses of the chemical in Washington, releases of the chemical in Washington, the levels of the chemical present in the Washington environment, and levels of the chemical present in Washington residents.

(ii) **Opportunities for reductions.** Whether there are opportunities for reducing or phasing out uses, production or releases of the PBT in Washington. In reviewing available information, the agencies shall consider whether more than one PBT is present in particular products, generated in particular processes or released from particular sources (co-occurring chemicals).

(iii) **Multiple chemical releases and exposures.** Scientific evidence on the combined effects of exposure to one or more PBTs and other substances commonly present in the Washington environment.

(iv) **Sensitive population groups and high-exposure populations.** Scientific evidence on the susceptibility of various population groups including the timing of the exposure and the cumulative effects of multiple exposures.

(v) **Existing plans or regulatory requirements.** Whether there are existing plans or regulatory requirements that reduce and phase out uses and releases of a particular PBT or group of PBTs.

(b) Ecology will not prepare CAPs if the department determines:

(i) All uses and releases of the PBT are prohibited under other state and federal laws or regulations;

(ii) There is credible scientific information to support a conclusion that the PBT is not used, released or present in Washington; or

(iii) There are no available opportunities for reducing or phasing out the uses, releases or exposures of the PBT

beyond levels required under other federal or state laws or regulations.

(3) **Preliminary schedule.** Ecology will prepare a preliminary schedule that will identify the PBTs for which CAPs will be developed for the multiyear schedule, the rationale for selecting these PBTs and a timeline for completing CAPs for these PBTs.

(4) **Public notice and comment.** Ecology will notify the public when it has prepared a preliminary schedule and provide an opportunity for public review and comment. Ecology will notify the public through an announcement published in the *Washington State Register* and posted on the ecology web site. Ecology will also send a written announcement to interested persons and organizations. Ecology will provide sixty days, from the date the notice is published in the *Washington State Register* for the public to review and submit comments on the preliminary selection.

(5) **Final schedule.** Ecology will review all public comments on the preliminary schedule prior to preparing a final schedule. Ecology will notify the public of the final decision through an announcement published in the *Washington State Register* and posted on the ecology web site. Ecology will also provide written notification to individuals or organizations who submitted comments on the preliminary schedule.

(6) **Schedule updates.** Ecology will review and, as appropriate, update the schedule for chemical action plans at least once every three years. In making such revisions, ecology will follow the process for preparing the schedule (including an opportunity for public review and comment) specified in this section.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-410, filed 1/13/06, effective 2/13/06.]

WAC 173-333-420 What are the contents of a CAP? (1) **Contents of the chemical action plans.** Chemical action plans will include, as appropriate, the following types of information, evaluations and recommendations:

(a) **General chemical information.** General information includes, but is not limited to, chemical name, properties, uses and manufacturers.

(b) **Production, uses and releases.** An analysis of information on the production, unintentional production, uses and disposal of the chemical. This will include estimates on the amount of each PBT used and released from all sources or activities in Washington and other man-made and naturally occurring sources that may contribute to exposures in Washington. Sources may include other chemicals or products that are known or suspected to degrade to the chemical included on the PBT list.

(c) **Human health and environmental impacts.** Information on the potential impacts on human health and the environment associated with the use and release of the PBT chemical. This will include consideration of available information on the levels of the PBT present in Washington's environment, potential for exposure, the likely fate and transport mechanisms, available body-burden data, toxicity effects, and the rates of diseases that have been associated with exposure to the particular PBT.

(d) **Current management approaches.** An evaluation of the regulatory and nonregulatory approaches that influence production, uses, releases and management of each PBT.

(e) **Identification of policy options.** A list of options for managing, reducing and phasing out the different uses and releases of the PBTs addressed in the CAP. The range of options for particular uses and releases will include:

(i) A no-action option;

(ii) An option that results in the phase out of PBT uses and releases;

(iii) An option to manage chemicals to reduce exposure; and

(iv) Other options, including the use of available substitutes, which will enable full consideration of the opportunities and constraints for reducing particular uses, releases and exposures.

(f) **Recommendations.** Recommendations for:

(i) Reducing and phasing-out uses and releases of the specific PBT or group of PBTs addressed in the CAP;

(ii) Managing products or wastes that contain the specific PBT or group of PBTs addressed in the CAP;

(iii) Minimizing exposure to the specific PBT or group of PBTs;

(iv) Switching to safer substitutes; and

(v) Encouraging the development of safer alternatives.

The recommendations will be based on an evaluation of the following factors:

(A) Environmental and human health benefits associated with implementing the action;

(B) Economic and social impacts associated with implementing the action;

(C) Feasibility of implementing the action;

(D) Availability and effectiveness of safer substitutes for uses of the PBT being addressed in the plan; and

(E) Consistency with existing federal and state regulatory requirements.

(g) **Implementation steps.** A description of the steps ecology will take to implement the CAP, including a description of:

(i) The existing resources and necessary additional budget ecology intends to use;

(ii) Potential funding sources for CAP implementation, including those that tie implementation costs to PBT sources and products;

(iii) How ecology intends to inform and educate affected persons about the CAP;

(iv) How ecology will promote, assist, and evaluate the effectiveness of voluntary actions;

(v) How ecology will collect additional information needed to evaluate the feasibility of potential actions; and

(vi) Any recommended regulatory actions and how ecology will pursue them.

(h) **Performance measures.** A description of interim milestones to assess progress and the use of objectively measurable outcomes, including recommendations for environmental and human health monitoring to measure levels of the chemical(s) (in the CAP) over time and whether the goals and purposes of the CAP are being achieved.

(i) **Other.** Other information that ecology determines is necessary to support the decision-making process.

(2) **Regulatory consistency.** When evaluating the consistency with existing federal and state regulatory requirements under subsection (1)(f)(iii)(E) of this section, ecology will:

(a) Ensure that the recommendations do not violate existing federal or state laws;

(b) Determine if the recommendations would impose more stringent performance requirements on private entities than on public entities, unless already required to do so by federal or state law, and if so, describe the justification for doing so; and

(c) Determine if the recommendations differ from federal regulations and statutes, and if so, explain why the difference is necessary and how ecology will coordinate with other federal, state, and local laws applicable to the same activity or subject matter.

(3) **Economic analyses.** In assessing economic impacts under subsection (1)(f)(iii)(B) of this section, ecology will identify costs of implementing the recommendations. This may include a qualitative and/or quantitative analysis of the probable benefits and costs of the CAP.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-420, filed 1/13/06, effective 2/13/06.]

WAC 173-333-430 What process will ecology use to develop CAPs? (1) **Purpose.** The purpose of this section is to identify the process ecology will use to develop CAPs.

(2) **Workplan/scoping.** Once a chemical is selected for CAP development, ecology will initially plan and scope the CAP of the selected chemical based upon available information regarding the chemical's products, uses and releases; human health exposure and ecological hazards; environmental releases, fate, and transport; environmental concentrations and available substitutes; available options for managing uses and releases; estimated costs, benefits and effectiveness of alternate management options; and any other information ecology determines is necessary to support the CAP development process. Ecology will consult with the department of health regarding all portions of the CAP related to human health exposures.

(3) **Advisory committee.** Ecology will create an external advisory committee for each CAP that ecology develops. The purpose of the advisory committee is to provide stakeholder input and expertise.

(a) The advisory committee membership will include, but not be limited to, representatives from: Large and small business sectors, community, environmental and public health advocacy groups, local governments, and public health agencies. When appropriate, representatives from the following groups will also be invited to participate: Agricultural groups, worker safety advocacy groups, and other interested parties. Federally recognized tribal governments will also be encouraged to participate. In addition, representation from other state executive agencies may be requested to provide input and to represent agency interests in the CAP development process. Outside experts (if needed) may be requested to provide technical expertise.

(b) A neutral third-party facilitator may be hired to facilitate advisory committee meetings.

(c) The advisory committee will follow a consultative process, where ecology will draft the CAP in consideration of input from advisory committee members.

(d) All advisory committee meetings will be open to the public. Ecology will notify the public of advisory committee meetings through an announcement posted on the ecology web site and written notification to interested individuals and organizations.

(4) **Information collection phase.** Ecology will collect all necessary and up-to-date information regarding the selected chemical. CAP advisory committee members will be asked to contribute, and as appropriate, review information from ecology during this phase of CAP development. The department of health will be asked to review any information related to human health.

(5) **Draft recommendations.** Ecology will develop a draft CAP for advisory committee review and comment. Ecology will review all advisory committee comments and, as appropriate, revise the draft CAP prior to distributing it for public review and comment.

(6) **Public review and comment.** Ecology will notify the public when it has developed a draft CAP and provide an opportunity for public review and comment. The public comment period for each draft CAP will be a minimum of sixty days. Ecology will notify the public through an announcement posted concurrently on the ecology web site, a notice in the *Washington State Register*, and sent to interested persons and organizations. The comment period shall start from the date the notice is published in the *Washington State Register*. During the comment period, ecology will hold a minimum of two public meetings on the draft CAP. One meeting shall be held on the western side of the state, and one meeting shall be held on the eastern side of the state. Ecology may hold additional public meetings during the public comment period if determined necessary. Ecology will provide a response to all public comments.

(7) **Final recommendations.** Ecology will review and provide responses to all public comments on the draft CAP prior to issuing the final recommendations. Ecology will notify the public of the final recommendations through an announcement that will be published in the *Washington State Register* and posted on the ecology web site. Ecology will also provide written notification to individuals or organizations who submitted comments on the draft CAP.

(8) **Coordination with other agencies.** Ecology will coordinate with other government agencies and interested parties as appropriate on the implementation of the final CAP. Ecology will consult with the department of health on public information materials addressing food safety issues.

[Statutory Authority: 2004 c 276 and chapter 70.105 RCW. 06-03-094 (Order 04-07), § 173-333-430, filed 1/13/06, effective 2/13/06.]

Chapter 173-340 WAC
MODEL TOXICS CONTROL ACT—CLEANUP

WAC

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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-340-010 Purpose. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-010, filed 6/8/88.] Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

173-340-020 Definitions. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-020, filed 6/8/88.] Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

173-340-030 Emergency actions. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-030, filed 6/8/88.] Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

173-340-040 Settlement procedures. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-040, filed 6/8/88.] Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

173-340-050 State conducted remedial action—Notice. [Statutory Authority: Chapter 70.105B RCW. 88-13-036 (Order 88-40), § 173-340-050, filed 6/8/88.] Repealed by 90-08-086, filed 4/3/90, effective 5/4/90. Statutory Authority: Chapter 70.105D RCW.

PART I—OVERALL CLEANUP PROCESS

WAC 173-340-100 Purpose. This chapter is promulgated under the Model Toxics Control Act. It establishes administrative processes and standards to identify, investigate, and clean up facilities where hazardous substances have come to be located. It defines the role of the department and encourages public involvement in decision making at these facilities.

The goal of this chapter is to implement chapter 70.105D RCW. This chapter provides a workable process to accomplish effective and expeditious cleanups in a manner that protects human health and the environment. This chapter is primarily intended to address releases of hazardous substances caused by past activities although its provisions may be applied to potential and ongoing releases of hazardous substances from current activities.

Note: All materials incorporated by reference in this chapter are available for inspection at the Department of Ecology's Toxics Cleanup Program, 300 Desmond Drive, Lacey, Washington, 98503.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-100, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-100, filed 4/3/90, effective 5/4/90.]

WAC 173-340-110 Applicability. (1) This chapter shall apply to all facilities where there has been a release or threatened release of a hazardous substance that may pose a threat to human health or the environment. Under this chapter, the department may require or take those actions necessary to investigate and remedy these releases.

(2) Nothing herein shall be construed to diminish the department's authority to address a release or threatened release under other applicable laws or regulations. The cleanup process and procedures under this chapter and under other laws may be combined. The department may initiate a remedial action under this chapter and may upon further analysis determine that another law is more appropriate, or vice versa.

(3) If a hazardous substance remains at a facility after actions have been completed under other applicable laws or regulations, the department may apply this chapter to protect human health or the environment.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-110, filed 4/3/90, effective 5/4/90.]

WAC 173-340-120 Overview. (1) Purpose. This section provides an overview of the cleanup process that typically will occur at a site where a release of a hazardous substance has been discovered with an emphasis on sites being cleaned up under order or consent decree. If there are any inconsistencies between this section and any specifically referenced sections, the referenced section shall govern.

(2) Site discovery. Site discovery includes:

(a) Release reporting. An owner or operator who knows of or discovers a release of a hazardous substance due to past activities must report the release to the department as described in WAC 173-340-300. Most current releases of hazardous substances must be reported to the department under the state's hazardous waste, underground storage tank, or water quality laws. The term "hazardous substance" includes a broad range of substances as defined by chapter 70.105D RCW.

(b) Initial investigation. Within ninety days of learning of a hazardous substance release, the department will conduct an initial investigation of the site under WAC 173-340-310. For sites that may need further remedial action, the department will send an early notice letter to the owner, operator, and other potentially liable persons known to the department, informing them of the department's decision.

(3) Site priorities. Sites are prioritized for further remedial action by the following process:

(a) Site hazard assessment. Based on the results of the initial investigation, a site hazard assessment will be performed if necessary, as described in WAC 173-340-320. The purpose of the site hazard assessment is to gather information to confirm whether a release has occurred and to enable the department to evaluate the relative potential hazard posed by the release. If the department decides that no further action is required, it will notify the public of that decision through the *Site Register*.

(b) Hazardous sites list. The department will maintain a list of sites known as the "hazardous sites list" where further remedial action is required. The department will add sites to this list after the completion of a site hazard assessment. Sites placed on the list will be ranked using the department's hazard ranking method. The department will remove a site from the hazardous sites list if the site meets the requirements for removal described in WAC 173-340-330.

(c) Biennial program report. Every even-numbered year, the department will prepare a biennial program report for the legislature. The hazard ranking, along with other factors, will be used in this report to identify the projects and expenditures recommended for appropriation. See WAC 173-340-340.

(4) Detailed site investigations and cleanup decisions. The following steps will be taken to ensure that the proper method of cleanup is chosen for the site.

(a) Remedial investigation. A remedial investigation will be performed at ranked sites under WAC 173-340-350. The purpose of the remedial investigation is to collect data and information necessary to define the extent of contamination and to characterize the site.

(b) Feasibility study. A feasibility study will be conducted at ranked sites under WAC 173-340-350. The purpose of the feasibility study is to develop and evaluate alternative cleanup actions. The department will evaluate the remedial investigation/feasibility study, establish cleanup levels and the point or points at which they must be complied with in accordance with the procedures provided for in WAC 173-340-700 through 173-340-760 and select a cleanup action that protects human health and the environment and is based on the remedy selection criteria and requirements in WAC 173-340-350 through 173-340-390. WAC 173-340-440 sets forth the circumstances in which institutional controls will be required to ensure continued protection of human health and the environment.

(c) Cleanup action plan. The cleanup action will be set forth in a draft cleanup action plan that addresses cleanup requirements for hazardous substances at the site. After public comment on the draft plan, a final cleanup action plan will be issued by the department.

(5) Site cleanup. Once the appropriate cleanup action has been selected for the site, the actual cleanup will be performed.

(a) Cleanup actions. WAC 173-340-400 describes the design and construction requirements for implementing the cleanup action plan.

(b) Compliance monitoring and review. The cleanup action must include compliance monitoring under WAC 173-340-410 and in some cases periodic review under WAC 173-340-420 to ensure the long-term effectiveness of the cleanup action.

(6) Interim actions. Under certain conditions it may be appropriate to take early actions at a site before completing the process described in subsections (2) through (5) of this section. WAC 173-340-430 describes when it is appropriate to take these early or interim actions and the requirements for such actions.

(7) Leaking underground storage tanks. Underground storage tank (UST) owners and underground storage tank operators regulated under chapter 90.76 RCW are required to perform specific actions in addition to what other site owners and operators would do under this chapter. WAC 173-340-450 describes the requirements for leaking underground storage tanks.

(8) Procedures for conducting remedial actions.

(a) Remedial action agreements. The department has authority to take remedial actions or to order persons to conduct remedial actions under WAC 173-340-510 and 173-340-540. However, the department encourages agreements for investigations and cleanups in appropriate cases. These agreements can be agreed orders or consent decrees reached under the procedures of WAC 173-340-520 and 173-340-530.

(b) Independent remedial actions. Persons may conduct investigations and cleanups without department approval under this chapter. The department will use the appropriate requirements in this chapter when evaluating the adequacy of any independent remedial action. Except as limited by WAC 173-340-515(2), nothing in this chapter prohibits persons from conducting such actions before the department is ready to act at the site; however, all interim and cleanup actions must be reported to the department under WAC 173-340-515. Furthermore, independent remedial actions are conducted at the potentially liable person's own risk and the department may take or require additional remedial actions at these sites at any time. (See WAC 173-340-515 and 173-340-545.)

(9) Public participation. At sites where the department is conducting the cleanup or overseeing the cleanup under an order or decree, the public will receive notice and an opportunity to comment on most of the steps in the cleanup process. At many sites, a public participation plan will be prepared to provide opportunities for more extensive public involvement in the cleanup process.

These and other requirements are described in WAC 173-340-600.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-120, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-120, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-120, filed 4/3/90, effective 5/4/90.]

WAC 173-340-130 Administrative principles. (1) Introduction. The department shall conduct or require remedial actions consistent with the provisions of this section.

(2) Information sharing. It is the policy of the department to make information about releases or threatened releases available to owners, operators or other persons with potential liability for a site in order to encourage them to conduct prompt remedial action. It is also the policy of the department to make the same information available to interested members of the general public so they can follow the progress of site cleanup in the state.

(3) Information exchange.

All persons are encouraged to contact the department and seek assistance on the general administrative and technical requirements of this chapter. Through its technical consultation program described in WAC 173-340-515, the department may also provide informal advice and assistance to persons conducting or proposing remedial actions at a specific site at any time. Unless the department is providing formal guidance for the implementation of an order or decree, any comments by the department or its agents are advisory and not commitments or approvals binding on the department. A person may not represent this advice as an approval of a remedial action. If the person requesting the advice is seeking binding commitments or approvals, then an order or consent decree shall be used.

(4) Scope of public participation. The department seeks to encourage public participation in all steps of the cleanup process. The department shall encourage a level of participation appropriate to the conditions at a facility and the level of the public's interest in the site.

(5) Scope of information. It is the department's intention that adequate information be gathered at a site to enable decisions on appropriate actions. It is also the department's intention that decisions be made and cleanups proceed expeditiously once adequate information is obtained. Studies can be performed and submittals made at varying levels of detail appropriate to the conditions at the site. Also, steps in the cleanup process may be combined to facilitate quicker cleanups, where appropriate. Flexibility in the scope of investigations and in combining steps may be particularly appropriate for routine cleanup actions. Once adequate information has been obtained, decisions shall be made within the framework provided in this chapter and in site-specific orders or decrees.

(6) Preparation of documents. Except for the initial investigation, any of the studies, reports, or plans used in the cleanup process can be prepared by either the department or the potentially liable person. The department retains all authority to review and verify the documents submitted and to make decisions based on the documents and other relevant information.

(7) Interagency coordination.

(a) If the department is conducting remedial actions or requiring remedial actions under an order or decree, the department shall ensure appropriate local, state, and federal agencies and tribal governments are kept informed and, as appropriate, involved in the development and implementation of remedial actions. The department may require a potentially liable person to undertake this responsibility. If the potentially liable person demonstrates that they are unable to obtain adequate involvement to allow the remedial action to proceed by a particular government agency or tribe, the department shall request the involvement of the agency or tribe.

(b) The nature and degree of coordination and consultation shall be commensurate with the other agencies' and tribes' interests and needs at the site. Interested agencies and tribes shall also be included in the mailing list for public notices under WAC 173-340-600. To facilitate coordination, it is important that agencies and tribes provide specific comments, including the identification of additional information needed or mitigating measures that are necessary or desirable to satisfy their concerns.

(c) In order to provide for expeditious cleanup actions, all federal, state, local agencies, and tribes are encouraged to coordinate when providing notices, holding meetings and hearings, and preparing documents. Whenever reasonable, the department shall coordinate and combine its activities with other agencies and tribes to minimize the duplication of notices, hearings and preparation of documents, unless otherwise prohibited.

(8) State Environmental Policy Act. See chapter 197-11 WAC for the State Environmental Policy Act requirements pertaining to the implementation of the Model Toxics Control Act.

(9) Appeals. Unless otherwise indicated all department decisions made under this chapter are remedial decisions and may be appealed only as provided for in RCW 70.105D.060.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-130, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-130, filed 4/3/90, effective 5/4/90.]

WAC 173-340-140 Deadlines. (1) Purpose. It is the department's intent to move sites through the cleanup process as expeditiously as possible. However, the department is limited by the amount of personnel and funds it can expend in any given fiscal year. This section is intended to establish reasonable deadlines for remedying releases within these constraints. The department's process for ranking and setting site priorities is described in WAC 173-340-330 and 173-340-340, respectively.

(2) Initial investigation. Within ninety days of learning of a release or threatened release of a hazardous substance, the department shall complete an initial investigation under WAC 173-340-310.

(3) Further investigation. At least twice a year, the department shall determine which sites with completed initial investigations are a high priority for further investigation. At

that time, the department shall schedule high priority sites for further investigations to begin within six months. This determination will be based on the best professional judgment of departmental staff. Sites may be scheduled for further investigation at any time if the department determines that the site warrants expedited action.

(4) Site assessment and ranking. For high priority sites, the department shall complete the site hazard assessment and hazard ranking within one hundred eighty days of the scheduled start date. These sites shall be identified in the department's *Site Register*. Sites not designated as a high priority shall be scheduled for future investigations and listed in the biennial report to the legislature (WAC 173-340-340). The department shall conduct at least thirty-five site hazard assessments each fiscal year until the number of sites needing site hazard assessments are reduced below this number.

(5) Site investigation. Within thirty days of ranking, the department shall designate which sites are a high priority for a remedial investigation/feasibility study and which sites are a lower priority where further action can be delayed. The department shall review these lower priority sites and provide an opportunity for public comment as part of the biennial report to the legislature (WAC 173-340-340).

(6) Remedial investigation/feasibility study. For all sites designated as a high priority, the remedial investigation/feasibility study shall be completed under WAC 173-340-350 within eighteen months of signing the order or decree. The department may extend the deadline up to twelve months if the circumstances at the site merit a longer time frame. The department shall provide the public an opportunity to comment on any extension. The department shall initiate a remedial investigation/feasibility study on at least ten sites per fiscal year.

(7) Cleanup action. The department shall select the cleanup action under WAC 173-340-360 and file a consent decree or issue an order for cleanup action for all designated high priority sites within six months of the completion of the remedial investigation/feasibility study. The department may extend the deadline for up to four months for consent decree and order discussions. The department shall provide the public with an opportunity to comment on any deadline extension.

(8) Site schedules. The department shall publish site schedules for designated high priority sites in the *Site Register* according to WAC 173-340-600(6).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-140, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-140, filed 4/3/90, effective 5/4/90.]

PART II—DEFINITIONS AND USAGE

WAC 173-340-200 Definitions. For the purpose of this chapter, the following definitions apply:

"Acute toxicity" means the ability of a hazardous substance to cause injury or death to an organism as a result of a short-term exposure to a hazardous substance.

"Agreed order" means an order issued by the department under WAC 173-340-530 with which the potentially liable person receiving the order agrees to comply. An agreed order may be used to require or approve any cleanup or other remedial actions but it is not a settlement under RCW 70.105D.-040(4) and shall not contain a covenant not to sue, or provide protection from claims for contribution, or provide eligibility for public funding of remedial actions under RCW 70.105D.-070 (2)(d)(xi).

"Aliphatic hydrocarbons" or "aliphatics" means organic compounds that are characterized by a straight, branched, or cyclic (nonbenzene ring) arrangement of carbon atoms and that do not contain halogens (such as chlorine). See also "aromatic hydrocarbons."

"All practicable methods of treatment" means all technologies and/or methods currently available and demonstrated to work under similar site circumstances or through pilot studies, and applicable to the site at reasonable cost. These include "all known available and reasonable methods of treatment" (AKART) for discharges or potential discharges to waters of the state, and "best available control technologies" for releases of hazardous substances into the air resulting from cleanup actions.

"Applicable state and federal laws" means all legally applicable requirements and those requirements that the department determines, based on the criteria in WAC 173-340-710(3), are relevant and appropriate requirements.

"Area background" means the concentrations of hazardous substances that are consistently present in the environment in the vicinity of a site which are the result of human activities unrelated to releases from that site.

"Aromatic hydrocarbons" or "aromatics" means organic compounds that are characterized by one or more benzene rings, with or without aliphatic hydrocarbon substitutions of hydrogen atoms on the rings, and that do not contain halogens (such as chlorine). See also "aliphatic hydrocarbons."

"Averaging time" means the time over which the exposure is averaged. For noncarcinogens, the averaging time typically equals the exposure duration. For carcinogens, the averaging time equals the life expectancy of a person.

"Bioconcentration factor" means the ratio of the concentration of a hazardous substance in the tissue of an aquatic organism divided by the hazardous substance concentration in the ambient water in which the organism resides.

"Carcinogen" means any substance or agent that produces or tends to produce cancer in humans. For implementation of this chapter, the term carcinogen applies to substances on the United States Environmental Protection Agency lists of A (known human) and B (probable human) carcinogens, and any substance that causes a significant increased incidence of benign or malignant tumors in a single, well conducted animal bioassay, consistent with the weight of evidence approach specified in the United States Environmental Protection Agency's Guidelines for Carcinogen Risk Assessment as set forth in 51 FR 33992 et seq.

"Carcinogenic potency factor" or "CPF" means the upper 95th percentile confidence limit of the slope of the dose-response curve and is expressed in units of (mg/kg-day)-1. When derived from human epidemiological data, the carcinogenic potency factor may be a maximum likelihood estimate.

"Chronic reference dose" means an estimate (with an uncertainty spanning an order of magnitude or more) of a daily exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of adverse effects during a lifetime.

"Chronic toxicity" means the ability of a hazardous substance to cause injury or death to an organism resulting from repeated or constant exposure to the hazardous substance over an extended period of time.

"Cleanup" means the implementation of a cleanup action or interim action.

"Cleanup action" means any remedial action, except interim actions, taken at a site to eliminate, render less toxic, stabilize, contain, immobilize, isolate, treat, destroy, or remove a hazardous substance that complies with WAC 173-340-350 through 173-340-390.

"Cleanup action alternative" means one or more treatment technology, containment action, removal action, engineered control, institutional control or other type of remedial action ("cleanup action components") that, individually or, in combination, achieves a cleanup action at a site.

"Cleanup action plan" means the document prepared by the department under WAC 173-340-380 that selects the cleanup action and specifies cleanup standards and other requirements for the cleanup action.

"Cleanup level" means the concentration of a hazardous substance in soil, water, air, or sediment that is determined to be protective of human health and the environment under specified exposure conditions.

"Cleanup standards" means the standards adopted under RCW 70.105D.030 (2)(d). Establishing cleanup standards requires specification of the following:

Hazardous substance concentrations that protect human health and the environment ("cleanup levels");

The location on the site where those cleanup levels must be attained ("points of compliance"); and

Additional regulatory requirements that apply to a cleanup action because of the type of action and/or the location of the site. These requirements are specified in applicable state and federal laws and are generally established in conjunction with the selection of a specific cleanup action.

"Cohen's method" means the maximum likelihood estimate of the mean and standard deviation accounting for data below the method detection limit or practical quantitation limit using the method described in the following publications:

• Cohen, A.C., 1959. "Simplified estimators for the normal distribution when samples are singly censored or truncated." *Technometrics*. Volume 1, pages 217-237.

• Cohen, A.C., 1961. "Tables for maximum likelihood estimates: Singly truncated and singly censored samples." *Technometrics*. Volume 3, pages 535-541.

"Compliance monitoring" means a remedial action that consists of monitoring as described in WAC 173-340-410.

"Conceptual site model" means a conceptual understanding of a site that identifies potential or suspected sources of hazardous substances, types and concentrations of hazardous substances, potentially contaminated media, and actual and potential exposure pathways and receptors. This model is typically initially developed during the scoping of the remedial investigation and further refined as additional information is collected on the site. It is a tool used to assist in making decisions at a site.

"Conducting land use planning under chapter 36.70A RCW" as used in the definition of "industrial properties," means having adopted a comprehensive plan and development regulations for the site under chapter 36.70A RCW.

"Containment" means a container, vessel, barrier, or structure, whether natural or constructed, that confines a hazardous substance within a defined boundary and prevents or minimizes its release into the environment.

"Contaminant" means any hazardous substance that does not occur naturally or occurs at greater than natural background levels.

"Curie" means the measure of radioactivity defined as that quantity of radioactive material which decays at the rate of 3.70×10^{10} transformations per second. This decay rate is nearly equivalent to that exhibited by 1 gram of radium in equilibrium with its disintegration products.

"Day" means calendar day; however, any document due on the weekend or a holiday may be submitted on the first working day after the weekend or holiday.

"Decree" means consent decree under WAC 173-340-520. "Consent decree" is synonymous with decree.

"Degradation by-products" or "decomposition by-products" means the secondary product of biological or chemical processes that break down chemicals into other chemicals. The decomposition by-products may be more or less toxic than the parent compound.

"Department" means the department of ecology.

"Developmental reference dose" means an estimate (with an uncertainty of an order of magnitude or more) of an exposure level for the human population, including sensitive subgroups, that is likely to be without an appreciable risk of developmental effects.

"Direct contact" means exposure to hazardous substances through ingestion and/or dermal contact.

"Director" means the director of ecology or the director's designee.

"Drinking water fraction" means the fraction of drinking water that is obtained or has the potential to be obtained from the site.

"Engineered controls" means containment and/or treatment systems that are designed and constructed to prevent or limit the movement of, or the exposure to, hazardous substances. Examples of engineered controls include a layer of clean soil, asphalt or concrete paving or other materials placed over contaminated soils to limit contact with contamination; a ground water flow barrier such as a bentonite slurry trench; ground water gradient control systems such as French drains or pump and treat systems; and vapor control systems.

"Environment" means any plant, animal, natural resource, surface water (including underlying sediments), ground water, drinking water supply, land surface (including tidelands and shorelands) or subsurface strata, or ambient air within the state of Washington or under the jurisdiction of the state of Washington.

"Equivalent carbon number" or "EC" means a value assigned to a fraction of a petroleum mixture, empirically derived from the boiling point of the fraction normalized to the boiling point of n-alkanes or the retention time of n-alkanes in a boiling point gas chromatography column.

"Exposure" means subjection of an organism to the action, influence, or effect of a hazardous substance (chemical agent) or physical agent.

"Exposure duration" means the period of exposure to a hazardous substance.

"Exposure frequency" means the portion of the exposure duration that an individual is exposed to a hazardous substance, expressed as a fraction. For example, if a person is exposed 260 days (five days per week for 52 weeks) over a year (365 days), the exposure frequency would be equal to: (5 x 50)/365 = 0.7.

"Exposure parameters" means those parameters used to derive an estimate of the exposure to a hazardous substance.

"Exposure pathway" means the path a hazardous substance takes or could take from a source to an exposed organism. An exposure pathway describes the mechanism by which an individual or population is exposed or has the potential to be exposed to hazardous substances at or originating from a site. Each exposure pathway includes an actual or potential source or release from a source, an exposure point, and an exposure route. If the exposure point differs from the source of the hazardous substance, the exposure pathway also includes a transport/exposure medium.

"Facility" means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, or aircraft; or any site or area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located.

"Federal cleanup law" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. 9601 et seq.

"Fish diet fraction" means the percentage of the total fish and/or shellfish in an individual's diet that is obtained or has the potential to be obtained from the site.

"Food crop" means any domestic plant that is produced for the purpose of, or may be used in whole or in part for, consumption by people or livestock. This shall include nursery, root, or seedstock to be used for the production of food crops.

"Free product" means a nonaqueous phase liquid that is present in the soil, bedrock, ground water or surface water as a district separate layer. Under the right conditions, if sufficient free product is present, free product is capable of migrating independent of the direction of flow of the ground water or surface water.

"Gastrointestinal absorption fraction" means the fraction of a substance transported across the gastrointestinal lining and taken up systemically into the body.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water.

"Hazard index" means the sum of two or more hazard quotients for multiple hazardous substances and/or multiple exposure pathways.

"Hazardous sites list" means the list of hazardous waste sites maintained under WAC 173-340-330.

"Hazardous substance" means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous substance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42 U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment.

The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: Crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local law.

"Hazardous waste site" means any facility where there has been confirmation of a release or threatened release of a hazardous substance that requires remedial action.

"Hazard quotient" or "HQ" means the ratio of the dose of a single hazardous substance over a specified time period to a reference dose for that hazardous substance derived for a similar exposure period.

"Health effects assessment summary tables" or "HEAST" means a data base developed by the United States Environmental Protection Agency that provides a summary of information on the toxicity of hazardous substances.

"Henry's law constant" means the ratio of a hazardous substance's concentration in the air to its concentration in water. Henry's law constant can vary significantly with temperature for some hazardous substances. The dimensionless form of this constant is used in the default equations in this chapter.

"Highest beneficial use" means the beneficial use of a resource generally requiring the highest quality in the resource. For example, for many hazardous substances, providing protection for the beneficial use of drinking water will generally also provide protection for a great variety of other existing and future beneficial uses of ground water.

"Independent remedial actions" means remedial actions conducted without department oversight or approval and not under an order, agreed order, or consent decree.

"Indicator hazardous substances" means the subset of hazardous substances present at a site selected under WAC 173-340-708 for monitoring and analysis during any phase of remedial action for the purpose of characterizing the site or establishing cleanup requirements for that site.

"Industrial properties" means properties that are or have been characterized by, or are to be committed to, traditional industrial uses such as processing or manufacturing of materials, marine terminal and transportation areas and facilities, fabrication, assembly, treatment, or distribution of manufactured products, or storage of bulk materials, that are either:

- Zoned for industrial use by a city or county conducting land use planning under chapter 36.70A RCW (Growth Management Act); or
- For counties not planning under chapter 36.70A RCW (Growth Management Act) and the cities within them, zoned for industrial use and adjacent to properties currently used or designated for industrial purposes.

See WAC 173-340-745 for additional criteria to determine if a land use not specifically listed in this definition

would meet the requirement of "traditional industrial use" and for evaluating if a land use zoning category meets the requirement of being "zoned for industrial use."

"Inhalation absorption fraction" means the percent of a hazardous substance (expressed as a fraction) that is absorbed through the respiratory system.

"Inhalation correction factor" means a multiplier that is used to adjust exposure estimates based on ingestion of drinking water to take into account exposure to hazardous substances that are volatilized and inhaled during use of the water.

"Initial investigation" means a remedial action that consists of an investigation under WAC 173-340-310.

"Institutional controls" means measures undertaken to limit or prohibit activities that may interfere with the integrity of an interim action or a cleanup action or result in exposure to hazardous substances at the site. For examples of institutional controls see WAC 173-340-440(1).

"Integrated risk information system" or "IRIS" means a data base developed by the United States Environmental Protection Agency that provides a summary of information on hazard identification and dose-response assessment for specific hazardous substances.

"Interim action" means a remedial action conducted under WAC 173-340-430.

"Interspecies scaling factor" means the conversion factor used to take into account differences between animals and humans.

"Land's method" means the method for calculating an upper confidence limit for the mean of a lognormal distribution, described in the following publications:

• Land, C.E., 1971. "Confidence intervals for linear functions of the normal mean and variance." *Annals of Mathematics and Statistics*. Volume 42, pages 1187-1205.

• Land, C.E., 1975. "Tables of confidence limits for linear functions of the normal mean and variance." In: *Selected Tables in Mathematical Statistics*, Volume III, pages 385-419. American Mathematical Society, Providence, Rhode Island.

"Legally applicable requirements" means those cleanup standards, standards of control, and other human health and environmental protection requirements, criteria, or limitations adopted under state or federal law that specifically address a hazardous substance, cleanup action, location, or other circumstances at the site.

"Lowest observed adverse effect level" or "LOAEL" means the lowest concentration of a hazardous substance at which there is a statistically or biologically significant increase in the frequency or severity of an adverse effect between an exposed population and a control group.

"Mail" means delivery through the United States Postal Service or an equivalent method of delivery or transmittal, including private mail carriers, or personal delivery.

"Maximum contaminant level" or "MCL" means the maximum concentration of a contaminant established by either the Washington state board of health or the United States Environmental Protection Agency under the Federal Safe Drinking Water Act (42 U.S.C. 300f et seq.) and published in chapter 248-54 WAC or 40 C.F.R. 141.

"Maximum contaminant level goal" or "MCLG" means the maximum concentration of a contaminant established by either the Washington state board of health or the United States Environmental Protection Agency under the Federal Safe Drinking Water Act (42 U.S.C. 300f et seq.) and published in chapter 248-54 WAC or 40 C.F.R. 141 for which no known or anticipated adverse effects on human health occur, including an adequate margin of safety.

"Method detection limit" or "MDL" means the minimum concentration of a compound that can be measured and reported with ninety-nine percent (99%) confidence that the value is greater than zero.

"Millirem" or "mrem" means the measure of the dose of any radiation to body tissue in terms of its estimated biological effect relative to a dose received from an exposure to one roentgen (R) of X rays. One millirem equals 0.001 rem.

"Mixed funding" means any funding provided to potentially liable persons from the state toxics control account under WAC 173-340-560.

"Model Toxics Control Act" or "act" means chapter 70.105D RCW, first passed by the voters in the November 1988 general election as Initiative 97 and as since amended by the legislature.

"Natural attenuation" means a variety of physical, chemical or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of hazardous substances in the environment. These in situ processes include: Natural biodegradation; dispersion; dilution; sorption; volatilization; and, chemical or biological stabilization, transformation, or destruction of hazardous substances. See WAC 173-340-370(7) for a description of the expected role of natural attenuation in site cleanup. A cleanup action that includes natural attenuation and conforms to the expectation in WAC 173-340-370(7) can be considered an active remedial measure.

"Natural background" means the concentration of hazardous substance consistently present in the environment that has not been influenced by localized human activities. For example, several metals and radionuclides naturally occur in the bedrock, sediments, and soils of Washington state due solely to the geologic processes that formed these materials and the concentration of these hazardous substances would be considered natural background. Also, low concentrations of some particularly persistent organic compounds such as polychlorinated biphenyls (PCBs) can be found in surficial soils and sediment throughout much of the state due to global distribution of these hazardous substances. These low concentrations would be considered natural background. Similarly, concentrations of various radionuclides that are present at low concentrations throughout the state due to global distribution of fallout from bomb testing and nuclear accidents would be considered natural background.

"Natural biodegradation" means in-situ biological processes such as aerobic respiration, anaerobic respiration, and cometabolism, that occur without human intervention and that break down hazardous substances into other compounds or elements. The process is typically a multiple step process and may or may not result in organic compounds being completely broken down or mineralized to carbon dioxide and water.

"Natural person" means any unincorporated individual or group of individuals. The term "individual" is synonymous with "natural person."

"Nonaqueous phase liquid" or "NAPL" means a hazardous substance that is present in the soil, bedrock, ground water or surface water as a liquid not dissolved in water. The term includes both light nonaqueous phase liquid (LNAPL) and dense nonaqueous phase liquid (DNAPL).

"No observed adverse effect level" or "NOAEL" means the exposure level at which there are no statistically or biologically significant increases in frequency or severity of adverse effects between the exposed population and its appropriate control; some effects may be produced at this level, but they are not considered to be adverse, nor precursors to specific adverse effects.

"Nonpotable" means not a current or potential source of drinking water. See WAC 173-340-720 and 173-340-730 for criteria for determining if ground water or surface water is a current or potential source of drinking water.

"Null hypothesis" means an assumption about hazardous substance concentrations at a site when evaluating compliance with cleanup levels established under this chapter. The null hypothesis is that the site is contaminated at concentrations that exceed cleanup levels. This shall not apply to cleanup levels based on background concentrations where other appropriate statistical methods supported by a power analysis would be more appropriate to use.

"Oral RFD conversion factor" means the conversion factor used to adjust an oral reference dose (which is typically based on an administered dose) to a dermal reference dose (which is based on an absorbed dose).

"Order" means an enforcement order issued under WAC 173-340-540 or an agreed order issued under WAC 173-340-530.

"Owner or operator" means any person that meets the definition of this term in RCW 70.105D.020(12).

"PAHs (carcinogenic)" or "cPAHs" means those polycyclic aromatic hydrocarbons substances, PAHs, identified as A (known human) or B (probable human) carcinogens by the United States Environmental Protection Agency. These include benzo(a)anthracene, benzo(b)fluoranthene, benzo (k)fluoranthene, benzo(a)pyrene, chrysene, dibenzo(a,h) anthracene, and indeno(1,2,3-cd)pyrene.

"Permanent solution" or "permanent cleanup action" means a cleanup action in which cleanup standards of WAC 173-340-700 through 173-340-760 can be met without further action being required at the site being cleaned up or any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

"Person" means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, state government agency, unit of local government, federal government agency, or Indian tribe.

"Picocurie" or "pCi" means 10^{-12} curie.

"Point of compliance" means the point or points where cleanup levels established in accordance with WAC 173-340-720 through 173-340-760 shall be attained. This term includes both standard and conditional points of compliance. A conditional point of compliance for particular media is only available as provided in WAC 173-340-720 through 173-340-760.

"Polychlorinated biphenyls" or "PCB mixtures" means those aromatic compounds containing two benzene nuclei with two or more substituted chlorine atoms. For the purposes of this chapter, PCB includes those congeners which are identified using the appropriate analytical methods as specified in WAC 173-340-830.

"Polycyclic aromatic hydrocarbons" or "PAH" means those hydrocarbon molecules composed of two or more fused benzene rings. For the purpose of this chapter, PAH includes those compounds which are identified and quantified using the appropriate analytical methods as specified in WAC 173-340-830. The specific compounds generally included are acenaphthene, acenaphthylene, fluorene, naphthalene, anthracene, fluoranthene, phenanthrene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, pyrene, chrysene, benzo[a]pyrene, dibenzo[a,h]anthracene, indeno[1,2,3-cd]pyrene, and benzo[ghi]perylene.

"Potentially liable person" means any person who the department finds, based on credible evidence, to be liable under RCW 70.105D.040.

"Practicable" means capable of being designed, constructed and implemented in a reliable and effective manner including consideration of cost. When considering cost under this analysis, an alternative shall not be considered practicable if the incremental costs of the alternative are disproportionate to the incremental degree of benefits provided by the alternative over other lower cost alternatives.

"Practical quantitation limit" or "PQL" means the lowest concentration that can be reliably measured within specified limits of precision, accuracy, representativeness, completeness, and comparability during routine laboratory operating conditions, using department approved methods.

"Probabilistic risk assessment" means a mathematical technique for assessing the variability and uncertainty in risk calculations. This is done by using distributions for model input parameters, rather than point values, where sufficient data exists to justify the distribution. These distributions are then used to compute various simulations using tools such as Monte Carlo analysis to examine the probability that a given outcome will result (such as a level of risk being exceeded). When using probabilistic techniques under this chapter for human health risk assessment, distributions shall not be used to represent dose response relationships (reference dose, reference concentration, cancer potency factor).

"Public notice" means, at a minimum, adequate notice mailed to all persons who have made a timely request of the department and to persons residing in the potentially affected vicinity of the proposed action; mailed to appropriate news media; published in the newspaper of largest circulation in the city or county of the proposed action; and opportunity for interested persons to comment.

"Public participation plan" means a plan prepared under WAC 173-340-600 to encourage coordinated and effective public involvement tailored to the public's needs at a particular site.

"Rad" means that quantity of ionizing radiation that results in the absorption of 100 ergs of energy per gram of irradiated material, regardless of the source of radiation.

"Radionuclide" means a type of atom that spontaneously undergoes radioactive decay. Radionuclides are hazardous substances under the act.

"Reasonable maximum exposure" means the highest exposure that can be reasonably expected to occur for a

human or other living organisms at a site under current and potential future site use.

"Reference dose" or "RFD" means a benchmark dose, derived from the NOAEL or LOAEL for a hazardous substance by consistent application of uncertainty factors used to estimate acceptable daily intake doses and an additional modifying factor, which is based on professional judgment when considering all available data about a substance, expressed in units of milligrams per kilogram body weight per day. This includes chronic reference doses, subchronic reference doses, and developmental reference doses.

"Release" means any intentional or unintentional entry of any hazardous substance into the environment, including but not limited to the abandonment or disposal of containers of hazardous substances.

"Relevant and appropriate requirements" means those cleanup standards, standards of control, and other human health and environmental requirements, criteria, or limitations established under state and federal law that, while not legally applicable to the hazardous substance, cleanup action, location, or other circumstance at a site, the department determines address problems or situations sufficiently similar to those encountered at the site that their use is well suited to the particular site. The criteria specified in WAC 173-340-710(3) shall be used to determine if a requirement is relevant and appropriate.

"Rem" means the unit of radiation dose equivalent that is the dosage in rads multiplied by a factor representing the different biological effects of various types of radiation.

"Remedial investigation/feasibility study" means a remedial action that consists of activities conducted under WAC 173-340-350 to collect, develop, and evaluate sufficient information regarding a site to select a cleanup action under WAC 173-340-360 through 173-340-390.

"Remediation level (REL)" means a concentration (or other method of identification) of a hazardous substance in soil, water, air, or sediment above which a particular cleanup action component will be required as part of a cleanup action at a site. Other methods of identification include physical appearance or location. A cleanup action selected in accordance with WAC 173-340-350 through 173-340-390 that includes remediation levels constitutes a cleanup action which is protective of human health and the environment. See WAC 173-340-355 for a description of the purpose of remediation levels and the requirements and procedures for developing a cleanup action alternative that includes remediation levels.

"Remedy" or "remedial action" means any action or expenditure consistent with the purposes of chapter 70.105D RCW to identify, eliminate, or minimize any threat posed by hazardous substances to human health or the environment including any investigative and monitoring activities with respect to any release or threatened release of a hazardous substance and any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health.

"Restoration time frame" means the period of time needed to achieve the required cleanup levels at the points of compliance established for the site.

"Risk" means the probability that a hazardous substance, when released into the environment, will cause an adverse effect in exposed humans or other living organisms.

"Routine cleanup action" means a remedial action meeting all of the following criteria:

• Cleanup standards for each hazardous substance addressed by the cleanup are obvious and undisputed, and allow for an adequate margin of safety for protection of human health and the environment;

• It involves an obvious and limited choice among cleanup action alternatives and uses an alternative that is reliable, has proven capable of accomplishing cleanup standards, and with which the department has experience;

• The cleanup action does not require preparation of an environmental impact statement; and

• The site qualifies under WAC 173-340-7491 for an exclusion from conducting a simplified or site-specific terrestrial ecological evaluation, or if the site qualifies for a simplified ecological evaluation, the evaluation is ended under WAC 173-340-7492(2) or the values in Table 749-2 are used.

Routine cleanup actions consist of, or are comparable to, one or more of the following remedial actions:

• Cleanup of above-ground structures;

• Cleanup of below-ground structures;

• Cleanup of contaminated soils where the action would restore the site to cleanup levels; or

• Cleanup of solid wastes, including containers.

"Safety and health plan" means a plan prepared under WAC 173-340-810.

"Sampling and analysis plan" means a plan prepared under WAC 173-340-820.

"Saturated zone" means the area below the water table in which all interstices are filled with water.

"Schools" means preschools, elementary schools, middle schools, high schools, and similar facilities, both public and private, used primarily for the instruction of minors.

"Science advisory board" means the advisory board established by the department under RCW 70.105D.030(4).

"Secondary maximum contaminant level" means the maximum concentration of a secondary contaminant in water established by the United States Environmental Protection Agency under the Federal Safe Drinking Water Act (42 U.S.C. 300f et seq.) and published in 40 C.F.R. 143.

"Sensitive environment" means an area of particular environmental value, where a release could pose a greater threat than in other areas including: Wetlands; critical habitat for endangered or threatened species; national or state wildlife refuge; critical habitat, breeding or feeding area for fish or shellfish; wild or scenic river; rookery; riparian area; big game winter range.

"Site" means the same as "facility."

"Site hazard assessment" means a remedial action that consists of an investigation performed under WAC 173-340-320.

"Soil" means a mixture of organic and inorganic solids, air, water, and biota that exists on the earth's surface above bedrock, including materials of anthropogenic sources such as slag, sludge, etc.

"Soil biota" means invertebrate multicellular animals that live in the soil or in close contact with the soil.

"Subchronic reference dose" means an estimate (with an uncertainty of an order of magnitude or more) of a daily exposure level for the human population, including sensitive subgroups, that is likely to be without appreciable risk of adverse effects during a portion of a lifetime.

"Surface water" means lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the state of Washington or under the jurisdiction of the state of Washington.

"Technically possible" means capable of being designed, constructed and implemented in a reliable and effective manner, regardless of cost.

"Terrestrial ecological receptors" means plants and animals that live primarily or entirely on land.

"Threatened or endangered species" means species listed as threatened or endangered under the federal Endangered Species Act 16 U.S.C. Section 1533, or classified as threatened or endangered by the state fish and wildlife commission under WAC 232-12-011(1) and 232-12-014.

"Total excess cancer risk" means the upper bound on the estimated excess cancer risk associated with exposure to multiple hazardous substances and multiple exposure pathways.

"Total petroleum hydrocarbons" or "TPH" means any fraction of crude oil that is contained in plant condensate, crankcase motor oil, gasoline, aviation fuels, kerosene, diesel motor fuel, benzol, fuel oil, and other products derived from the refining of crude oil. For the purposes of this chapter, TPH will generally mean those fractions of the above products that are the total of all hydrocarbons quantified by analytical methods NWTPH-Gx; NWTPH-Dx; volatile petroleum hydrocarbons (VPH) for volatile aliphatic and volatile aromatic petroleum fractions; and extractable petroleum hydrocarbons (EPH) for nonvolatile aliphatic and nonvolatile aromatic petroleum fractions, as appropriate, or other test methods approved by the department.

"Type I error" means the error made when it is concluded that an area of a site is below cleanup levels when it actually exceeds cleanup levels. This is the rejection of a true null hypothesis.

"Underground storage tank" or "UST" means an underground storage tank and connected underground piping as defined in the rules adopted under chapter 90.76 RCW.

"Unrestricted site use conditions" means restrictions on the use of the site or natural resources affected by releases of hazardous substances from the site are not required to ensure continued protection of human health and the environment.

"Upper bound on the estimated excess cancer risk of one in one hundred thousand" means the upper ninety-fifth percent confidence limit on the estimated risk of one additional cancer above the background cancer rate per one hundred thousand individuals.

"Upper bound on the estimated excess cancer risk of one in one million" means the upper ninety-fifth percent confidence limit on the estimated risk of one additional cancer above the background cancer rate per one million individuals.

"Volatile organic compound" means those carbon-based compounds listed in EPA methods 502.2, 524.2, 551, 601, 602, 603, 624, 1624C, 1666, 1671, 8011, 8015B, 8021B, 8031, 8032A, 8033, 8260B, and those with similar vapor pressures or boiling points. See WAC 173-340-830(3) for references describing these methods. For petroleum, volatile means aliphatic and aromatic constituents up to and including EC12, plus naphthalene, 1-methylnaphthalene and 2-methylnaphthalene.

"Wastewater facility" means all structures and equipment required to collect, transport, treat, reclaim, or dispose of domestic, industrial, or combined domestic/industrial wastewaters.

"Wetlands" means lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For the purposes of this classification, wetlands must have one or more of the following attributes at least periodically, the land supports predominantly hydrophytes; the substrate is predominately undrained hydric soil; and the substrate is nonsoil and saturated with water or covered by shallow water at some time during the growing season each year.

"Wildlife" means any nonhuman vertebrate animal other than fish.

"Zoned for (a specified) use" means the use is allowed as a permitted or conditional use under the local jurisdiction's land use zoning ordinances. A land use that is inconsistent with the current zoning but allowed to continue as a nonconforming use or through a comparable designation is not considered to be zoned for that use.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-200, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-200, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-200, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-200, filed 4/3/90, effective 5/4/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-210 Usage. For the purposes of this chapter, the following shall apply:

(1) Unless the context clearly requires otherwise the use of the singular shall include the plural and conversely.

(2) The terms "applicable," "appropriate," "relevant," "unless otherwise directed by the department" and similar terms implying discretion mean as determined by the department, with the burden of proof on other persons to demonstrate that the requirements are or are not necessary.

(3) "Approved" means for department conducted or ordered remedial actions, or for potentially liable person conducted cleanups agreed to by the department in an agreed order or decree governing remedial actions at the site.

(4) "Conduct" means to perform or undertake whether directly or through an agent or contractor, unless this chapter expressly provides otherwise.

(5) "Include" means included but not limited to.

(6) "May" or "should" means the provision is optional and permissive, and does not impose a requirement.

(7) "Shall," "must," or "will" means the provision is mandatory.

(8) "Threat" means threat or potential threat.

(9) "Under" means pursuant to, subject to, required by, established by, in accordance with, and similar expressions of legislative or administrative authorization or direction.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-210, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-210, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-210, filed 4/3/90, effective 5/4/90.]

PART III—SITE REPORTS AND CLEANUP DECISIONS

WAC 173-340-300 Site discovery and reporting. (1) Purpose. As part of a program to identify hazardous waste sites, this section sets forth the requirements for reporting a release of a hazardous substance due to past activities, whether discovered before or after the effective date of this regulation. It also sets forth the requirements for reporting independent remedial actions. The department may take any other actions it deems appropriate to identify potential hazardous waste sites consistent with chapter 70.105D RCW.

(2) Release report.

(a) Any owner or operator who has information that a hazardous substance has been released to the environment at the owner or operator's facility and may be a threat to human health or the environment shall report such information to the department within ninety days of discovery. Releases from underground storage tanks shall be reported by the owner or operator of the underground storage tank within twenty-four hours of release confirmation, in accordance with WAC 173-340-450. To the extent known, the report shall include:

(i) The identification and location of the hazardous substance;

(ii) Circumstances of the release and the discovery; and

(iii) Any remedial actions planned, completed, or underway. All other persons are encouraged to report such information to the department.

(b) Persons should use best professional judgment in deciding whether a release of a hazardous substance may be a threat or potential threat to human health or the environment. The following, which is not an exhaustive list, are examples of situations that generally should be reported under this section:

(i) Contamination in a water supply well.

(ii) Contaminated seeps, sediment or surface water.

(iii) Vapors in a building, utility vault or other structure that appear to be entering the structure from nearby contaminated soil or ground water.

(iv) Free product such as petroleum product or other organic liquids on the surface of the ground or in the ground water.

(v) Any contaminated soil or unpermitted disposal of waste materials that would be classified as a hazardous waste under federal or state law.

(vi) Any abandoned containers such as drums or tanks, above ground or buried, still containing more than trace residuals of hazardous substances.

(vii) Sites where unpermitted industrial waste disposal has occurred.

(viii) Sites where hazardous substances have leaked or been dumped on the ground.

(ix) Leaking underground petroleum storage tanks not already reported under WAC 173-340-450.

(3) Exemptions. The following releases are exempt from these notification requirements:

(a) Application of pesticides and fertilizers for their intended purposes and according to label instructions;

(b) Lawful and nonnegligent use of hazardous substances by a natural person for personal or domestic purposes;

(c) A release in accordance with a permit that authorizes the release;

(d) A release previously reported to the department in fulfillment of a reporting requirement in this chapter or in another law or regulation;

(e) A release previously reported to the United States Environmental Protection Agency under CERCLA, Section 103(c) (42 U.S.C. Sec. 9603(c));

(f) Except for releases under subsection (2)(b)(iii) of this section, a release to the air;

(g) Releases discovered in public water systems regulated by the department of health; or

(h) A release to a permitted wastewater facility.

An exemption from the notification requirements in this section does not imply a release from liability under this chapter.

(4) Report of independent remedial actions.

See WAC 173-340-515 for additional reporting requirements for independent remedial actions. See WAC 173-340-450 for reporting requirements for independent remedial actions for releases from underground storage tanks.

(5) Department response. Within ninety days of receiving information under this section, the department shall conduct an initial investigation in accordance with WAC 173-340-310. For sites on the hazardous sites list, the department shall, as resources permit, review reports that document independent cleanup actions. The review shall include an evaluation of whether the site qualifies for removal from the hazardous sites list or whether further remedial action is required.

(6) Other obligations. Nothing in this section shall eliminate any obligations to comply with reporting requirements that may exist in a permit or under other laws.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-300, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-300, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-300, filed 4/3/90, effective 5/4/90.]

WAC 173-340-310 Initial investigation. (1) Purpose. An initial investigation is an inspection of a suspected site by the department and documentation of conditions observed during that site inspection. The purpose of the initial investigation is to determine whether a release or threatened release of a hazardous substance may have occurred that warrants further action under this chapter.

(2) Applicability and timing. Whenever the department receives information and has a reasonable basis to believe that there may be a release or a threatened release of a hazardous substance that may pose a threat to human health or the environment, the department shall conduct an initial investigation within ninety days.

(3) Exemptions. The department shall not be required to conduct an initial investigation when:

(a) The circumstances associated with the release or threatened release are known to the department and have previously been or currently are being evaluated by the department or other government agency;

(b) The release is permitted; or

(c) The release is exempt from reporting under WAC 173-340-300(3).

(4) Department deferral to others. The department may rely on another government agency or a contractor to the

department to conduct an initial investigation on its behalf, provided the department determines such an agency or contractor is not suspected to have contributed to the release or threatened release of a hazardous substance and that no conflict of interest exists.

(5) Department decision. Based on the information obtained about the site, the department shall within thirty days of completion of the initial investigation make one or more of the following decisions:

(a) A site hazard assessment is required;

(b) Emergency remedial action is required;

(c) Interim action is required; or

(d) The site requires no further action under this chapter at this time because either:

(i) There has been no release or threatened release of a hazardous substance; or

(ii) A release or threatened release of a hazardous substance has occurred, but in the department's judgment, does not pose a threat to human health or the environment; or

(iii) Action under another authority is appropriate.

A decision for a particular follow-up action does not preclude the department from requiring some other action in the future based on reevaluation of the site or additional information.

(6) Notification.

(a) Sites requiring an emergency remedial action or interim action. If the department determines that an emergency remedial action or interim action is required, then notification of the threat to the potentially affected vicinity may be required by the department. The method and nature of the notification shall be determined on a case-by-case basis using the methods specified in WAC 173-340-600. Such notification shall be the responsibility of the site owner or operator if required in writing by the department.

(b) Sites requiring further remedial action. For sites requiring further remedial action under chapter 70.105D RCW, the department shall notify the owner, operator, and any potentially liable person known to the department of its decision. This notification shall be a letter ("Early Notice Letter") mailed to the person which includes:

(i) The basis for the department's decision;

(ii) Information on the cleanup process provided for in this chapter;

(iii) A statement that it is the department's policy to work cooperatively with persons to accomplish prompt and effective cleanups;

(iv) A person or office of the department to contact regarding the contents of the letter; and

(v) A statement that the letter is not a determination of liability and that cooperating with the department in planning or conducting a remedial action is not an admission of guilt or liability.

(c) Sites not requiring further remedial action. For sites requiring no further remedial action under chapter 70.105D RCW, if requested by the owner or operator, the department shall notify the owner or operator of the department's conclusion. This notification shall be in writing and may be combined with the determination of status letter in WAC 173-340-500.

(7) Reservation of rights. Nothing in this section shall preclude the department from taking or requiring appropriate remedial action at any time.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-310, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-310, filed 4/3/90, effective 5/4/90.]

WAC 173-340-320 Site hazard assessment. (1) Purpose. The purpose of the site hazard assessment is to provide sufficient sampling data and other information for the department to:

(a) Confirm or rule out that a release or threatened release of a hazardous substance has occurred;

(b) Identify the hazardous substance and provide some information regarding the extent and concentration of the substance;

(c) Identify site characteristics that could result in the hazardous substance entering and moving through the environment;

(d) Evaluate the potential for the threat to human health and the environment; and

(e) Determine the hazard ranking of the site under WAC 173-340-330, if appropriate.

(2) Timing. Generally, a site hazard assessment shall be completed before proceeding to any subsequent phase of remedial action, other than an emergency or interim action.

(3) Administrative options. The site hazard assessment may be conducted under any of the procedures described in WAC 173-340-510. The department may rely on another government agency or a contractor to the department to conduct a site hazard assessment on its behalf, provided the department determines such an agency or contractor is not suspected to have contributed to the release or threatened release of a hazardous substance and that no conflict of interest exists.

(4) Scope and content. A site hazard assessment is an early study to provide preliminary data regarding the relative potential hazard of the site. A site hazard assessment is not intended to be a detailed site characterization; however, it shall include sufficient sampling, site observations, maps, and other information needed to meet the purposes specified in subsection (1) of this section. To fulfill this requirement, a site hazard assessment shall include, as appropriate, the following information:

(a) Identification of hazardous substances, including what was released and is threatened to be released and/or, if known, what products of decomposition, recombination, or chemical reaction are currently present on site, and an estimate of their quantities and concentrations;

(b) Evidence confirming a release or threatened release of hazardous substances to the environment;

(c) Description of facilities containing releases, if any, and their condition;

(d) Identification of the location of all areas where a hazardous substance is known or suspected to be, indicated on a site map;

(e) Consideration of surface water run-on and runoff and the hazardous substances leaching potential;

(f) Preliminary characterization of the subsurface and ground water actually or potentially affected by the release, including vertical depth to ground water and distance to

nearby wells, bodies of surface water, and drinking water intakes;

(g) Preliminary evaluation of receptors, including: Human population, food crops, recreation areas, parks, sensitive environments, irrigated areas, and aquatic resources currently or potentially affected by ground water, air, or surface water containing the release of hazardous substances at the site, including distances to these receptors; and

(h) Any other physical factors which may be significant in estimating the potential or current exposure to sensitive biota.

(5) Guidance. The department shall make available guidance for how to conduct a site hazard assessment to meet the requirements of this section. Persons are encouraged to contact the department to obtain a copy of the latest guidance.

(6) Department decision. Based on the results of the site hazard assessment and other available information about the site, the department shall either determine the site warrants no further action using the criteria in WAC 173-340-310 (5)(d) or proceed with ranking and placing the site on the hazardous sites list under WAC 173-340-330.

(7) Notification. The department shall make available the results of the site hazard assessment to the site's owner and operator and any person who has received a potentially liable person status letter under WAC 173-340-500 regarding the site. If the department finds after a site hazard assessment that the site requires no further action, it shall publish this decision in the *Site Register*.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-320, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-320, filed 4/3/90, effective 5/4/90.]

WAC 173-340-330 Hazard ranking and the hazardous sites list. (1) Purpose. The department shall maintain a list of sites where remedial action has been determined by the department to be necessary. This list, called the hazardous sites list, shall fulfill the department's responsibilities under RCW 70.105D.030 (2)(b) and (3). From this list, the department shall select those sites where action is anticipated and include those in the biennial program report under WAC 173-340-340.

(2) Hazard ranking.

(a) The department shall give a hazard ranking to sites placed on the list. The purpose of hazard ranking is to estimate, based on the information compiled during the site hazard assessment, the relative potential risk posed by the site to human health and the environment. This assessment considers air, ground water, and surface water migration pathways, human and nonhuman exposure targets, properties of the substances present, and the interaction of these variables.

(b) The department shall evaluate each site on a consistent basis using the procedure described in the "*Washington Ranking Method Scoring Manual*," publication number 90-14, dated April 1992. The sediment component of a site shall be scored using the procedures described in "*Sediment Ranking System*," publication number 97-106, dated January 1990, and *"Status Report: Technical Basis for SEDRANK Modifications,"* publication number 97-107, dated June 1991. The ranking procedure and major amendments to the manual shall be reviewed by the science advisory board established under chapter 70.105D RCW. Information obtained in the site hazard assessment, plus any additional data specified in these publications, shall be included in the hazard ranking evaluation.

(3) *Site Register*. The department shall periodically provide notification of the results of hazard ranking in the *Site Register*. The department shall make available hazard ranking results for each site to the site owner and operator and any potentially liable person known to the department before publication in the *Site Register*.

(4) Reranking. The department may at its discretion rerank a site if, before the initiation of state action at the site, the department receives additional information within the scope of the evaluation criteria which indicates that a significant change in rank may result.

(5) Listing.

Sites shall be ranked and placed on the hazardous sites list if, after the completion of a site hazard assessment, the department determines that further action is required at the site. The list shall be updated at least once per year. Placement of a site on the hazardous sites list does not, by itself, imply that persons associated with the site are liable under chapter 70.105D RCW.

(6) Site status. The hazardous sites list shall reflect the current status of remedial action at each site. The department may change a site's status to reflect current conditions. The status for each site shall be identified as one of the following:

(a) Sites awaiting further remedial action;

(b) Sites with remedial action in progress;

(c) Sites where a cleanup action has been conducted but confirmational monitoring is underway;

(d) Sites with independent remedial actions; or

(e) Other categories established by the department.

(7) Removing sites from the list.

(a) The department may remove a site from the list only after it has determined that:

(i) For sites where the selected cleanup action does not include containment, all remedial actions except confirmational monitoring have been completed and compliance with the cleanup standards has been achieved at the site;

(ii) The listing was erroneous; or

(iii) For sites where the selected cleanup action includes containment, if all of the following conditions have been met:

(A) All construction and operation of remedial actions have been adequately completed and:

(I) Only passive maintenance activities such as monitoring, inspections and periodic repairs remain; or

(II) For municipal solid waste landfills only, a closure plan meeting the substantive requirements in chapter 173-351 WAC has been approved by the department as part of a remedial action under this chapter and the only remaining active maintenance activities are methane gas control, the operation of leachate collection and treatment systems, and/or surface water diversion;

(B) Sufficient confirmational monitoring has been done to demonstrate that the remedy has effectively contained the hazardous substances of concern at the site;

(C) All required performance monitoring has been completed;

(D) Any required institutional controls are in place and have been demonstrated to be effective in protecting public

health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action;

(E) Written documentation is present in the department files that describes what hazardous substances have been left on site, where they are located, and the long term monitoring and maintenance obligations at the site;

(F) When required under WAC 173-340-440, financial assurances are in place; and

(G) For sites with releases to ground water, it has been demonstrated the site meets ground water cleanup levels at the designated point of compliance.

(b) A site owner, operator, or potentially liable person may request that a site be removed from the list by submitting a petition to the department. The petition shall include thorough documentation of all investigations performed, all cleanup actions taken, and adequate compliance monitoring to demonstrate to the department's satisfaction that one of the conditions in (a) of this subsection has been met. The department may require payment of costs incurred, including an advance deposit, for review and verification of the work performed. The department shall review such petitions; however, the timing of the review shall be at its discretion and as resources may allow.

(8) Record of sites. The department shall maintain a record of sites that have been removed from the list under subsection (7) of this section. The record shall identify which sites have institutional controls under WAC 173-340-440 and which sites are subject to periodic review under WAC 173-340-420. This record will be made available to the public upon request.

(9) Relisting of sites. The department may relist a site that has previously been removed if it determines that the site requires further remedial action.

(10) Notice. The department shall provide public notice and an opportunity to comment when the department proposes to remove a site from the list. Additions to the list, changes in site status, and removal from the list shall be published in the *Site Register*.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-330, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-330, filed 4/3/90, effective 5/4/90.]

WAC 173-340-340 Biennial program report. (1) Timing. Before November 1 of each even-numbered year, the department shall prepare a biennial program report for the legislature containing its plan for conducting remedial actions for the following two fiscal years. This report shall identify the projects and expenditures recommended for appropriation from both the state and local toxics control accounts. In determining which sites the department shall consider for planned action, emphasis shall be given to sites posing the highest risk to human health and the environment, as indicated by a site's hazard ranking. The department may also consider other factors in setting site priorities. After legislative action and any revisions, this report shall become the department's biennial program plan.

(2) Public notice. The department shall provide public notice and a hearing on the proposed plan. For purposes of this subsection only, public notice shall consist of mailings to all persons who have made a timely request and to the appropriate news media, and publication in the state register. Notice shall also be provided in the *Site Register*. The public comment period on the proposed plan shall run for at least thirty days from the date of the publication in the *Site Register*.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-340, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-340, filed 4/3/90, effective 5/4/90.]

WAC 173-340-350 Remedial investigation and feasibility study. (1) Purpose. The purpose of a remedial investigation/feasibility study is to collect, develop, and evaluate sufficient information regarding a site to select a cleanup action under WAC 173-340-360 through 173-340-390.

(2) Timing. Unless otherwise directed by the department, a remedial investigation/feasibility study shall be completed before selecting a cleanup action under WAC 173-340-360 through 173-340-390, except for an emergency or interim action.

(3) Administrative options. A remedial investigation/feasibility study may be conducted under any of the procedures described in WAC 173-340-510 and 173-340-515.

(4) Submittal requirements. For a remedial action conducted by the department or under a decree or order, a report shall be prepared at the completion of the remedial investigation/feasibility study. Additionally, the department may require reports to be submitted for discrete elements of the remedial investigation/feasibility study. Reports prepared under this section and under an order or decree shall be submitted to the department for review and approval. See also subsection (7)(c)(iv) of this section for information on the sampling and analysis plan and the safety and health plan. See WAC 173-340-515(4) for submittal requirements for independent remedial actions.

(5) Public participation. Public participation will be accomplished in a manner consistent with WAC 173-340-600.

(6) Scope. The scope of a remedial investigation/feasibility study varies from site to site, depending on the informational and analytical needs of the specific facility. This requires that the process remain flexible and be streamlined when possible to avoid the collection and evaluation of unnecessary information so that the cleanup can proceed in a timely manner. Where information required in subsections (7)(c) and (8)(c) of this section is available in other documents for the site, that information may be incorporated by reference to avoid unnecessary duplication. However, in all cases sufficient information must be collected, developed, and evaluated to enable the selection of a cleanup action under WAC 173-340-360 through 173-340-390. In addition, for facilities on the federal national priorities list, a remedial investigation/feasibility study shall comply with federal requirements.

(7) Procedures for conducting a remedial investigation.

(a) Purpose. The purpose of the remedial investigation is to collect data necessary to adequately characterize the site for the purpose of developing and evaluating cleanup action alternatives. Site characterization may be conducted in one or more phases to focus sampling efforts and increase the efficiency of the remedial investigation. Site characterization activities may be integrated with the development and evaluation of alternatives in the feasibility study, as appropriate.

(b) Scoping activities. To focus the collection of data and to assist the department in making the preliminary evaluation required under the State Environmental Policy Act (see WAC 197-11-256), the following scoping activities may be taken before conducting a remedial investigation:

(i) Assemble and evaluate existing data on the site, including the results of any interim or emergency actions, initial investigations, site hazard assessments, and other site inspections;

(ii) Develop a preliminary conceptual site model as defined in WAC 173-340-200;

(iii) Begin to identify likely cleanup levels for the site;

(iv) Begin to identify likely cleanup action components that may address the releases at the site;

(v) Consider the type, quality and quantity of data necessary to support selection of a cleanup action; and

(vi) Begin to identify likely applicable state and federal laws under WAC 173-340-710.

(c) Content. A remedial investigation shall include the following information as appropriate:

(i) General facility information. General information, including: Project title; name, address, and phone number of project coordinator; legal description of the facility location; dimensions of the facility; present owner and operator; chronological listing of past owners and operators and operational history; and other pertinent information.

(ii) Site conditions map. An existing site conditions map that illustrates relevant current site features such as property boundaries, proposed facility boundaries, surface topography, surface and subsurface structures, utility lines, well locations, and other pertinent information.

(iii) Field investigations. Sufficient investigations to characterize the distribution of hazardous substances present at the site, and threat to human health and the environment. Where applicable to the site, these investigations shall address the following:

(A) Surface water and sediments. Investigations of surface water and sediments to characterize significant hydrologic features such as: Surface drainage patterns and quantities, areas of erosion and sediment deposition, surface waters, floodplains, and actual or potential hazardous substance migration routes towards and within these features. Sufficient surface water and sediment sampling shall be performed to adequately characterize the areal and vertical distribution and concentrations of hazardous substances. Properties of surface and subsurface sediments that are likely to influence the type and rate of hazardous substance migration, or are likely to affect the ability to implement alternative cleanup actions shall be characterized.

(B) Soils. Investigations to adequately characterize the areal and vertical distribution and concentrations of hazardous substances in the soil due to the release. Properties of surface and subsurface soils that are likely to influence the type and rate of hazardous substance migration, or which are likely to affect the ability to implement alternative cleanup actions shall be characterized.

(C) Geology and ground water system characteristics. Investigations of site geology and hydrogeology to adequately characterize the areal and vertical distribution and concentrations of hazardous substances in the ground water and those features which affect the fate and transport of these hazardous substances. This shall include, as appropriate, the description, physical properties and distribution of bedrock and unconsolidated materials; ground water flow rate and gradient for affected and potentially affected ground waters; ground water divides; areas of ground water recharge and discharge; location of public and private production wells; and ground water quality data.

(D) Air. An evaluation of air quality impacts, including sampling, where appropriate, and information regarding local and regional climatological characteristics which are likely to affect the hazardous substance migration such as seasonal patterns of rainfall, the magnitude and frequency of significant storm events, temperature extremes, prevailing wind direction, variations in barometric pressure, and wind velocity.

(E) Land use. Information regarding present and proposed land and resource uses and zoning for the site and potentially affected areas and information characterizing human and ecological populations that are reasonably likely to be exposed or potentially exposed to the release based on such use.

(F) Natural resources and ecological receptors.

(I) Information to determine the impact or potential impact of the hazardous substance from the facility on natural resources and ecological receptors, including any information needed to conduct a terrestrial ecological evaluation, under WAC 173-340-7492 or 173-340-7493, or to establish an exclusion under WAC 173-340-7491.

(II) Where appropriate, a terrestrial ecological evaluation may be conducted so as to avoid duplicative studies of soil contamination that will be remediated to address other concerns, such as protection of human health. This may be accomplished by evaluating residual threats to the environment after cleanup action alternatives for human health protection have been developed. If this approach is used, the remedial investigation may be phased. Examples of sites where this approach may not be appropriate include: A site contaminated with a hazardous substance that is primarily an ecological concern and will not obviously be addressed by the cleanup action for the protection of human health, such as zinc; or a site where the development of a human health based remedy is expected to be a lengthy process, and postponing the terrestrial ecological evaluation would cause further harm to the environment.

(III) If it is determined that a simplified or site-specific terrestrial ecological evaluation is not required under WAC 173-340-7491, the basis for this determination shall be included in the remedial investigation report.

(G) Hazardous substance sources. A description of and sufficient sampling to define the location, quantity, areal and vertical extent, concentration within and sources of releases. Where relevant, information on the physical and chemical characteristics, and the biological effects of hazardous substances shall be provided.

(H) Regulatory classifications. Regulatory designations classifying affected air, surface water and ground water, if any.

(iv) Workplans. A safety and health plan and a sampling and analysis plan shall be prepared as part of the remedial investigation/feasibility study. These plans shall conform to

the requirements specified in WAC 173-340-810 and 173-340-820.

(v) Other information. Other information may be required by the department.

(8) Procedures for conducting a feasibility study.

(a) Purpose. The purpose of the feasibility study is to develop and evaluate cleanup action alternatives to enable a cleanup action to be selected for the site. If concentrations of hazardous substances do not exceed the cleanup level at a standard point of compliance, no further action is necessary.

(b) Screening of alternatives. An initial screening of alternatives to reduce the number of alternatives for the final detailed evaluation may be appropriate. The person conducting the feasibility study may initially propose cleanup action alternatives or components to be screened from detailed evaluation. The department shall make the final determination of which alternatives must be evaluated in the feasibility study. The following cleanup action alternatives or components may be eliminated from the feasibility study:

(i) Alternatives that, based on a preliminary analysis, the department determines so clearly do not meet the minimum requirements specified in WAC 173-340-360 that a more detailed analysis is unnecessary. This includes those alternatives for which costs are clearly disproportionate under WAC 173-340-360 (3)(e); and

(ii) Alternatives or components that are not technically possible at the site.

(c) Content. A feasibility study shall include the following information as appropriate.

(i) General requirements.

(A) The feasibility study shall include cleanup action alternatives that protect human health and the environment (including, as appropriate, aquatic and terrestrial ecological receptors) by eliminating, reducing, or otherwise controlling risks posed through each exposure pathway and migration route.

(B) A reasonable number and type of alternatives shall be evaluated, taking into account the characteristics and complexity of the facility, including current site conditions and physical constraints.

(C) Each alternative may consist of one or more cleanup action components, including, but not limited to, components that reuse or recycle the hazardous substances, destroy or detoxify the hazardous substances, immobilize or solidify the hazardous substances, provide for on-site or off-site disposal of the hazardous substances in an engineered, lined and monitored facility, on-site isolation or containment of the hazardous substances with attendant engineering controls, and institutional controls and monitoring.

(D) Alternatives may, as appropriate, include remediation levels to define when particular cleanup action components will be used. Alternatives may also include different remediation levels for the same component. For example, alternatives that excavate and treat soils at varying concentrations may be appropriate to evaluate. See WAC 173-340-355 for detailed information on establishing potential remediation levels to be evaluated in the feasibility study.

(E) If necessary, evaluate the residual threats that would accompany each alternative and determine if remedies that are protective of human health will also be protective of ecological receptors. See subsection (7)(c)(iii)(F) of this section.

(F) The feasibility study shall include alternatives with the standard point of compliance for each environmental media containing hazardous substances, unless those alternatives have been eliminated under (b) of this subsection, and may include, as appropriate, alternatives with conditional points of compliance.

(G) Each alternative shall be evaluated on the basis of the requirements and the criteria specified in WAC 173-340-360.

(H) A preferred cleanup action may be identified in the feasibility study, where appropriate.

(I) Other information may be required by the department.

(ii) Permanent alternatives.

(A) Except as provided in (c)(ii)(B) of this subsection, the feasibility study shall include at least one permanent cleanup action alternative, as defined in WAC 173-340-200, to serve as a baseline against which other alternatives shall be evaluated for the purpose of determining whether the cleanup action selected is permanent to the maximum extent practicable. The most practicable permanent cleanup action alternative shall be included.

(B) The feasibility study does not need to include a permanent cleanup action alternative under any of the following circumstances:

(I) Where a model remedy is the selected cleanup action;

(II) Where a permanent cleanup action alternative is not technically possible; or

(III) Where the cost of the most practicable permanent cleanup action alternative is so clearly disproportionate that a more detailed analysis is not necessary, as determined through the screening process in (b)(i) of this subsection.

(9) Additional requirements.

(a) Cleanup levels. Unless otherwise specified under this chapter, cleanup levels shall be established for hazardous substances in each medium and for each pathway where a release has occurred, using WAC 173-340-700 through 173-340-760. These are typically initially established during the scoping of the remedial investigation and may be further refined during the remedial investigation and/or feasibility study.

(b) Compliance with other laws. The department may require that a remedial investigation/feasibility study include additional information or analyses to comply with the State Environmental Policy Act or other applicable laws. This includes information necessary to make a threshold determination (see WAC 197-11-335(1)), or information necessary to integrate the remedial investigation/feasibility study with an environmental impact statement (see WAC 197-11-262).

(c) Treatability studies. The department may require treatability studies as necessary to provide sufficient information to develop and evaluate cleanup action alternatives for a site.

(d) Other information. Other information may be required by the department.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-350, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-350, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-350, filed 4/3/90, effective 5/4/90.]

WAC 173-340-355 Development of cleanup action alternatives that include remediation levels. (1) Purpose. A cleanup action selected for a site will often involve a combination of cleanup action components, such as treatment of some soil contamination and containment of the remainder. Remediation levels are used to identify the concentrations (or other methods of identification) of hazardous substances at which different cleanup action components will be used. (See the definition of remediation level in WAC 173-340-200.) Remediation levels may be used at sites where a combination of cleanup actions components are used to achieve cleanup levels at the point of compliance (see the examples in subsection (3)(a) and (c) of this section). Remediation levels may also be used at sites where the cleanup action involves the containment of soils as provided under WAC 173-340-740 (6)(f) and at sites conducting interim actions (see the examples in subsection (3)(b) and (d) of this section).

(2) Relationship to cleanup levels and cleanup standards. Remediation levels are not the same as cleanup levels. A cleanup level defines the concentration of hazardous substances above which a contaminated medium (e.g., soil) must be remediated in some manner (e.g., treatment, containment, institutional controls). A remediation level, on the other hand, defines the concentration (or other method of identification) of a hazardous substance in a particular medium above or below which a particular cleanup action component (e.g., soil treatment or containment) will be used. Remediation levels, by definition, exceed cleanup levels.

Cleanup levels must be established for every site. Remediation levels, on the other hand, may not be necessary at a site. Whether remediation levels are necessary depends on the cleanup action selected. For example, remediation levels would not be necessary if the selected cleanup action removes for off-site disposal all soil that exceeds the cleanup level at the applicable points of compliance.

A cleanup action that uses remediation levels must meet each of the minimum requirements specified in WAC 173-340-360, including the requirement that all cleanup actions must comply with cleanup standards. Compliance with cleanup standards requires, in part, that cleanup levels are met at the applicable points of compliance. If the remedial action does not comply with cleanup standards, the remedial action is an interim action, not a cleanup action. Where a cleanup action involves containment of soils with hazardous substance concentrations exceeding cleanup levels at the point of compliance, the cleanup action may be determined to comply with cleanup standards, provided the requirements specified in WAC 173-340-740 (6)(f) are met.

(3) Examples. The following examples of cleanup actions that use remediation levels are for illustrative purposes only. All cleanup action alternatives in a feasibility study, including those with proposed remediation levels, must be evaluated to determine whether they meet each of the minimum requirements specified in WAC 173-340-360 (see WAC 173-340-360 (2)(h)). This evaluation requires, in part, a determination that a more permanent cleanup action is not practicable, based on the disproportionate cost analysis in WAC 173-340-360 (3)(e).

(a) Example of a site meeting soil cleanup levels at the point of compliance. Assume that the soil cleanup level at a site is 20 ppm. Further assume that the cleanup action alternative determined to comply with the minimum requirements in WAC 173-340-360 and selected for the site consists of soil treatment and removal and a remediation level of 100 ppm to define when those two components are used. Under the cleanup standard, any soil that exceeds the 20 ppm cleanup level at the applicable point of compliance must be remediated in some manner. Under the selected cleanup action, any soil that exceeds the 100 ppm remediation level must be removed and treated. Any soil that does not exceed the 100 ppm remediation level, but exceeds the 20 ppm cleanup level, must be removed and landfilled. The cleanup action may be determined to comply with the cleanup standard because the cleanup level is met at the applicable point of compliance.

(b) Example of a site not meeting soil cleanup levels at the point of compliance. Assume that the soil cleanup level at a site is 20 ppm. Further assume that the cleanup action alternative determined to comply with the minimum requirements in WAC 173-340-360 and selected for the site consists of soil treatment and containment and a remediation level of 100 ppm to define when those two components are used. Under the cleanup standard, any soil that exceeds the 20 ppm cleanup level at the applicable point of compliance must be remediated in some manner. Under the selected cleanup action, any soil that exceeds the 100 ppm remediation level must be treated. Any soil that does not exceed the 100 ppm remediation level, but exceeds the 20 ppm cleanup level, must be contained. Residual contamination above the cleanup level will remain at the site. However, assuming the cleanup action meets the requirements specified in WAC 173-340-740 (6)(f) for soil containment actions, the cleanup action may be determined to comply with cleanup standards.

(c) Example of site meeting ground water cleanup levels at the point of compliance. Assume that the ground water cleanup level at a site is 500 ug/l and that a conditional point of compliance is established at the property boundary. Further assume that the cleanup action alternative determined to comply with the minimum requirements in WAC 173-340-360 and selected for the site consists of: Removing the source of the ground water contamination (e.g., removal of a leaking tank and associated soil contamination above the water table); extracting free product and any ground water exceeding a concentration of 2,000 ug/l; and utilizing natural attenuation to restore the ground water to 500 ug/l before it arrives at the property boundary. The ground water concentration of 2,000 ug/l constitutes a remediation level because it defines the concentration of a hazardous substance at which different cleanup action components are used. As long as the ground water meets the 500 ug/l cleanup level at the conditional point of compliance (the property boundary), the cleanup action may be determined to comply with cleanup standards.

(d) Example of a site not meeting ground water cleanup levels at the point of compliance. Assume that the ground water cleanup level at a site is 5 ug/l and that a conditional point of compliance is established at the property boundary. Further assume that the remedial action selected for the site consists of: Vapor extraction of the soil to nondetectable concentrations (to prevent further ground water contamination); extraction and treatment of ground water with concentrations in excess of 100 ug/l; and installation of an air stripping system to treat ground water at a water supply well

beyond the property boundary to less than 5 ug/l. Further assume that the ground water cleanup level will not be met at the conditional point of compliance (the property boundary). The ground water concentration of 100 ug/l constitutes a remediation level because it defines the concentration of a hazardous substance at which different cleanup action components are used. However, in this example, the remedial action does not constitute a cleanup action because it does not comply with cleanup standards, one of the minimum requirements for cleanup actions in WAC 173-340-360. Consequently, the remedial action is considered an interim action until the cleanup level is attained at the conditional point of compliance (the property boundary).

(4) General requirements. Potential remediation levels may be developed as part of the cleanup action alternatives to be considered during the feasibility study (see WAC 173-340-350 (8)(c)(i)(D)). These potential remediation levels may be defined as either a concentration or other method of identification of a hazardous substance. Other methods of identification include physical appearance or location (e.g., all of the green sludge will be removed from the northern area of the site). Quantitative or qualitative methods may be used to develop these potential remediation levels. These methods may include a human health risk assessment or an ecological risk assessment. These methods may also consider fate and transport issues. These methods may be simple or complex, as appropriate to the site. Where a quantitative risk assessment is used, see WAC 173-340-357. All cleanup action alternatives in a feasibility study, including those with proposed remediation levels, must still be evaluated to determine whether they meet each of the minimum requirements specified in WAC 173-340-360 (see WAC 173-340-360 (2)(h)).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-355, filed 2/12/01, effective 8/15/01.]

WAC 173-340-357 Quantitative risk assessment of cleanup action alternatives. (1) Purpose. A quantitative site-specific risk assessment may be conducted to help determine whether cleanup action alternatives, including those using a remediation level, engineered control and/or institutional control, are protective of human health and the environment. If a quantitative site-specific risk assessment is used, then other considerations may also be needed in evaluating the protectiveness of the overall cleanup action. Methods other than a quantitative site-specific risk assessment may also be used to determine if a cleanup action alternative is protective of human health and the environment.

(2) Relationship to selection of cleanup actions. Selecting a cleanup action requires a determination that each of the requirements specified in WAC 173-340-360 is met, including the requirement that the cleanup action is protective of human health and the environment. A quantitative risk assessment conducted under this section may be used to help determine whether a particular cleanup action alternative meets this requirement. A determination that a cleanup action alternative evaluated is protective of human health and the environment does not mean that the other minimum requirements specified in WAC 173-340-360 have been met.

(3) Protection of human health. A quantitative site-specific human health risk assessment may be conducted to help determine whether cleanup action alternatives, including those using a remediation level, engineered control and/or institutional control, are protective of human health. For the purpose of this assessment, the default assumptions in the standard Method B and C equations in WAC 173-340-720 through 173-340-750 may be modified as provided for under modified Method B and C. In addition to those modifications, adjustments to the reasonable maximum exposure scenario or default exposure assumptions may also be made. See WAC 173-340-708 (3)(d) and (10)(b). References to Method C in this subsection apply to a medium only if the particular medium the remediation level is being established for qualifies for a Method C cleanup level under WAC 173-340-706.

(a) Reasonable maximum exposure. Standard reasonable maximum exposures and corresponding Method B and C equations in WAC 173-340-720 through 173-340-750 may be modified as provided under WAC 173-340-708 (3)(d). For example, land uses other than residential and industrial may be used as the basis for an alternative reasonable maximum exposure scenario for the purpose of assessing the protectiveness of a cleanup action alternative that uses a remediation level, engineered control, and/or institutional control.

(b) Exposure parameters. Exposure parameters for the standard Method B and C equations in WAC 173-340-720 through 173-340-750 may be modified as provided in WAC 173-340-708(10).

(c) Acceptable risk level. The acceptable risk level for remediation levels shall be the same as that used for the cleanup level.

(d) Soil to ground water pathway. The methods specified in WAC 173-340-747 to develop soil concentrations that are protective of ground water beneficial uses may also be used during remedy selection to help assess the protectiveness to human health of a cleanup action alternative that uses a remediation level, engineered control, and/or institutional control.

(e) Burden of proof, new science, and quality of information. Any modification of the default assumptions in the standard Method B and C equations, including modification of the standard reasonable maximum exposures and exposure parameters, or any modification of default assumptions or methods specified in WAC 173-340-747 requires compliance with WAC 173-340-702 (14), (15) and (16).

(f) Commercial gas station scenario.

(i) At active commercial gas stations, where there are retail sales of gasoline and/or diesel, Equations 740-3 and 740-5 may be used with the exposure frequency reduced to 0.25 to demonstrate when a cap is protective of the soil ingestion and dermal pathways. This scenario is intended to be a conservative estimate of a child trespasser scenario at a commercial gas station where contaminated soil has been excavated and stockpiled or soil is otherwise accessible. Sites using remediation levels must also use institutional controls to prevent uses that could result in a higher level of exposure and assess the protectiveness for other exposure pathways (e.g., soil vapors and soil to ground water).

(ii) Equations 740-3 and 740-5 may also be modified on a site-specific basis as described in WAC 173-340-740 (3)(c).

(4) Protection of the environment. A quantitative site-specific ecological risk assessment may be conducted to help determine whether cleanup action alternatives, including those using a remediation level, engineered control and/or institutional control, are protective of the environment.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-357, filed 2/12/01, effective 8/15/01.]

WAC 173-340-360 Selection of cleanup actions. (1) Purpose.

This section describes the minimum requirements and procedures for selecting cleanup actions. This section is intended to be used in conjunction with the administrative principles for the overall cleanup process in WAC 173-340-130; the requirements and procedures in WAC 173-340-350 through 173-340-357 and WAC 173-340-370 through 173-340-390; and the cleanup standards defined in WAC 173-340-700 through 173-340-760.

(2) Minimum requirements for cleanup actions. All cleanup actions shall meet the following requirements. Because cleanup actions will often involve the use of several cleanup action components at a single site, the overall cleanup action shall meet the requirements of this section. The department recognizes that some of the requirements contain flexibility and will require the use of professional judgment in determining how to apply them at particular sites.

(a) Threshold requirements. The cleanup action shall:

(i) Protect human health and the environment;

(ii) Comply with cleanup standards (see WAC 173-340-700 through 173-340-760);

(iii) Comply with applicable state and federal laws (see WAC 173-340-710); and

(iv) Provide for compliance monitoring (see WAC 173-340-410 and 173-340-720 through 173-340-760).

(b) Other requirements. When selecting from cleanup action alternatives that fulfill the threshold requirements, the selected action shall:

(i) Use permanent solutions to the maximum extent practicable (see subsection (3) of this section);

(ii) Provide for a reasonable restoration time frame (see subsection (4) of this section); and

(iii) Consider public concerns (see WAC 173-340-600).

(c) Ground water cleanup actions.

(i) Permanent ground water cleanup actions. A permanent cleanup action shall be used to achieve the cleanup levels for ground water in WAC 173-340-720 at the standard point(s) of compliance (see WAC 173-340-720(8)) where a permanent cleanup action is practicable or determined by the department to be in the public interest.

(ii) Nonpermanent ground water cleanup actions. Where a permanent cleanup action is not required under (c)(i) of this subsection, the following measures shall be taken:

(A) Treatment or removal of the source of the release shall be conducted for liquid wastes, areas contaminated with high concentrations of hazardous substances, highly mobile hazardous substances, or hazardous substances that cannot be reliably contained. This includes removal free product consisting of petroleum and other light nonaqueous phase liquid (LNAPL) from the ground water using normally accepted engineering practices. Source containment may be appropriate when the free product consists of a dense nonaqueous phase liquid (DNAPL) that cannot be recovered after reasonable efforts have been made.

(B) Ground water containment, including barriers or hydraulic control through ground water pumping, or both, shall be implemented to the maximum extent practicable to avoid lateral and vertical expansion of the ground water volume affected by the hazardous substance.

(d) Cleanup actions for soils at current or potential future residential areas and for soils at schools and child care centers. For current or potential future residential areas and for schools and child care centers, soils with hazardous substance concentrations that exceed soil cleanup levels must be treated, removed, or contained. Property qualifies as a current or potential residential area if:

(i) The property is currently used for residential use; or

(ii) The property has a potential to serve as a future residential area based on the consideration of zoning, statutory and regulatory restrictions, comprehensive plans, historical use, adjacent land uses, and other relevant factors.

(e) Institutional controls.

(i) Cleanup actions shall use institutional controls and financial assurances when required under WAC 173-340-440.

(ii) Cleanup actions that use institutional controls shall meet each of the minimum requirements specified in this section, just as any other cleanup action. Institutional controls should demonstrably reduce risks to ensure a protective remedy. This demonstration should be based on a quantitative scientific analysis where appropriate.

(iii) In addition to meeting each of the minimum requirements specified in this section, cleanup actions shall not rely primarily on institutional controls and monitoring where it is technically possible to implement a more permanent cleanup action for all or a portion of the site.

(f) Releases and migration. Cleanup actions shall prevent or minimize present and future releases and migration of hazardous substances in the environment.

(g) Dilution and dispersion. Cleanup actions shall not rely primarily on dilution and dispersion unless the incremental costs of any active remedial measures over the costs of dilution and dispersion grossly exceed the incremental degree of benefits of active remedial measures over the benefits of dilution and dispersion.

(h) Remediation levels. Cleanup actions that use remediation levels shall meet each of the minimum requirements specified in this section, just as any other cleanup action.

(i) Selection of a cleanup action alternative that uses remediation levels requires, in part, a determination that a more permanent cleanup action is not practicable, based on the disproportionate cost analysis (see subsections (2)(b)(i) and (3) of this section).

(ii) Selection of a cleanup action alternative that uses remediation levels also requires a determination that the alternative meets each of the other minimum requirements specified in this section, including a determination that the alternative is protective of human health and the environment.

(3) Determining whether a cleanup action uses permanent solutions to the maximum extent practicable.

(a) Purpose. This subsection describes the requirements and procedures for determining whether a cleanup action uses permanent solutions to the maximum extent practicable, as required under subsection (2)(b)(i) of this section. A determination that a cleanup action meets this one requirement does not mean that the other minimum requirements speci-

fied in subsection (2) of this section have been met. To select a cleanup action for a site, a cleanup action must meet each of the minimum requirements specified in subsection (2) of this section.

(b) General requirements. When selecting a cleanup action, preference shall be given to permanent solutions to the maximum extent practicable. To determine whether a cleanup action uses permanent solutions to the maximum extent practicable, the disproportionate cost analysis specified in (e) of this subsection shall be used. The analysis shall compare the costs and benefits of the cleanup action alternatives evaluated in the feasibility study. The costs and benefits to be compared are the evaluation criteria identified in (f) of this subsection.

(c) Permanent cleanup action defined. A permanent cleanup action or permanent solution is defined in WAC 173-340-200.

(d) Selection of a permanent cleanup action. A disproportionate cost analysis shall not be required if the department and the potentially liable persons agree to a permanent cleanup action that will be identified by the department as the proposed cleanup action in the draft cleanup action plan.

(e) Disproportionate cost analysis.

(i) Test. Costs are disproportionate to benefits if the incremental costs of the alternative over that of a lower cost alternative exceed the incremental degree of benefits achieved by the alternative over that of the other lower cost alternative.

(ii) Procedure.

(A) The alternatives evaluated in the feasibility study shall be ranked from most to least permanent, based on the evaluation of the alternatives under (f) of this subsection and the definition of permanent solution in (c) of this subsection.

(B) The most practicable permanent solution evaluated in the feasibility study shall be the baseline cleanup action alternative against which cleanup action alternatives are compared. If no permanent solution has been evaluated in the feasibility study, the cleanup action alternative evaluated in the feasibility study that provides the greatest degree of permanence shall be the baseline cleanup action alternative.

(C) The comparison of benefits and costs may be quantitative, but will often be qualitative and require the use of best professional judgment. In particular, the department has the discretion to favor or disfavor qualitative benefits and use that information in selecting a cleanup action. Where two or more alternatives are equal in benefits, the department shall select the less costly alternative provided the requirements of subsection (2) of this section are met.

(f) Evaluation criteria. The following criteria shall be used to evaluate and compare each cleanup action alternative when conducting a disproportionate cost analysis under (e) of this subsection to determine whether a cleanup action is permanent to the maximum extent practicable.

(i) Protectiveness. Overall protectiveness of human health and the environment, including the degree to which existing risks are reduced, time required to reduce risk at the facility and attain cleanup standards, on-site and off-site risks resulting from implementing the alternative, and improvement of the overall environmental quality.

(ii) Permanence. The degree to which the alternative permanently reduces the toxicity, mobility or volume of hazardous substances, including the adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and sources of releases, the degree of irreversibility of waste treatment process, and the characteristics and quantity of treatment residuals generated.

(iii) Cost. The cost to implement the alternative, including the cost of construction, the net present value of any long-term costs, and agency oversight costs that are cost recoverable. Long-term costs include operation and maintenance costs, monitoring costs, equipment replacement costs, and the cost of maintaining institutional controls. Cost estimates for treatment technologies shall describe pretreatment, analytical, labor, and waste management costs. The design life of the cleanup action shall be estimated and the cost of replacement or repair of major elements shall be included in the cost estimate.

(iv) Effectiveness over the long term. Long-term effectiveness includes the degree of certainty that the alternative will be successful, the reliability of the alternative during the period of time hazardous substances are expected to remain on-site at concentrations that exceed cleanup levels, the magnitude of residual risk with the alternative in place, and the effectiveness of controls required to manage treatment residues or remaining wastes. The following types of cleanup action components may be used as a guide, in descending order, when assessing the relative degree of long-term effectiveness: Reuse or recycling; destruction or detoxification; immobilization or solidification; on-site or off-site disposal in an engineered, lined and monitored facility; on-site isolation or containment with attendant engineering controls; and institutional controls and monitoring.

(v) Management of short-term risks. The risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that will be taken to manage such risks.

(vi) Technical and administrative implementability. Ability to be implemented including consideration of whether the alternative is technically possible, availability of necessary off-site facilities, services and materials, administrative and regulatory requirements, scheduling, size, complexity, monitoring requirements, access for construction operations and monitoring, and integration with existing facility operations and other current or potential remedial actions.

(vii) Consideration of public concerns. Whether the community has concerns regarding the alternative and, if so, the extent to which the alternative addresses those concerns. This process includes concerns from individuals, community groups, local governments, tribes, federal and state agencies, or any other organization that may have an interest in or knowledge of the site.

(4) Determining whether a cleanup action provides for a reasonable restoration time frame.

(a) Purpose. This subsection describes the requirements and procedures for determining whether a cleanup action provides for a reasonable restoration time frame, as required under subsection (2)(b)(ii) of this section. A determination that a cleanup action meets this one requirement does not mean that the other minimum requirements specified in subsection (2) of this section have been met. To select a cleanup

action for a site, a cleanup action must meet each of the minimum requirements specified in subsection (2) of this section.

(b) Factors. To determine whether a cleanup action provides for a reasonable restoration time frame, the factors to be considered include the following:

(i) Potential risks posed by the site to human health and the environment;

(ii) Practicability of achieving a shorter restoration time frame;

(iii) Current use of the site, surrounding areas, and associated resources that are, or may be, affected by releases from the site;

(iv) Potential future use of the site, surrounding areas, and associated resources that are, or may be, affected by releases from the site;

(v) Availability of alternative water supplies;

(vi) Likely effectiveness and reliability of institutional controls;

(vii) Ability to control and monitor migration of hazardous substances from the site;

(viii) Toxicity of the hazardous substances at the site; and

(ix) Natural processes that reduce concentrations of hazardous substances and have been documented to occur at the site or under similar site conditions.

(c) A longer period of time may be used for the restoration time frame for a site to achieve cleanup levels at the point of compliance if the cleanup action selected has a greater degree of long-term effectiveness than on-site or off-site disposal, isolation, or containment options.

(d) When area background concentrations (see WAC 173-340-200 for definition) would result in recontamination of the site to levels that exceed cleanup levels, that portion of the cleanup action which addresses cleanup below area background concentrations may be delayed until the off-site sources of hazardous substances are controlled. In these cases the remedial action shall be considered an interim action until cleanup levels are attained.

(e) Where cleanup levels determined under Method C in WAC 173-340-706 are below technically possible concentrations, concentrations that are technically possible to achieve shall be met within a reasonable time frame considering the factors in subsection (b) of this section. In these cases the remedial action shall be considered an interim action until cleanup levels are attained.

(f) Extending the restoration time frame shall not be used as a substitute for active remedial measures, when such actions are practicable.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-360, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-360, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-360, filed 4/3/90, effective 5/4/90.]

WAC 173-340-370 Expectations for cleanup action alternatives. The department has the following expectations for the development of cleanup action alternatives under WAC 173-340-350 and the selection of cleanup actions under WAC 173-340-360. These expectations represent the types of cleanup actions the department considers likely results of the remedy selection process described in WAC 173-340-350 through 173-340-360; however, the department recognizes that there may be some sites where cleanup actions conforming to these expectations are not appropriate. Also, selecting a cleanup action that meets these expectations shall not be used as a substitute for selecting a cleanup action under the remedy selection process described in WAC 173-340-350 through 173-340-360.

(1) The department expects that treatment technologies will be emphasized at sites containing liquid wastes, areas contaminated with high concentrations of hazardous substances, highly mobile materials, and/or discrete areas of hazardous substances that lend themselves to treatment.

(2) To minimize the need for long-term management of contaminated materials, the department expects that all hazardous substances will be destroyed, detoxified, and/or removed to concentrations below cleanup levels throughout sites containing small volumes of hazardous substances.

(3) The department recognizes the need to use engineering controls, such as containment, for sites or portions of sites that contain large volumes of materials with relatively low levels of hazardous substances where treatment is impracticable.

(4) In order to minimize the potential for migration of hazardous substances, the department expects that active measures will be taken to prevent precipitation and subsequent runoff from coming into contact with contaminated soils and waste materials. When such measures are impracticable, such as during active cleanup, the department expects that site runoff will be contained and treated prior to release from the site.

(5) The department expects that when hazardous substances remain on-site at concentrations which exceed cleanup levels, those hazardous substances will be consolidated to the maximum extent practicable where needed to minimize the potential for direct contact and migration of hazardous substances;

(6) The department expects that, for facilities adjacent to a surface water body, active measures will be taken to prevent/minimize releases to surface water via surface runoff and ground water discharges in excess of cleanup levels. The department expects that dilution will not be the sole method for demonstrating compliance with cleanup standards in these instances.

(7) The department expects that natural attenuation of hazardous substances may be appropriate at sites where:

(a) Source control (including removal and/or treatment of hazardous substances) has been conducted to the maximum extent practicable;

(b) Leaving contaminants on-site during the restoration time frame does not pose an unacceptable threat to human health or the environment;

(c) There is evidence that natural biodegradation or chemical degradation is occurring and will continue to occur at a reasonable rate at the site; and

(d) Appropriate monitoring requirements are conducted to ensure that the natural attenuation process is taking place and that human health and the environment are protected.

(8) The department expects that cleanup actions conducted under this chapter will not result in a significantly greater overall threat to human health and the environment than other alternatives.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-370, filed 2/12/01, effective 8/15/01.]

WAC 173-340-380 Cleanup action plan. (1) **Draft cleanup action plan.** The department shall issue a draft cleanup action plan for a cleanup action to be conducted by the department or by a potentially liable person under an order or decree. The level of detail in the draft cleanup action plan shall be commensurate with the complexity of the site and proposed cleanup action.

(a) The draft cleanup action plan shall include the following:

(i) A general description of the proposed cleanup action developed in accordance with WAC 173-340-350 through 173-340-390.

(ii) A summary of the rationale for selecting the proposed alternative.

(iii) A brief summary of other cleanup action alternatives evaluated in the remedial investigation/feasibility study.

(iv) Cleanup standards and, where applicable, remediation levels, for each hazardous substance and for each medium of concern at the site.

(v) The schedule for implementation of the cleanup action plan including, if known, restoration time frame.

(vi) Institutional controls, if any, required as part of the proposed cleanup action.

(vii) Applicable state and federal laws, if any, for the proposed cleanup action, when these are known at this step in the cleanup process (this does not preclude subsequent identification of applicable state and federal laws).

(viii) A preliminary determination by the department that the proposed cleanup action will comply with WAC 173-340-360.

(ix) Where the cleanup action involves on-site containment, specification of the types, levels, and amounts of hazardous substances remaining on site and the measures that will be used to prevent migration and contact with those substances.

(b) For routine actions the department may use an order or decree to fulfill the requirements of a cleanup action plan, provided that the information in (a) of this subsection is included in an order or decree. The scope of detail for the required information shall be commensurate with the complexity of the site and proposed cleanup action.

(2) **Public participation.** The department will provide public notice and opportunity for comment on the draft cleanup plan, as required in WAC 173-340-600(13).

(3) **Final cleanup action plan.** After review and consideration of the comments received during the public comment period, the department shall issue a final cleanup action plan and publish its availability in the *Site Register* and by other appropriate methods. If the department determines, following the implementation of the preferred alternative, that the cleanup standards or, where applicable, remediation levels established in the cleanup action plan cannot be achieved, the department shall issue public notice of this determination.

(4) **Federal cleanup sites.** For federal cleanup sites, a record of decision or order or consent decree prepared under the federal cleanup law may be used by the department to meet the requirements of this section provided:

(a) The cleanup action meets the requirements under WAC 173-340-360;

(b) The state has concurred with the cleanup action; and

(c) An opportunity was provided for the public to comment on the cleanup action.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-380, filed 2/12/01, effective 8/15/01.]

WAC 173-340-390 Model remedies. (1) **Purpose.** The purpose of model remedies is to streamline and accelerate the selection of cleanup actions that protect human health and the environment, with a preference for permanent solutions to the maximum extent practicable.

(2) **Development of model remedies.** The department may, from time to time, identify model remedies for common categories of facilities, types of contamination, types of media, and geographic areas. In identifying a model remedy, the department shall identify the circumstances for which application of the model remedy meets the requirements under WAC 173-340-360. The department shall provide an opportunity for the public to review and comment on any proposed model remedies.

(3) **Applicability and effect of model remedies.** Where a site meets the circumstances identified by the department under subsection (2) of this section, the components of the model remedy may be selected as the cleanup action, or as a portion of the cleanup action. At such sites, it shall not be necessary to conduct a feasibility study under WAC 173-340-350(8) or a disproportionate cost analysis under WAC 173-340-360(3) for those components of a cleanup action to which a model remedy applies.

(4) **Public notice and participation.** Where a model remedy is proposed as the cleanup action or as a portion of the cleanup action, the cleanup action plan is still subject to the same public notice and participation requirements in this chapter as any other cleanup action.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-390, filed 2/12/01, effective 8/15/01.]

PART IV—SITE CLEANUP AND MONITORING

WAC 173-340-400 Implementation of the cleanup action. (1) Purpose. Unless otherwise directed by the department, cleanup actions shall comply with this section except for emergencies or interim actions. The purpose of this section is to ensure that the cleanup action is designed, constructed, and operated in a manner that is consistent with:

(a) The cleanup action plan;

(b) Accepted engineering practices; and

(c) The requirements specified in WAC 173-340-360.

(2) Administrative options. A cleanup action may be conducted under any of the procedures described in WAC 173-340-510 and 173-340-515.

(3) Public participation. During cleanup action implementation, public participation shall be accomplished in a manner consistent with the requirements of WAC 173-340-600.

(4) Plans describing the cleanup action. Design, construction, and operation of the cleanup action shall be consistent with the purposes of this section and shall consider relevant information provided by the remedial investigation/fea-

sibility study. For most cleanups, to ensure this is done it will be necessary to prepare the engineering documents described in this section. The scope and level of detail in these documents may vary from site to site depending on the site-specific conditions and nature and complexity of the proposed cleanup action. In many cases, such as routine cleanups and cleanups at leaking underground storage tanks, it is appropriate to combine the information in these various documents into one report to avoid unnecessary duplication. Where the information is contained in other documents it may be appropriate to incorporate those documents by reference to avoid duplication. Any document prepared in order to implement a cleanup may be used to satisfy these requirements provided they contain the required information. In addition, for facilities on the national priorities list the plans prepared for the cleanup action shall also comply with federal requirements.

(a) Engineering design report. The engineering design report shall include sufficient information for the development and review of construction plans and specifications. It shall document engineering concepts and design criteria used for design of the cleanup action. The following information shall be included in the engineering design report, as appropriate:

(i) Goals of the cleanup action including specific cleanup or performance requirements;

(ii) General information on the facility including a summary of information in the remedial investigation/feasibility study updated as necessary to reflect the current conditions;

(iii) Identification of who will own, operate, and maintain the cleanup action during and following construction;

(iv) Facility maps showing existing site conditions and proposed location of the cleanup action;

(v) Characteristics, quantity, and location of materials to be treated or otherwise managed, including ground water containing hazardous substances;

(vi) A schedule for final design and construction;

(vii) A description and conceptual plan of the actions, treatment units, facilities, and processes required to implement the cleanup action including flow diagrams;

(viii) Engineering justification for design and operation parameters, including:

(A) Design criteria, assumptions and calculations for all components of the cleanup action;

(B) Expected treatment, destruction, immobilization, or containment efficiencies and documentation on how that degree of effectiveness is determined; and

(C) Demonstration that the cleanup action will achieve compliance with cleanup requirements by citing pilot or treatability test data, results from similar operations, or scientific evidence from the literature;

(ix) Design features for control of hazardous materials spills and accidental discharges (for example, containment structures, leak detection devices, run-on and runoff controls);

(x) Design features to assure long-term safety of workers and local residences (for example, hazardous substances monitoring devices, pressure valves, bypass systems, safety cutoffs);

(xi) A discussion of methods for management or disposal of any treatment residual and other waste materials containing hazardous substances generated as a result of the cleanup action;

(xii) Facility specific characteristics that may affect design, construction, or operation of the selected cleanup action, including:

(A) Relationship of the proposed cleanup action to existing facility operations;

(B) Probability of flooding, probability of seismic activity, temperature extremes, local planning and development issues; and

(C) Soil characteristics and ground water system characteristics;

(xiii) A general description of construction testing that will be used to demonstrate adequate quality control;

(xiv) A general description of compliance monitoring that will be performed during and after construction to meet the requirements of WAC 173-340-410;

(xv) A general description of construction procedures proposed to assure that the safety and health requirements of WAC 173-340-810 are met;

(xvi) Any information not provided in the remedial investigation/feasibility study needed to fulfill the applicable requirements of the State Environmental Policy Act (chapter 43.21C RCW);

(xvii) Any additional information needed to address the applicable state, federal and local requirements including the substantive requirements for any exempted permits; and property access issues which need to be resolved to implement the cleanup action;

(xviii) For sites requiring financial assurance and where not already incorporated into the order or decree or other previously submitted document, preliminary cost calculations and financial information describing the basis for the amount and form of financial assurance and, a draft financial assurance document;

(xix) For sites using institutional controls as part of the cleanup action and where not already incorporated into the order or decree or other previously submitted documents, copies of draft restrictive covenants and/or other draft documents establishing these institutional controls; and

(xx) Other information as required by the department.

(b) Construction plans and specifications. Construction plans and specifications shall detail the cleanup actions to be performed. The plans and specifications shall be prepared in conformance with currently accepted engineering practices and techniques and shall include the following information as applicable:

(i) A general description of the work to be performed and a summary of the engineering design criteria from the engineering design report;

(ii) General location map and existing facility conditions map;

(iii) A copy of any permits and approvals;

(iv) Detailed plans, procedures and material specifications necessary for construction of the cleanup action;

(v) Specific quality control tests to be performed to document the construction, including specifications for the testing or reference to specific testing methods, frequency of testing, acceptable results, and other documentation methods;

(vi) Startup procedures and criteria to demonstrate the cleanup action is prepared for routine operation;

(vii) Additional information to address applicable state, federal, and local requirements including the substantive requirements for any exempted permits;

(viii) A compliance monitoring plan prepared under WAC 173-340-410 describing monitoring to be performed during construction, and a sampling and analysis plan meeting the requirements of WAC 173-340-820;

(ix) Provisions to assure safety and health requirements of WAC 173-340-810 are met; and

(x) Other information as required by the department.

(c) Operation and maintenance plan. An operation and maintenance plan that presents technical guidance and regulatory requirements to assure effective operations under both normal and emergency conditions. The operation and maintenance plan shall include the following elements, as appropriate:

(i) Name and phone number of the responsible individuals;

(ii) Process description and operating principles;

(iii) Design criteria and operating parameters and limits;

(iv) General operating procedures, including startup, normal operations, operation at less than design loading, shutdown, and emergency or contingency procedures;

(v) A discussion of the detailed operation of individual treatment units, including a description of various controls, recommended operating parameters, safety features, and any other relevant information;

(vi) Procedures and sample forms for collection and management of operating and maintenance records;

(vii) Spare part inventory, addresses of suppliers of spare parts, equipment warranties, and appropriate equipment catalogues;

(viii) Equipment maintenance schedules incorporating manufacturers recommendations;

(ix) Contingency procedures for spills, releases, and personnel accidents;

(x) A compliance monitoring plan prepared under WAC 173-340-410 describing monitoring to be performed during operation and maintenance, and a sampling and analysis plan meeting the requirements of WAC 173-340-820;

(xi) Description of procedures which ensure that the safety and health requirements of WAC 173-340-810 are met, including specification of contaminant action levels and contingency plans, as appropriate;

(xii) Procedures for the maintenance of the facility after completion of the cleanup action, including provisions for removal of unneeded appurtenances, and the maintenance of covers, caps, containment structures, and monitoring devices; and

(xiii) Other information as required by the department.

(5) Permits. Permits and approvals and any substantive requirements for exempted permits, if required for construction or to otherwise implement the cleanup action, shall be identified and where possible, resolved before, or during, the design phase to avoid delays during construction and implementation of the cleanup action.

(6) Construction. Construction of the cleanup action shall be conducted in accordance with the construction plans and specifications, and other plans prepared under this section.

(a) Department inspections.

(i) The department may perform site inspections and construction oversight. The department may require that construction activities be halted at a site if construction or any supporting activities are not consistent with approved plans; are not in compliance with environmental regulations or accepted construction procedures; or endanger human health or the environment.

(ii) The department may conduct a formal inspection of the site following construction and an initial operational shake down period to ensure satisfactory completion of the construction. If such an inspection is performed, the construction documentation report and engineer's opinion specified in (b)(ii) of this subsection shall be available before the inspection.

(b) Construction documentation.

(i) Except as provided for in (b)(iii) of this subsection, all aspects of construction shall be performed under the oversight of a professional engineer registered in the state of Washington or a qualified technician under the direct supervision of a professional engineer registered in the state of Washington or as otherwise provided for in RCW 18.43.130. During construction, detailed records shall be kept of all aspects of the work performed including construction techniques and materials used, items installed, and tests and measurements performed.

(ii) As built reports. At the completion of construction the engineer responsible for the oversight of construction shall prepare as built drawings and a report documenting all aspects of facility construction. The report shall also contain an opinion from the engineer, based on testing results and inspections, as to whether the cleanup action has been constructed in substantial compliance with the plans and specifications and related documents.

(iii) For leaking underground storage tanks, the construction oversight and documentation report may be conducted by an underground storage tank provider certified under chapter 173-360 WAC. Removal of above ground abandoned drums, tanks and similar above ground containers and associated minor soil contamination may be overseen and documented by an experienced environmental professional. In other appropriate cases the department may authorize departure from the requirements of this subsection.

(c) Financial assurance and institutional control documentation. As part of the as-built documentation for the site cleanup, where the following information has not already been submitted under an order or decree or as part of another previously submitted document, the following information shall be included in the as-built report:

(i) For sites requiring financial assurance, a copy of the financial assurance document and any procedures for periodic adjustment to the value of the financial assurance mechanism;

(ii) For sites using institutional controls as part of the cleanup action, copies of recorded deed restrictions (with proof of recording) and other documents establishing these institutional controls.

(d) Plan modifications. Changes in the design or construction of the cleanup action performed under an order or decree shall be approved by the department.

(7) Opportunity for public comment. If the department determines that any plans prepared under this section repre-

sent a substantial change from the cleanup action plan, the department shall provide public notice and opportunity for comment under WAC 173-340-600.

(8) Plans and reports. Plans or reports prepared under this section and under an order or decree shall be submitted to the department for review and approval. For independent remedial actions, the plans and reports shall be submitted as required under WAC 173-340-515.

(9) Requirements for managing waste generated by site cleanup. Any waste contaminated by a hazardous substance generated during cleanup activities and requiring off-site treatment, storage or disposal, shall be transported to a facility permitted or approved to handle these wastes.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-400, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-400, filed 4/3/90, effective 5/4/90.]

WAC 173-340-410 Compliance monitoring requirements. (1) Purpose. There are three types of compliance monitoring: Protection, performance, and confirmational monitoring. The purposes of these three types of compliance monitoring and evaluation of the data are to:

(a) Protection monitoring. Confirm that human health and the environment are adequately protected during construction and the operation and maintenance period of an interim action or cleanup action as described in the safety and health plan;

(b) Performance monitoring. Confirm that the interim action or cleanup action has attained cleanup standards and, if appropriate, remediation levels or other performance standards such as construction quality control measurements or monitoring necessary to demonstrate compliance with a permit or, where a permit exemption applies, the substantive requirements of other laws;

(c) Confirmational monitoring. Confirm the long-term effectiveness of the interim action or cleanup action once cleanup standards and, if appropriate, remediation levels or other performance standards have been attained.

(2) General requirements. Compliance monitoring shall be required for all cleanup actions, and may be required for interim and emergency actions conducted under this chapter. Unless otherwise directed by the department, a compliance monitoring plan shall be prepared.

Plans prepared under this section and under an order or decree shall be submitted to the department for review and approval. Protection monitoring may be addressed in the safety and health plan. Performance and confirmational monitoring may be addressed in separate plans or may be combined with other plans or submittals, such as those in WAC 173-340-400 and 173-340-820.

(3) Contents of a monitoring plan. Compliance monitoring plans may include monitoring for chemical constituents, biological testing, and physical parameters as appropriate for the site. Where the cleanup action includes engineered controls or institutional controls, the monitoring may need to include not only measurements but also documentation of observations on the performance of these controls. Long-term monitoring shall be required if on-site disposal, isolation, or containment is the selected cleanup action for a site or a portion of a site. Such measures shall be required until residual hazardous substance concentrations no longer exceed site cleanup levels established under WAC 173-340-700 through 173-340-760. Compliance monitoring plans shall be specific for the media being tested and shall contain the following elements:

(a) A sampling and analysis plan meeting the requirements of WAC 173-340-820 which shall explain in the statement of objectives how the purposes of subsection (1) of this section are met;

(b) Data analysis and evaluation procedures used, to demonstrate and confirm compliance and justification for these procedures, including:

(i) A description of any statistical method to be employed; or

(ii) If sufficient data is not available before writing the plan to propose a reliable statistical method to demonstrate and confirm compliance, a contingency plan proposing one or more reliable statistical methods to demonstrate and confirm compliance, and the conditions under which the methods would be used at the facility; and

(c) Other information as required by the department.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-410, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-410, filed 4/3/90, effective 5/4/90.]

WAC 173-340-420 Periodic review. (1) Purpose. A periodic review consists of a review by the department of post-cleanup site conditions and monitoring data to assure that human health and the environment are being protected.

(2) Applicability. The department shall conduct periodic reviews of a site whenever the department conducts a cleanup action; whenever the department approves a cleanup action under an order, agreed order or consent decree; or, as resources permit, whenever the department issues a no further action opinion; and one of the following conditions exists, at the site:

(a) Where an institutional control and/or financial assurance is required as part of the cleanup action;

(b) Where the cleanup level is based on a practical quantitation limit as provided for under WAC 173-340-707; and

(c) Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

(3) General requirements. If a periodic review is required under subsection (2) of this section, a review shall be conducted by the department at least every five years after the initiation of a cleanup action. The department may require potentially liable persons to submit information required by the department to conduct a periodic review.

(4) Review criteria. When evaluating whether human health and the environment are being protected, the factors the department shall consider include:

(a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the site;

(b) New scientific information for individual hazardous substances or mixtures present at the site;

(c) New applicable state and federal laws for hazardous substances present at the site;

(d) Current and projected site and resource uses;

(e) The availability and practicability of more permanent remedies; and

(f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

(5) Notice and public comment. The department shall publish a notice of all periodic reviews in the *Site Register* and provide an opportunity for public comment. The department shall also notify all potentially liable persons known to the department of the results of the periodic review.

(6) Determination of whether amendment of the cleanup action plan required. When the department determines that substantial changes in the cleanup action are necessary to protect human health and the environment at the site, a revised cleanup action plan shall be prepared. The department shall provide opportunities for public review and comment on the draft cleanup action plan in accordance with WAC 173-340-380 and 173-340-600.

(7) Determination of whether future periodic reviews required. In conducting a periodic review under this section, the department shall determine whether additional reviews are necessary, taking into consideration the factors in subsection (4) of this section. Sites with institutional controls shall remain subject to periodic reviews as long as the institutional controls are required under this chapter.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-420, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-420, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-420, filed 4/3/90, effective 5/4/90.]

WAC 173-340-430 Interim actions. (1) Purpose. An interim action is distinguished from a cleanup action in that an interim action only partially addresses the cleanup of a site. (Note: An interim action may constitute the cleanup action for a site if the interim action is subsequently shown to comply with WAC 173-340-350 through 173-340-390.) An interim action is:

(a) A remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance at a facility;

(b) A remedial action that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed; or

(c) A remedial action needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action.

Example. A site is identified where oil-based wood preservative has leaked from a tank and is puddled on the ground and is floating on the water table. Runoff from adjacent properties passes through the site. Neighborhood children have been seen on the site. In this case, several interim actions would be appropriate before fully defining the extent of the distribution of hazardous substances at the site and selecting a cleanup action. These interim actions might consist of removing the tank, fencing the site, rerouting runoff, and removing the product puddled on the ground and floating on the water table. Further studies would then determine what additional soil and ground water cleanup would be needed.

(2) General requirements.

Interim actions may:

(a) Achieve cleanup standards for a portion of the site;

(b) Provide a partial cleanup, that is, clean up hazardous substances from all or part of the site, but not achieve cleanup standards; or

(c) Provide a partial cleanup of hazardous substances and not achieve cleanup standards, but provide information on how to achieve cleanup standards for a cleanup. For example, demonstration of an unproven cleanup technology.

(3) Relationship to the cleanup action.

(a) If the cleanup action is known, the interim action shall be consistent with the cleanup action.

(b) If the cleanup action is not known, the interim action shall not foreclose reasonable alternatives for the cleanup action. This is not meant to preclude the destruction or removal of hazardous substances.

(4) Timing.

(a) Interim actions may occur anytime during the cleanup process. Interim actions shall not be used to delay or supplant the cleanup process. An interim action may be done before or in conjunction with a site hazard assessment and hazard ranking. However, sufficient technical information must be available regarding the facility to ensure the interim action is appropriate and warranted.

(b) Interim actions shall be followed by additional remedial actions unless compliance with cleanup standards has been confirmed at the site.

(c) The department shall set appropriate deadlines commensurate with the actions taken for completion of the interim action.

(5) Administrative options. Interim cleanup actions may be conducted under any of the procedures described in WAC 173-340-510 and 173-340-515.

(6) Public participation. Public participation will be accomplished in a manner consistent with WAC 173-340-600.

(7) Submittal requirements. Unless otherwise directed by the department and except for independent remedial actions, emergency remedial actions, and underground storage tank releases being addressed under WAC 173-340-450, a report shall be prepared before conducting an interim action. Reports prepared under an order or decree shall be submitted to the department for review and approval. Reports for independent remedial actions shall be submitted as required by WAC 173-340-515. Reports shall be of a scope and detail commensurate with the work performed and site-specific characteristics, and shall include, as appropriate:

(a) A description of the interim action and how it will meet the criteria identified in subsections (1), (2) and (3) of this section;

(b) Information from the applicable subsections of the remedial investigation/feasibility study of WAC 173-340-350, including at a minimum:

(i) A description of existing site conditions and a summary of all available data related to the interim action; and

(ii) Alternative interim actions considered and an explanation why the proposed alternative was selected;

(c) Information from the applicable subsections of the design and construction requirements of WAC 173-340-400; and

(d) A compliance monitoring plan meeting the applicable requirements of WAC 173-340-410;

(e) A safety and health plan meeting the requirements of WAC 173-340-810; and

(f) A sampling and analysis plan meeting the requirements of WAC 173-340-820.

(8) Construction. Construction of the interim action shall be in conformance with WAC 173-340-400(7).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-430, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-430, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-430, filed 4/3/90, effective 5/4/90.]

WAC 173-340-440 Institutional controls. (1) Purpose. Institutional controls are measures undertaken to limit or prohibit activities that may interfere with the integrity of an interim action or cleanup action or that may result in exposure to hazardous substances at a site. Institutional controls may include:

(a) Physical measures such as fences;

(b) Use restrictions such as limitations on the use of property or resources; or requirements that cleanup action occur if existing structures or pavement are disturbed or removed;

(c) Maintenance requirements for engineered controls such as the inspection and repair of monitoring wells, treatment systems, caps or ground water barrier systems;

(d) Educational programs such as signs, postings, public notices, health advisories, mailings, and similar measures that educate the public and/or employees about site contamination and ways to limit exposure; and

(e) Financial assurances (see subsection (11) of this section).

(2) Relationship to engineered controls. The term institutional controls refers to nonengineered measures while the term engineered controls means containment and/or treatment systems that are designed and constructed to prevent or limit the movement of, or the exposure to, hazardous substances. See the definition of engineered controls in WAC 173-340-200 for examples of engineered controls.

(3) Applicability. This section applies to remedial actions being conducted at sites under any of the administrative options in WAC 173-340-510 and 173-340-515.

(4) Circumstances required. Institutional controls shall be required to assure both the continued protection of human health and the environment and the integrity of an interim action or cleanup action in the following circumstances:

(a) The cleanup level is established using Method A or B and hazardous substances remain at the site at concentrations that exceed the applicable cleanup level;

(b) The cleanup level is established using Method C;

(c) An industrial soil cleanup level is established under WAC 173-340-745;

(d) A ground water cleanup level that exceeds the potable ground water cleanup level is established using a site-specific risk assessment under WAC 173-340-720 (6)(c) and institutional controls are required under WAC 173-340-720 (6)(c)(iii);

(e) A conditional point of compliance is established as the basis for measuring compliance at the site;

(f) Any time an institutional control is required under WAC 173-340-7490 through 173-340-7494; or

(g) Where the department determines such controls are required to assure the continued protection of human health and the environment or the integrity of the interim or cleanup action.

(5) Minimum requirements. Cleanup actions that use institutional controls shall meet each of the minimum requirements specified in WAC 173-340-360, just as any other cleanup action. Institutional controls should demonstrably reduce risks to ensure a protective remedy. This demonstration should be based on a quantitative, scientific analysis where appropriate.

(6) Requirement for primary reliance. In addition to meeting each of the minimum requirements specified in WAC 173-340-360, cleanup actions shall not rely primarily on institutional controls and monitoring where it is technically possible to implement a more permanent cleanup action for all or a portion of the site.

(7) Periodic review. The department shall review compliance with institutional control requirements as part of periodic reviews under WAC 173-340-420.

(8) Format.

(a) For properties owned by a person who has been named as a potentially liable person or who has not been named a potentially liable person by the department but meets the criteria in RCW 70.105D.040 for being named a potentially liable person, appropriate institutional controls shall be described in a restrictive covenant on the property. The covenant shall be executed by the property owner and recorded with the register of deeds for the county in which the site is located. This restrictive covenant shall run with the land, and be binding on the owner's successors and assigns.

(b) For properties owned by a local, state, or federal government entity, a restrictive covenant may not be required if that entity demonstrates to the department that:

(i) It does not routinely file with the county recording officer records relating to the type of interest in real property that it has in the site; and

(ii) It will implement an effective alternative system to meet the requirements of subsection (9) of this section.

The department shall require the government entity to implement the alternative system as part of the cleanup action plan. If a government entity meets these criteria, and if it subsequently transfers its ownership in any portion of the property, then the government entity must file a restrictive covenant upon transfer if any of the conditions in subsection (4) of this section still exist.

(c) For properties containing hazardous substances where the owner does not meet the criteria in RCW 70.105D.040 for being a potentially liable person, the department may approve cleanup actions that include restrictive covenants or other legal and/or administrative mechanisms. The use of legal or administrative mechanisms that do not include restrictive covenants is intended to apply to situations where the release has affected properties near the source of the release not owned by a person potentially liable under the act. A potentially liable person must make a good faith effort to obtain a restrictive covenant before using other legal or

administrative mechanisms. Examples of such mechanisms include zoning overlays, placing notices in local zoning or building department records or state lands records, public notices and educational mailings.

(9) Restrictive covenants. Where required, the restrictive covenant shall:

(a) Prohibit activities on the site that may interfere with a cleanup action, operation and maintenance, monitoring, or other measures necessary to assure the integrity of the cleanup action and continued protection of human health and the environment;

(b) Prohibit activities that may result in the release of a hazardous substance that was contained as a part of the cleanup action;

(c) Require notice to the department of the owner's intent to convey any interest in the site. No conveyance of title, easement, lease, or other interest in the property shall be consummated by the property owner without adequate and complete provision for the continued operation, maintenance and monitoring of the cleanup action, and for continued compliance with this subsection;

(d) Require the land owner to restrict leases to uses and activities consistent with the restrictive covenant and notify all lessees of the restrictions on the use of the property. This requirement applies only to restrictive covenants imposed after February 1, 1996;

(e) Require the owner to include in any instrument conveying any interest in any portion of the property, notice of the restrictive covenant under this section;

(f) Require notice and approval by the department of any proposal to use the site in a manner that is inconsistent with the restrictive covenant. If the department, after public notice and comment approves the proposed change, the restrictive covenant shall be amended to reflect the change; and

(g) Grant the department and its designated representatives the right to enter the property at reasonable times for the purpose of evaluating compliance with the cleanup action plan and other required plans, including the right to take samples, inspect any remedial actions taken at the site, and to inspect records.

(10) Local government notification. Before a restrictive covenant being established under this chapter, the department shall notify and seek comment from a city or county department with land use planning authority for real property subject to the restrictive covenant. Once a restrictive covenant has been executed, this same department shall be notified and sent a copy of the restrictive covenant. For independent cleanups reviewed by the department under WAC 173-340-515 that use restrictive covenants, the person conducting the cleanup shall be responsible for these notifications.

(11) Financial assurances. The department shall, as appropriate, require financial assurance mechanisms at sites where the cleanup action selected includes engineered and/or institutional controls. It is presumed that financial assurance mechanisms will be required unless the PLP can demonstrate that sufficient financial resources are available and in place to provide for the long-term effectiveness of engineered and institutional controls adopted. Financial assurances shall be of sufficient amount to cover all costs associated with the operation and maintenance of the cleanup action, including institutional controls, compliance monitoring, and corrective measures.

(a) Mechanisms. Financial assurance mechanisms may include one or more of the following: A trust fund, a surety bond, a letter of credit, financial test, guarantee, standby trust fund, government bond rating test, government financial test, government guarantee, government fund, or financial assurance mechanisms required under another law (for example, requirements for solid waste landfills or treatment, storage, and disposal facilities) that meets the requirements of this section.

(b) Exemption from requirement. The department shall not require financial assurances if persons conducting the cleanup can demonstrate that requiring financial assurances will result in the PLPs for the site having insufficient funds to conduct the cleanup or being forced into bankruptcy or similar financial hardship.

(12) Removal of restrictions. If the conditions at the site requiring an institutional control under subsection (4) of this section no longer exist, then the owner may submit a request to the department that the restrictive covenant or other restrictions be eliminated. The restrictive covenant or other restrictions shall be removed, if the department, after public notice and opportunity for comment, concurs.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-440, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-440, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-440, filed 1/28/91, effective 2/28/91.]

WAC 173-340-450 Releases from underground storage tanks. (1) Purpose. The purpose of this section is to set forth the requirements for addressing releases that may pose a threat to human health or the environment from an underground storage tank (UST) regulated under chapter 90.76 RCW.

(a) Releases from USTs exempted under chapter 90.76 RCW and rules adopted therein are still subject to all other requirements of this chapter.

(b) Unless the department requires otherwise, UST owners and UST operators regulated under chapter 90.76 RCW shall comply with the requirements in this section after confirmation of an UST release that may pose a threat to human health or the environment.

(2) Initial response. Within twenty-four hours of confirmation of an UST release, the UST owner or the UST operator shall perform the following actions:

(a) Report the UST release to the department and other authorities with jurisdiction, in accordance with rules adopted under chapter 90.76 RCW and any other applicable law;

(b) Remove as much of the hazardous substance from the UST as is possible and necessary to prevent further release to the environment;

(c) Eliminate or reduce any fire, explosion or vapor hazards in such a way as to minimize any release of hazardous substances to surface water and ground water; and

(d) Visually inspect any aboveground releases or exposed belowground releases and prevent the hazardous substance from spreading into surrounding soils, ground water and surface water.

(3) Interim actions.

(a) As soon as possible but no later than twenty days following confirmation of an UST release, the UST owner or the UST operator shall perform the following interim actions:

(i) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that may have migrated from the UST into structures in the vicinity of the site, such as sewers or basements;

(ii) Reduce the threat to human health and the environment posed by contaminated soils that are excavated or discovered as a result of investigation or cleanup activities. Treatment, storage and disposal of soils must be carried out in compliance with all applicable federal, state and local requirements;

(iii) Test for hazardous substances in the environment where they are most likely to be present. Such testing shall be done in accordance with a sampling and analysis plan prepared under WAC 173-340-820. The sample types, sample locations, and measurement methods shall be based on the nature of the stored substance, type of subsurface soils, depth to ground water and other factors as appropriate for identifying the presence and source of the release. If contaminated soil is found in contact with the ground water or soil contamination appears to extend below the lowest soil sampling depth, then testing shall include the installation of ground water monitoring wells to test for the presence of possible ground water contamination. Information gathered for the site check or closure site assessment conducted under rules adopted under chapter 90.76 RCW, which sufficiently characterizes the releases at the site, may be substituted for the testing required under this paragraph;

(iv) The testing performed under (a)(iii) of this subsection shall use the analytical methods specified in WAC 173-340-830 and include, at a minimum, the following:

(A) For petroleum product releases, the concentration(s) of hazardous substances potentially present at the site, as appropriate for the type of petroleum product(s) released. The minimum testing requirements are specified in Table 830-1.

(B) The hazardous substance stored and any likely decomposition by-products where a hazardous substance other than petroleum may be present; and

(C) Any other tests required by the department; and

(v) Investigate for the presence of free product.

(4) Free product removal. At sites where investigations indicate free product is present, the UST owner or the UST operator shall conduct, as soon as possible after discovery, an interim action to remove the free product while continuing, as necessary, any other actions required under this section. To accomplish this the UST owner or UST operator shall:

(a) Conduct free product removal to the maximum extent practicable and in a manner that minimizes the spread of hazardous substances, by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site. The objective of free product removal system must be, at a minimum, to stop the free product migration;

(b) Properly treat, discharge, or dispose of any hazardous substance, water, sludge or any other materials collected in the free product removal process in compliance with all applicable local, state, and federal regulations and permits; and

(c) Handle all flammable products safely to prevent fires and explosions.

(5) Reporting requirements. The following reports are required to be submitted to the department:

(a) Status report. Within twenty days after an UST release, the UST owner or UST operator shall submit a status report to the department. The status report shall identify if known, the types, amounts, and locations of hazardous substances released, how the release occurred, evidence confirming the release, actions taken under subsections (2) and (3) of this section, any planned remedial actions, and any results of work done up to the time of the report. This report may be provided verbally to the department.

(b) Site characterization reports. Within ninety days after release confirmation, unless directed to do otherwise by the department, the UST owner or UST operator shall submit a report to the department about the site and nature of the release. This report shall be submitted to the department in writing and may be combined with the twenty-day status report, if the information required is available at that time. The site characterization report shall include, at a minimum, the following information:

(i) The information required for the status report under (a) of this subsection;

(ii) A site conditions map indicating approximate boundaries of the property, all areas where hazardous substances are known or suspected to be located, and sampling locations. This map may consist of a sketch of the site at a scale sufficient to illustrate this information;

(iii) Available data regarding surrounding populations, surface and ground water quality, use and approximate location of wells potentially affected by the release, subsurface soil conditions, depth to ground water, direction of ground water flow, proximity to and potential for affecting surface water, locations of sewers and other potential conduits for vapor or free product migration, surrounding land use, and proximity to sensitive environments;

(iv) Results of tests for hazardous substances performed under subsection (3)(a)(iii) and (iv) of this section;

(v) Results of the free product investigation required under subsection (3)(a)(v) of this section;

(vi) Results of all completed site investigations, interim actions and cleanup actions and a description of any remaining investigations, cleanup actions and compliance monitoring that are planned or underway; and

(vii) Information on the free product removal efforts at sites where investigations indicate free product is present. This shall include, at a minimum, the following information:

(A) Name of the person responsible for implementing the free product removal measures;

(B) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes and excavations;

(C) The type of free product recovery system used;

(D) The location of any on-site or off-site discharge during the recovery operation;

(E) The type of treatment applied to, and the effluent quality expected from, any discharge;

(F) The steps taken and planned to obtain necessary permits for any discharge;

(G) Disposition of recovered free product; and

(viii) Any other information required by the department.

(6) Remedial investigation and feasibility study.

(a) If the initial cleanup actions taken at an UST site do not achieve cleanup levels throughout the site, a remedial investigation and feasibility study may need to be conducted in accordance with WAC 173-340-350. The scope of a remedial investigation and feasibility study will depend on the informational needs at the site. UST owners and operators shall conduct a remedial investigation and feasibility study for sites where the following conditions exist:

(i) There is evidence that the release has caused hazardous substances to be present in the ground water in excess of the ground water standards adopted under chapter 90.48 RCW or cleanup levels in WAC 173-340-720 (Table 720-1);

(ii) Free product is found; or

(iii) Where otherwise required by the department.

(b) UST owners and UST operators shall submit the information collected for the remedial investigation/feasibility study to the department as soon as practicable. The information may be included with other reports submitted under this section.

(c) If the department determines, based on the results of the remedial investigation/feasibility study or other information, that additional remedial action is required, the department may require the UST owner or the UST operator to submit engineering documents as described in WAC 173-340-400.

(7) Cleanup actions. Unless directed to do otherwise by the department, cleanup actions performed by UST owners or UST operators shall comply with the cleanup standards described in WAC 173-340-700 through 173-340-760 and the requirements for the selection of cleanup actions in WAC 173-340-350 through 173-340-390.

(8) Independent cleanup actions. In addition to work performed under subsections (2) through (5), and (7) of this section, UST owners or UST operators performing independent cleanup actions shall:

(a) Notify the department of their intention to begin cleanup. This can be included with other reports under this section;

(b) Comply with any conditions imposed by the department to assure adequate protection of human health and the environment; and

(c) Within ninety days of completion of the cleanup action, submit the results of all investigations, interim and cleanup actions and compliance monitoring not previously submitted to the department.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-450, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-450, filed 1/28/91, effective 2/28/91.]

PART V—ADMINISTRATIVE PROCEDURES FOR REMEDIAL ACTIONS

WAC 173-340-500 Determination of status as a potentially liable person. (1) Status letter. The department shall issue a potentially liable person status letter to any person it believes to be potentially liable as provided for in RCW 70.105D.020(8), unless an emergency requires otherwise. Persons will be notified when the department has credible evidence of their potential liability under RCW 70.105D.040 and when the department is ready to proceed with remedial action except for emergencies and initial investigations. The status letter shall be sent by certified mail, return receipt requested, or by personal service.

(2) Contents of letter. The status letter shall provide:

(a) The name of the person the department believes to be potentially liable;

(b) A general description of the location of the facility;

(c) The basis for the department's belief that the person has a relationship to the facility;

(d) The basis for the department's belief that a release or threatened release of a hazardous substance has occurred at the facility and that the release or threatened release poses a threat to human health or the environment;

(e) An indication of the department's intentions regarding enforcement or other actions at the facility; and

(f) The names of other persons to whom the department has sent a status letter.

(3) Opportunity to comment. Any comments shall be submitted in writing to the department within thirty days from the date of receipt by the potentially liable person of the status letter unless the department provides an extension.

(4) Determination of status. If after reviewing any comments submitted, the department concludes that credible evidence supports a finding of potential liability, then the department shall issue a determination of potentially liable person status.

(5) Voluntary waiver. Persons may accept status as a potentially liable person at any time through a voluntary waiver of their right to notice and comment.

(6) Additional potentially liable persons. The department reserves the right to notify additional potentially liable persons at any time, and as resources permit, will facilitate potentially liable persons' efforts to identify additional potentially liable persons. The department shall notify in writing, all persons who previously received a status letter for the facility whenever additional status letters have been sent.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-500, filed 4/3/90, effective 5/4/90.]

WAC 173-340-510 Administrative options for remedial actions. (1) Policy. It is the responsibility of each and every liable person to conduct remedial action so that sites are cleaned up well and expeditiously where a release or threatened release of a hazardous substance requires remedial action. Potentially liable persons are encouraged to initiate discussions and negotiations with the department and the office of the attorney general that may lead to an agreement on the remedial action to be conducted with the state of Washington. The department may provide informal advice and assistance on the development of proposals for remedial action, as provided by WAC 173-340-515. Any approval by the department or the state of remedial action shall occur by one of the means described in subsections (2) and (3) of this section.

(2) Actions initiated by the potentially liable person. Potentially liable persons may initiate a remedial action, as follows:

(a) A person may initiate negotiations for a consent decree by submitting a letter under WAC 173-340-520(1).

(b) A person may request an agreed order by submitting a letter under WAC 173-340-530.

(3) Action initiated by the department. The department may initiate remedial action by:

(a) Issuing a letter inviting negotiations on a consent decree under WAC 173-340-520(2); or

(b) Requesting an agreed order under WAC 173-340-530; or

(c) Issuing an enforcement order under WAC 173-340-540.

(4) Department remedial action. Nothing in this chapter shall preclude the department from taking appropriate remedial action on its own at any time. Except for emergency actions and initial investigations, reasonable effort will be made to notify potentially liable persons before the department takes remedial actions for which the recovery of public funds can be sought under RCW 70.105D.050(3).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-510, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-510, filed 4/3/90, effective 5/4/90.]

WAC 173-340-515 Independent remedial actions. (1) **Purpose.** An independent remedial action is a remedial action conducted without department oversight or approval and not under an order, agreed order or consent decree. This section describes the procedures and requirements for independent remedial actions. See WAC 173-340-545 for additional requirements pertaining to independent remedial actions anticipated to be part of a private right of action.

(2) **Applicability.** Nothing in this chapter shall preclude potentially liable persons from conducting independent remedial actions at sites not in discussions or negotiations for, or under, an order or decree. However, a potentially liable person may not conduct independent remedial actions after commencing discussions or negotiations for an agreed order or consent decree unless:

(a) Such action does not foreclose or preempt the remedial actions under discussion or negotiation and such action does not foreclose the selection of a cleanup action; or

(b) The potentially liable person has provided reasonable notice to the department and the department does not object to such action.

(3) **Standards.**

(a) In reviewing independent remedial actions, the department shall determine whether the remedial actions meet the substantive requirements of this chapter and/or whether further remedial action is necessary at the site. Persons conducting independent remedial actions do so at their own risk, and may be required to take additional remedial actions if the department determines such actions are necessary. In such circumstances, the department reserves all of its rights to take actions authorized by law.

(b) When this chapter requires a consultation with, or an approval or determination by the department, such a consultation, approval or determination is not necessary in order to conduct an independent remedial action. However, independent remedial actions must still meet the substantive requirements of this chapter.

(c) Except for the requirement of a restrictive covenant under WAC 173-340-440, where documents are required under this chapter, the documents prepared need not be the same in title or format; however, the documents must still contain sufficient information to serve the same purpose. The scope and level of detail in these documents may vary from site to site depending on the site-specific conditions and the complexity of the remedial action.

(4) **Reports to the department.**

(a) Any person who conducts an independent interim action or cleanup action for a release that is required to be reported under WAC 173-340-300 shall submit a written report to the department within ninety days of the completion of the action. For the purposes of this section, the department will consider an interim action or cleanup action complete if no remedial action other than compliance monitoring has occurred at the site for ninety days. This does not preclude earlier reporting of such actions or reporting of site investigations. See WAC 173-340-450 for additional requirements for reporting independent remedial actions for releases from underground storage tanks.

(b) The report shall include the information in WAC 173-340-300(2) if not already reported, and enough information to determine if the independent remedial action meets the substantive requirements of this chapter including, the results of all site investigations, cleanup actions and compliance monitoring planned or under-way. If a restrictive covenant is used, it must be included in the report and it must meet the requirements specified in WAC 173-340-440(9). The department may require additional reports on the work conducted.

(c) If the independent interim action or cleanup action is completed within ninety days of discovery, a single written report may be submitted on both the release and the action taken. The report shall contain the information specified in provision (b) of this subsection and shall be submitted within ninety days of completion of the remedial action.

(d) The department shall publish in the *Site Register* a notice of all reports on independent interim actions and cleanup actions received under this section. If deemed necessary, the department shall also conduct an initial investigation under WAC 173-340-310. Neither submission of information on an independent remedial action nor any response by the department shall release the person submitting the report or any other person from liability. The department reserves all rights to pursue any subsequent action it deems appropriate.

(5) **Technical consultations.** The department may provide informal advice and assistance (technical consultations) on the administrative and technical requirements of this chapter to persons conducting or otherwise interested in an independent remedial action. Such advice or assistance is advisory only and not binding on the department. This advice may include written opinions. These written opinions shall be limited to whether the independent remedial actions or proposals for those actions meet the substantive requirements of this chapter and/or whether the department believes further remedial action is necessary at the facility. Upon completing the review of an independent remedial action report or proposal that is voluntarily submitted for the department's review and opinion, the department will:

(a) Provide a written opinion regarding the remedial actions performed or proposed at the site;

(b) Provide a written opinion regarding the remedial actions performed at the site and remove the site or a portion

of the site from the hazardous sites list if the department has sufficient information to show that the independent remedial actions are appropriate to characterize and address contamination at the site, as provided for in WAC 173-340-330 (4)(b); or

(c) Provide a written opinion describing the deficiencies with the remedial action or proposal for a remedial action at the site.

It is the department's policy, in conducting reviews under this subsection, to promote independent remedial actions by delisting sites or portions of sites whenever petitions and supporting documents show that the actions taken are appropriate to characterize and address the contamination at the site.

(6) **Cost of technical consultations.** For information on the payment of remedial action costs, see WAC 173-340-550(6).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-515, filed 2/12/01, effective 8/15/01.]

WAC 173-340-520 Consent decrees. (1) Procedures for consent decrees initiated by potentially liable persons. To request a consent decree a person shall submit a letter to the department and office of the attorney general via certified mail, return receipt requested, or by personal delivery.

(a) Request. The letter shall describe, based on available information:

(i) The proposed remedial action, including the schedule for the work;

(ii) Information which demonstrates that the settlement will lead to a more expeditious cleanup, be consistent with cleanup standards if the remedial action is a cleanup action, and be consistent with any previous orders;

(iii) The facility, including location and boundaries;

(iv) The environmental problems to be addressed including a description of the releases at the facility and the potential impact of those releases to human health and the environment;

(v) A summary of the relevant historical use or conditions at the facility;

(vi) The date on which the potentially liable person will be ready to submit a detailed proposal;

(vii) Any special scheduling considerations for implementing the remedial actions;

(viii) Names of other persons who the person has reason to believe may be potentially liable persons at the facility; and

(ix) A proposed public participation plan. This proposed plan shall be commensurate with the nature of the proposal and site and shall include the elements listed in WAC 173-340-600(8).

(b) The letter may include:

(i) A waiver of the procedural requirements of WAC 173-340-500 and acceptance, for purposes of settlement, of potentially liable person status.

(ii) The contents of detailed proposal under (g) of this subsection.

(c) A prospective purchaser consent decree is a particular type of consent decree entered into with a person not currently liable for remedial action at the site who proposes to purchase, redevelop, or reuse the site. RCW 70.105D.040(5) contains specific statutory requirements for this type of decree. In addition to the information in (a) and (b) of this subsection, a request for a prospective purchaser consent decree shall include:

(i) Identification of all persons proposing to enter into the consent decree and information which demonstrates that those persons are not currently liable for remedial action at the site;

(ii) Information which demonstrates that the settlement will yield substantial new resources to facilitate cleanup;

(iii) A general description of the proposed continued use or redevelopment or reuse of the site, including the proposed schedule for purchase, redevelopment, or reuse; and

(iv) Information describing whether and how the proposed settlement will provide a substantial public benefit.

(d) Recognizing that the steps of the cleanup process may be combined and may vary by site, the information in the request shall be at the level of detail appropriate to the steps in the process for which the consent decree is requested. For example, a request for a consent decree for a remedial investigation/feasibility study should generally include the level of information needed for a site hazard assessment, if not already done by the department, so that the department and the public can evaluate the proposed scope of work and relative priority of the site.

(e) The department may waive part of the letter requirements of (a) of this subsection if the requirements have already been met.

(f) Response. The department shall respond to the request within sixty days, unless the department needs additional time to determine potentially liable person status under WAC 173-340-500. This determination will be based in part on a preliminary finding by the department that any resulting consent decree would be in accordance with RCW 70.105D.040 (4)(a). The department may:

(i) Request additional information;

(ii) Accept the request and require the person to submit a detailed written proposal by a specified date; or

(iii) Provide written reasons for denying the request.

(g) Contents of detailed proposal. The proposal shall contain:

(i) A proposed technical scope of work describing the remedial action to be conducted;

(ii) The data, studies, or any other information upon which the settlement proposal is based;

(iii) A statement describing the potentially liable person's ability to conduct or finance the remedial action as described in the proposed scope of work;

(iv) A schedule for proposed negotiations and implementation of the proposed remedial actions; and

(v) Any additional information requested by the department.

(h) In addition to the information in (g) of this subsection, the detailed proposal for a prospective purchaser consent decree shall include the following:

(i) Information showing a legal commitment to purchase, redevelop or reuse the site;

(ii) A detailed description including a plan of the proposed continued use, redevelopment, or reuse of the site, including, if necessary, an updated schedule for purchase, redevelopment or reuse;

(iii) Information which demonstrates that the redevelopment or reuse of the site is not likely to contribute to the existing or threatened releases at the site, interfere with remedial actions that may be needed at the site, or increase health risks to persons at or in the vicinity of the site; and

(iv) If the requestor does not propose to conduct the entire cleanup of the site, available information about potentially liable persons who are expected to conduct the remainder of the cleanup.

(i) The department and the office of the attorney general shall determine whether the proposal provides a sufficient basis for negotiations, and shall deliver to the potentially liable person within sixty days following receipt of their proposal a written notice indicating whether or not the proposal is sufficient to proceed with negotiations.

(j) Prepayment agreement. Unless otherwise determined by the department, any person who requests a prospective purchaser agreement and receives a notice accepting the request under (f) of this subsection shall enter into a prepayment agreement with the department consistent with WAC 173-340-550(7) before negotiations will begin.

(k) Time limits for negotiations. The department shall set the time period and starting date for negotiations. The department and the office of the attorney general shall then negotiate with those potentially liable persons who have received a notice under (f) of this subsection that their proposal was sufficient to proceed with negotiations. Negotiations may address one or more phases of remedial action. The length of the negotiation period specified by the department shall be no less than that proposed by the potentially liable person provided it does not conflict with the deadlines established under WAC 173-340-140.

(l) Enforcement stay. For consent decrees that are not prospective purchaser agreements, unless an emergency exists, the department will stay any enforcement action under chapter 70.105D RCW, but the duration of such stay shall not exceed one hundred twenty days from the date negotiations begin. The department can withdraw from negotiations if it determines that:

(i) Reasonable progress is not being made toward a consent decree acceptable to the department; or

(ii) The proposal is inappropriate based on new information or changed circumstances.

The department may begin an enforcement action after notifying the potentially liable person, in writing, of its intent to withdraw from negotiations.

(2) Procedures for consent decrees initiated by the department. When the department believes that a consent decree will be a more expeditious method to achieve remedial action at a facility, it may initiate the procedures set forth in this subsection by sending a letter to the potentially liable person. The letter shall be sent via certified mail, return receipt requested, or by personal service.

(a) The letters may be delivered with potentially liable person status letters issued under WAC 173-340-500. The period for negotiation shall not commence until the thirty-day comment period required by WAC 173-340-500 has expired or the person expressly waives the procedural requirements of WAC 173-340-500.

(b) Contents of letter. The letter shall:

(i) Inform potentially liable person(s) that the department and the attorney general want to begin negotiations which may lead to a consent decree providing for remedial action;

(ii) Propose a draft consent decree and scope of work;

(iii) Define the negotiation process and schedule which shall not exceed ninety days;

(iv) Reference the department's finding under WAC 173-340-500;

(v) Request a written statement of the potentially liable person's willingness to proceed with the negotiation process defined in the letter; and

(vi) Request the names of other persons whom the person has reason to believe may be potentially liable persons at the facility.

(c) The letter may request the potentially liable person to respond, in writing, to the proposed draft consent decree and scope of work before beginning the negotiation phase.

(d) Negotiations. The department and the office of the attorney general shall negotiate with potentially liable persons who have indicated to the department a willingness to proceed with the negotiations. The negotiation time frame shall begin from the date the potentially liable person receives the letter under (a) of this subsection unless modified by the department. Negotiations may address one or more phases of remedial action.

(e) Enforcement stay. Unless an emergency exists, the department will stay any enforcement action under chapter 70.105D RCW, but the duration of the stay shall not exceed ninety days from the date negotiations begin. The department can withdraw from negotiations if it determines that:

(i) Reasonable progress is not being made toward a consent decree acceptable to the department; or

(ii) The proposal is inappropriate based on new information or changed circumstances. The department may commence with enforcement action after notifying the potentially liable person, in writing, of its intent to withdraw from negotiations.

(f) Deadline extensions. The department may, at its discretion, extend the deadline for negotiations established in (b) of this subsection, provided the extension does not exceed thirty days.

(3) Filing a decree. After satisfying the public comment and hearing requirements, the department shall determine whether the proposed settlement negotiated under subsection (1) or (2) of this section, is more expeditious and consistent with cleanup standards established and in compliance with any order issued by the department relevant to the remedial action. After making the requisite findings, the department shall forward the proposed consent decree with the findings required by RCW 70.105D.040(4), to the office of the attorney general. If agreed to by the office of the attorney general, the consent decree will be filed by that office with the appropriate superior court or the federal court having jurisdiction over the matter.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-520, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-520, filed 4/3/90, effective 5/4/90.]

WAC 173-340-530 Agreed orders. (1) Purpose. Agreed orders may be used for all remedial actions. An agreed order means that the potentially liable person agrees to perform remedial actions at the site in accordance with the provisions of the agreed order and that the department will not take additional enforcement action against the potentially liable person to require those remedial actions specified in the agreed order so long as the potentially liable person complies with the provisions of the order. Since an agreed order is not a settlement, an agreed order shall not provide for mixed funding, a covenant not to sue, or protection from claims for contribution. The department may require additional remedial actions should it deem such actions necessary.

(2) Procedures for agreed orders initiated by a potentially liable person.

(a) To request an agreed order, a person shall submit a letter to the department based on available information, describing:

(i) The proposed remedial action including a schedule for the work;

(ii) The facility, including location and boundaries;

(iii) The environmental problems to be addressed, including the releases at the facility and the potential impact of those releases to human health and the environment;

(iv) A summary of the relevant historical use or conditions at the facility;

(v) Names of other persons whom the person has reason to believe may be potentially liable persons at the facility; and

(vi) A proposed public participation plan. This proposed plan shall be commensurate with the nature of the proposal and site and shall include, at a minimum, the elements listed in WAC 173-340-600(8).

(b) The letter may include a waiver of the procedural requirements of WAC 173-340-500, and acceptance, for purposes of the agreed order, of potentially liable person status.

(c) Recognizing that the basic steps of the cleanup process may be combined and may vary by site, the information in the request shall be at the level of detail appropriate to the step in the process for which the order is requested. For example, a request for an agreed order for a remedial investigation/feasibility study should generally include the level of information needed for a site hazard assessment, so that the department and the public can evaluate the proposed scope of work and relative priority of the site.

(d) The department may waive part of the letter requirements of (a) of this subsection if the requirements have already been met.

(3) Department response to PLP-initiated request. The department shall respond to the request within sixty days, unless the department needs additional time to determine potentially liable person status under WAC 173-340-500. The department may:

(a) Request additional information;

(b) Proceed with discussions, if the department believes it is in the public interest to do so; or

(c) Provide written reasons for denying the request.

(4) Procedures for agreed orders initiated by the department. When the department believes that an agreed order is an appropriate method to achieve remedial action at a facility, it may initiate the request for an agreed order.

(5) Duration of discussions. Discussions on the agreed order shall not exceed sixty days unless the department decides continued discussions are in the public interest.

(6) Enforcement. Unless an emergency exists, the department will stay any enforcement action under chapter 70.105D RCW; however, the duration of such stay shall not exceed sixty days from the date discussions begin. Furthermore, the department can withdraw from discussions if it determines that:

(a) Reasonable progress is not being made toward an agreed order acceptable to the department; or

(b) The agreed order is inappropriate based on new information or changed circumstances.

The department may begin an enforcement action after notifying the potentially liable person in writing of its intent to withdraw from discussions.

(7) Focus of discussions. The focus of discussions for the agreed order shall ordinarily be the technical scope of work and work schedule. This subsection is not intended to preclude discussion on any item. It is intended to convey the expectation that the scope of work and work schedule will be the primary topics of discussion in developing agreed orders.

(8) Public participation.

(a) When issuing an agreed order, the department shall provide appropriate public participation opportunities under WAC 173-340-600.

(b) If the department and the potentially liable person signing the order agree to substantial changes in the order, the department shall provide appropriate additional public notice and opportunity to comment.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-530, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-530, filed 1/26/96, effective 2/26/96; 90-08-086, § 173-340-530, filed 4/3/90, effective 5/4/90.]

WAC 173-340-540 Enforcement orders. The department may issue an enforcement order requiring remedial action after issuing a notice of potentially liable person status letter under WAC 173-340-500. In emergencies, the notice of potentially liable person status may occur concurrently with the issuance of the order. Unless an emergency requires otherwise, the issuance of a potentially liable person status letter shall precede or take place concurrently with the issuance of an enforcement order. Furthermore, except in an emergency, the department shall issue its determination under WAC 173-340-500(4) before an enforcement order can become effective. Failure to comply with an enforcement order may result in substantial liability for costs and penalties as specified in RCW 70.105D.050.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-540, filed 4/3/90, effective 5/4/90.]

WAC 173-340-545 Private rights of action. (1) **Purpose.** A private right of action is a legal claim authorized by RCW 70.105D.080 under which a person may recover costs of remedial action from other persons liable under the act. RCW 70.105D.080 limits recovery of remedial action costs to those remedial actions that, when evaluated as a whole, are the substantial equivalent of a department-conducted or

department-supervised remedial action. The purpose of this section is to facilitate private rights of action and minimize department staff involvement in these actions by providing guidance to potentially liable persons and the court on what remedial actions the department would consider the substantial equivalent of a department-conducted or department-supervised remedial action. In determining substantial equivalence, the department anticipates the requirements in this section will be evaluated as a whole and that a claim would not be disallowed due to omissions that do not diminish the overall effectiveness of the remedial action.

(2) **Substantial equivalent.** For the purposes of this section, the department considers the following remedial actions to be the substantial equivalent of a department-conducted or department-supervised remedial action.

(a) A remedial action conducted by the department;

(b) A remedial action that has been or is being conducted under an order or decree and the remedial requirements of the order or decree have been satisfied for those portions of the remedial action for which the private right of action is being sought; or

(c) A remedial action that has been conducted as an independent remedial action that includes the following elements:

(i) Information on the site and remedial actions conducted has been reported to the department in accordance with WAC 173-340-300, 173-340-450 and 173-340-515, as applicable;

(ii) The department has not objected to the remedial action being conducted or any such objection has been cured as determined by the court;

(iii) Except for emergency remedial actions, before conducting an interim action or cleanup action, reasonable steps have been taken to provide advance public notice;

(iv) The remedial actions have been conducted substantially equivalent with the technical standards and evaluation criteria described in subsection (4) of this section; and

(v) For facilities where hazardous substances have been disposed of as part of the remedial action, documentation is available indicating where these substances were disposed of and that this disposal was in compliance with applicable state and federal laws. It is not the intent of this provision to require extensive documentation. For example, if the remedial action results in solid wastes being transported off-site for disposal, it would be sufficient to have records indicating the wastes have been disposed of at a permitted solid waste or hazardous waste landfill.

(3) **Public notice requirements.** This subsection shall be used to determine if reasonable steps have been taken to provide advance public notice under subsection (2)(c)(iii) of this section. These public notice procedures apply only to interim actions or cleanup actions conducted as independent remedial actions after December 25, 1993. The notice may be combined with any notices under another law. For interim actions or cleanup actions conducted as independent remedial actions before December 25, 1993, the department recognizes little or no public notification typically occurred because there were no department-specified requirements other than the reporting requirements in this chapter. For these actions, this chapter contains no other specific public notice requirements or guidance, and the court will need to determine such requirements, if any, on a case-by-case basis. For independent remedial actions consisting of site investigations and studies, it is anticipated that public notice would not normally be done since often these early phases of work are to determine if a release even requires an interim action or cleanup action. For the purposes of this section only, unless the court determines other notice procedures are adequate for the site-specific circumstances, the following constitutes adequate public notice for independent remedial actions and supersedes the requirements in WAC 173-340-600:

(a) Except for emergency remedial actions, written notification has been mailed at least fifteen days before beginning construction of the interim action or cleanup action to the last known address of the following persons:

(i) The department (which shall publish a summary of the notice in the *Site Register*);

(ii) The local jurisdictional health department/district;

(iii) The town, city or county with land use jurisdiction;

(iv) The land owners identified by the tax assessor at the time the action is begun for that portion of the facility where the interim action or cleanup action is being conducted; and

(v) Persons potentially liable under RCW 70.105D.040 known to the person conducting the interim action or cleanup action. In identifying persons potentially liable under RCW 70.105D.040 who are to be noticed under this provision, the person conducting the remedial action need only make a reasonable effort to review information currently readily available. Where the interim action or cleanup action is complex, written notification before beginning detailed design is recommended but not required. For emergency remedial actions, written notice should be provided as soon as practicable;

(b) The written notification includes: A brief statement describing the releases being remedied and the interim actions or cleanup actions expected to be conducted; the schedule for these interim actions or cleanup actions; and, for persons potentially liable under RCW 70.105D.040 known to the person conducting the interim actions or cleanup actions, a statement that they could be held liable for the costs of remedial actions being conducted; and

(c) Posting a sign at the site at a location visible to the general public indicating what interim actions or cleanup actions are being conducted and identifying a person to contact for more information. Except for emergency remedial actions this sign should be posted not later than the beginning of construction of any interim action or cleanup action and should remain posted for the duration of the construction. For emergency remedial actions posting of a sign should be done as soon as practicable;

(4) **Technical standards and evaluation criteria.** This subsection shall be used to determine if the remedial actions have been conducted substantially equivalent with the technical standards and evaluation criteria contained in this chapter. For the purposes of this section, remedial actions shall be deemed to comply with subsection (2)(c)(iv) of this section if they have been conducted substantially equivalent with the technical standards and evaluation criteria contained in the following sections, where applicable. Except for a restrictive covenant under WAC 173-340-440, where documents are required by the following sections, the documents prepared need not be the same in title or format. Other documents can be used in place of the documents specified in these sections as long as sufficient information is included in the record to

serve the same purpose. When using the following sections to determine substantial equivalence it should be recognized that there are often many alternative methods for cleanup of a facility that would comply with these provisions. When this chapter requires a consultation with, or an approval or determination by the department, such a consultation, approval or determination is not necessary for remedial actions to meet the substantial equivalence requirement under this section; however, the remedial action must still be conducted substantially equivalent with the substantive requirements of those provisions. In applying these sections, reference should be made to the other applicable sections of this chapter, with particular attention to WAC 173-340-130 (Administrative principles), WAC 173-340-200 (Definitions), and WAC 173-340-210 (Usage).

(a) WAC 173-340-350 (Remedial investigation/feasibility study);

(b) WAC 173-340-355 (Development of cleanup action alternatives that include remediation levels);

(c) WAC 173-340-357 (Quantitative risk assessment of cleanup action alternatives);

(d) WAC 173-340-360 (Selection of cleanup actions);

(e) WAC 173-340-380 (Cleanup action plan);

(f) WAC 173-340-400 (Cleanup actions);

(g) WAC 173-340-410 (Compliance monitoring requirements);

(h) WAC 173-340-430 (Interim actions);

(i) WAC 173-340-440 (Institutional controls);

(j) WAC 173-340-450 (Releases from underground storage tanks);

(k) WAC 173-340-700 through 173-340-760 (Cleanup standards); and

(l) WAC 173-340-810 through 173-340-850 (General provisions).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-545, filed 2/12/01, effective 8/15/01.]

WAC 173-340-550 Payment of remedial action costs. (1) Policy. RCW 70.105D.050(3) requires that the state seek to recover the amounts spent by the department for investigative and remedial actions and orders. It is the department's intention to recover those costs which are reasonably attributable to individual sites. Timing of cost recovery for individual sites will be considered on a case-by-case basis, however, the department may demand, and generally requires, payment of costs as they are incurred.

(2) Costs. Each person who is liable under chapter 70.105D RCW is liable for remedial action costs incurred by the department. Remedial action costs are costs reasonably attributable to the site and may include costs of direct activities, support costs of direct activities, and interest charges for delayed payments. The department may send its request for payment to all potentially liable persons who are under an order or decree for the remedial action costs at the site. The department shall charge an hourly rate based on direct staff costs plus support costs. It is the department's intention that the resulting hourly rate charged be less than the hourly rate typically charged by a comparably sized consulting firm providing similar services. The department shall use the following formula for computing hourly rates:

Hourly Rate = DSC + DSC(ASCM) + DSC(PSCM), where:

DSC = Direct Staff Costs defined in (a) of this subsection.

ASCM = Agency Support Cost Multiplier defined in (b) of this subsection.

PSCM = Program Support Cost Multiplier defined in (c) of this subsection.

(a) Costs of direct activities are direct staff costs and other direct costs. Direct staff costs (DSC) are the costs of hours worked directly on a contaminated site, including salaries, retirement plan benefits, Social Security benefits, health care benefits, leave and holiday benefits, and other benefits required by law to be paid to, or on behalf of, employees. Other direct costs are costs incurred as a direct result of department staff working on a contaminated site including, for example, costs of: Travel related to the site, printing and publishing of documents about the site, purchase or rental of equipment used for the site, and contracted work for the site.

(b) Agency support costs are the costs of facilities, communications, personnel, fiscal, and other statewide and agency-wide services. The agency support cost multiplier (ASCM) used shall be the agency indirect rate approved by the agency's federal cognizant agency (which, as of July 1, 1993, was the United States Department of the Interior) for each fiscal year.

(c) Program support costs are the costs of administrative time spent by site managers and other staff who work directly on sites and a portion of the cost of management, clerical, policy, computer, financial, citizen technical advisor, and other support provided by other program staff to site managers and other staff who work directly on sites. Other activities of the toxics cleanup program not included in program support costs include, for example, community relations not related to a specific site, policy development, and a portion of the cost of nonsite management, clerical, policy, computer, financial, and other support staff. The program support cost multiplier (PSCM) used shall be calculated by dividing actual program support costs by the direct staff costs of all hours charged to site related work. This multiplier shall be evaluated at least biennially and any changes published in at least two publications of the *Site Register*. The calculation and source documents used in any revision shall be audited by either the state auditor's office or a private accounting firm. Audit results shall be available for public review. This multiplier shall not exceed 1.0 (one).

(3) Request for payment. When the department requests payment of remedial action costs it shall provide an itemized statement documenting the costs incurred.

(4) Interest charges. A charge of twelve percent interest (annual percentage rate, compounded monthly) shall accrue on all remedial action costs not paid within ninety days of the billing date, or within another longer time period designated by the department.

(5) Natural resource damages. Nothing in this section shall affect the authority of the department and the office of attorney general to recover natural resource damages.

(6) Independent remedial actions.

(a) The department may collect, from persons requesting a site-specific technical consultation under WAC 173-340-

515, the costs incurred by the department in providing such advice and assistance.

(b) For situations where the department has decided to collect its costs, a refundable deposit of a reasonable amount will be required. The department's hourly costs shall be determined based on the method in WAC 173-340-550(2).

(c) The department's Toxics Cleanup Program manager or designee may make a discretionary, nonappealable decision on whether a person is eligible for a waiver of fees based on that person's ability to pay.

(d) The department shall waive collection of its costs, where appropriate, in providing technical assistance in support of an appropriate level of public participation or where the department's time in responding to the request is de minimis.

(7) Prepayment of costs.

(a) Persons potentially liable under this chapter or seeking a prospective purchaser agreement may request the department's oversight of remedial actions through a prepayment agreement. The purpose of such an agreement is to enable department oversight of remedial actions at lower priority sites. The department shall make a determination that such an agreement is in the public interest. A prepayment agreement requires a person to pay the department's remedial action costs, in advance, allowing the department to increase staff for the unanticipated workload. Agreements may cover one or more facilities. Whether the department can respond favorably to a request for a prepayment agreement will depend, in part, on the department and attorney general receiving authorization for the staffing necessary to implement the agreement. Persons interested in such an agreement are encouraged to contact the department early on to informally discuss the potential for using such an agreement at a facility.

(b) Prepayment agreements do not replace an order or decree but are preliminary to or work in conjunction with such documents. Persons entering into a prepayment agreement shall enter into good faith negotiations on an agreed order or consent decree governing remedial actions at the facility in accordance with the procedures described in WAC 173-340-520(1) or 173-340-530(2). Failure to successfully conclude such negotiations may result in the department withdrawing from the prepayment agreement or initiating enforcement action.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-550, filed 2/12/01, effective 8/15/01. Statutory Authority: RCW 70.105D.030 (1)(f), 70.105D.040(2) and SB 5404. 93-24-064, § 173-340-550, filed 11/24/93, effective 12/25/93. Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-550, filed 4/3/90, effective 5/4/90.]

WAC 173-340-560 Mixed funding. (1) Introduction. Under RCW 70.105D.070 (2)(d)(xi), the department may provide public funds from the state toxics control account to a potentially liable person for the purpose of assisting with the payment of remedial action costs regardless of when incurred. This assistance can be provided in the form of a loan or a contribution, in cash or in kind. Any funding decision under this section is solely the responsibility of the director.

(2) Applicability and request.

(a) Mixed funding shall be provided only to potentially liable persons whom the department has found to be eligible and who have entered into a consent decree with the department under the requirements of this chapter.

(b) The consent decree shall identify remedial action tasks to be addressed by the mixed funding, costs to be borne by the potentially liable person, costs to be borne by the state toxics control account and terms of the agreement. In the case of loans, the consent decree shall also define any terms and conditions under which the potentially liable person receiving mixed funding has agreed to reimburse the state toxics control account.

(c) The potentially liable person shall submit sufficient documentation to support its request for mixed funding.

(3) Eligibility and mixed funding criteria. The director shall make a determination, based upon specific criteria whether a proposal is eligible for funding. The only circumstances under which mixed funding can be approved by the department are when the funding will achieve both:

(a) A substantially more expeditious or enhanced cleanup than would otherwise occur; and

(b) The prevention or mitigation of unfair economic hardship. In considering this criterion the department shall consider the extent to which mixed funding will either:

(i) Prevent or mitigate unfair economic hardship faced by the potentially liable person if the remedial action plan were to be implemented without public funding; or

(ii) Achieve greater fairness with respect to the payment of remedial action costs between the potentially liable person entering into a consent decree with the department and any nonsettling potentially liable persons.

(4) Funding decision. The department may have informal discussions on mixed funding. If a potentially liable person is found to be eligible for mixed funding, the director shall make a determination regarding the amount of funding to be provided, if any. This shall be determined at the discretion of the director and is not subject to review. A determination of eligibility is not a funding commitment. Actual funding will depend on the availability of funds.

(5) The department may recover the amount of public funding spent on investigations and remedial actions from potentially liable persons who have not entered into a consent decree under this chapter. For purposes of such cost recovery action, the amount in mixed funding attributed to the site shall be considered as remedial action costs paid by the department.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-560, filed 4/3/90, effective 5/4/90.]

PART VI—PUBLIC PARTICIPATION

WAC 173-340-600 Public notice and participation. (1) Purpose. Public participation is an integral part of the department's responsibilities under the Model Toxics Control Act. The department's goal is to provide the public with timely information and meaningful opportunities for participation that are commensurate with each site. The department will meet this goal through a public participation program that includes: The early planning and development of a site-specific public participation plan; the provision of public

notices; a site register; public meetings or hearings; and the participation of regional citizens' advisory committees.

(2) Other requirements. In addition to the requirements in this section, other sections of this chapter contain specific notice requirements that must also be followed. See WAC 173-340-720 for notice requirements on an off-property conditional point of compliance and cleanup levels for ground water flowing into nearby surface water; WAC 173-340-545 for public notice requirements for private rights of action; WAC 173-340-440 for local government notification requirements for restrictive covenants; and WAC 173-340-310 for public notice requirements for emergency or interim actions required by the department as a result of an initial investigation.

(3) Criteria. In order to promote effective and meaningful public participation, the department may determine that public participation opportunities in addition to those specifically required by chapter 70.105D RCW, or this chapter, are appropriate and should be provided. In making this determination, the department may consider:

(a) Known or potential risks to human health and the environment that could be avoided or reduced by providing information to the public;

(b) Public concerns about the facility;

(c) The need to contact the public in order to gather information about the facility;

(d) The extent to which the public's opportunity to affect subsequent departmental decisions at the facility may be limited or foreclosed in the future;

(e) The need to prevent disclosure of confidential, unverified, or enforcement-sensitive information;

(f) The routine nature of the contemplated remedial action; and

(g) Any other factors as determined by the department.

(4) Public notice. Whenever public notice is required by chapter 70.105D RCW, the department shall, at a minimum, provide or require notice as described in this section except as specified for the biennial report in WAC 173-340-340.

(a) Request for notice. Notice shall be mailed to persons who have made a timely request. A request for notice is timely if received before or during the public comment period for the current phase of remedial action at the facility. However, the receipt of a request for notice shall not require the department to extend the comment period associated with the notice.

(b) Mail. Notice shall be mailed to persons who reside within the potentially affected vicinity of the proposed action. The potentially affected vicinity shall include all property within and contiguous to the site and any other area that the department determines to be directly affected by the proposed action.

(c) Newspaper publication. Notice of the proposed action shall be published in the newspaper of largest circulation in the city or county of the proposed action, by one or more of the following methods: Display ad; legal notice; or any other appropriate format, as determined by the department.

(d) Other news media. Notice of the proposed action shall be mailed to any other news media that the department determines to be appropriate. The department may consider how a medium compares with the newspaper of largest circulation in terms of: Audience reached; timeliness; adequacy in conveying the particular information in the notice; cost; or other relevant factors.

(e) Comment periods. All public notices shall indicate the public comment period on the proposed action. Unless stated otherwise, comment periods shall be for thirty days at a minimum. The department may extend the public comment period, as appropriate.

(f) Combining public comment requirements. Whenever reasonable, the department shall consolidate public notice and opportunities for public comment under this chapter with public notice and comment requirements under other laws and regulations.

(g) Site-specific risk assessment. For public notices describing cleanup plans that use site-specific risk assessment or would restrict future site or resource use, the public notice shall specifically identify the restrictions and invite comments on these elements of the cleanup plan. This notice shall also include a statement indicating the availability of public participation grants and of the department's citizen technical advisor for providing technical assistance to citizens on site-specific risk assessment and other issues related to site remediation.

(5) Public meetings. During any comment period announced by a public notice issued under this chapter, if ten or more persons request a public meeting on the subject of the public notice, the department shall hold a public meeting for the purpose of receiving comments.

(6) Additional methods. In addition to "public notice" required by chapter 70.105D RCW, or this chapter, the department may use any of the following methods to provide information to the public:

(a) Press releases;

(b) Fact sheets;

(c) Public meetings;

(d) Publications;

(e) Personal contact by department employees;

(f) Posting signs at the facility;

(g) Notice in the *Site Register*;

(h) Notice through the internet;

(i) Any other methods as determined by the department.

(7) *Site Register*. The department shall regularly publish, make available electronically, and maintain a publication called the *Site Register*, which provides notice of the following:

(a) Determinations of no further action under WAC 173-340-320;

(b) Results of site hazard rankings;

(c) Availability of annual and biennial reports;

(d) Issuance of enforcement orders, agreed orders, or proposed consent decrees;

(e) Public meetings or hearings;

(f) Scoping notice of department-conducted remedial investigation/feasibility study;

(g) Availability of remedial investigation/feasibility study reports and draft and final cleanup plans;

(h) Change in site status or placing sites on or removing sites from the hazardous sites list under WAC 173-340-330;

(i) Availability of engineering design reports under WAC 173-340-400;

(j) Schedules developed under WAC 173-340-140;

(k) Reports of independent cleanup actions received under WAC 173-340-300;

(l) Beginning of negotiations or discussions under WAC 173-340-520 and 173-340-530;

(m) Deadline extensions or missed deadlines under WAC 173-340-140;

(n) A summary of any notices received under WAC 173-340-545 for cleanup actions and interim actions being conducted where a private right of action is anticipated;

(o) A list of available department publications, including guidance, technical reports and policies pertinent to remedial actions;

(p) The results of department review of reports on independent remedial actions submitted under WAC 173-340-515; and

(q) Any other notice that the department considers appropriate for inclusion.

(8) Evaluation. As part of requiring or conducting a remedial action at any facility, the department shall evaluate public participation needs at the facility. The evaluation shall include an identification of the potentially affected vicinity for the remedial action. For sites where site-specific risk assessment is used, the department shall also evaluate public interest in the site, significant public concerns regarding future site use, and public values to be addressed through the public participation plan.

(9) Public participation plans.

(a) Scope. The public participation plans required by this section are intended to encourage a coordinated and effective public involvement tailored to the public's needs at a particular facility. The scope of a plan shall be commensurate with the nature of the proposed remedial actions; the level of public concern; and the risks posed by the facility.

(b) Early planning encouraged. In order to develop an appropriate plan, the department or potentially liable person (if submitting a plan to the department) should engage in an early planning process to assess the public participation needs at the facility. This process may include identifying and conferring with individuals, community groups, local governments, tribes, public agencies, or any other organizations that may have an interest in or knowledge of the facility.

(c) Plan development. The department shall develop the plan, or work with the potentially liable person to develop the plan. If a plan already exists for a facility, the department shall consider whether the existing plan is still appropriate or whether the plan should be amended. For example, a plan originally developed to address a remedial investigation/feasibility study may need to be amended to address implementation phases.

(d) Plans required. As part of requiring or conducting a remedial action, except emergency actions, at any site that has been assigned a hazard ranking score, the department shall ensure that a public participation plan is developed and implemented. The department may also require the development of a public participation plan as part of an agreed order (see WAC 173-340-530) or consent decree (see WAC 173-340-520) for facilities that have not been assigned a hazard ranking score.

(e) If the variables proposed to be modified in a site-specific risk assessment or alternative reasonable maximum exposure scenario may affect the significant public concerns regarding future land uses and exposure scenarios, then the department shall assure appropriate public involvement and comment opportunities will occur as identified in the public participation plan.

(f) Plan as part of order or decree. A potentially liable person will ordinarily be required to submit a proposed public participation plan as part of its request for an agreed order or a consent decree. If a plan already exists for the facility, the potentially liable person may either resubmit the existing plan with any proposed amendments or submit an entirely new proposed plan. The proposed plan may be revised during the course of discussions or negotiations on the agreed order (see WAC 173-340-530) or consent decree (see WAC 173-340-520).

The final public participation plan may become part of the agreed order or consent decree.

(g) Contents. The public participation plan shall include the following:

(i) Applicable public notice requirements and how these will be met, including: When public notice will occur; the length of the comment periods accompanying each notice; the potentially affected vicinity and any other areas to be provided notice, to the extent known.

(ii) Information repositories. The plan should identify at least one location where the public can review information about the remedial action. Multiple locations may be appropriate.

(iii) Methods of identifying the public's concerns. Such methods may include: Interviews; questionnaires; meetings; contacts with community groups or other organizations that have an interest in the site; establishing citizen advisory groups for sites; or obtaining advice from the appropriate regional citizens' advisory committee.

(iv) Methods of addressing the public's concerns and conveying information to the public. These may include any of the methods listed in subsection (6) of this section.

(v) Coordination of public participation requirements. The plan should identify any public participation requirements of other applicable federal, state or local laws, and address how such requirements can be coordinated. For example, if Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) applies to the proposed action, the plan should explain how CERCLA and this chapter's public comment periods will be coordinated.

(vi) Amendments to the plan. The plan should outline the process for amending the plan. Any amendments must be approved by the department.

(vii) Citizen technical advisor: A statement indicating the availability of the department's citizen technical advisor for providing technical assistance to citizens on issues related to the investigation and cleanup of the site.

(viii) Any other elements that the department determines to be appropriate for inclusion in the final public participation plan.

(h) Implementation. The department shall retain approval authority over the actions taken by a potentially liable person to implement the plan.

(10) Consent decrees. In addition to any other applicable public participation requirements, the following shall be required for consent decrees.

(a) Public participation plan. A plan meeting the requirements of subsection (9) of this section shall be developed when required by subsection (9)(d) of this section.

(b) Notice of negotiations. When the department decides to proceed with negotiations it shall place a notice in the *Site Register* advising the public that negotiations have begun. This notice shall include the name of the facility, a general description of the subject of the consent decree and the deadlines for negotiations.

(c) Notice of proposed decree. The department shall provide or require public notice of proposed consent decree. The notice may be combined with notice of other documents under this chapter, such as a cleanup action plan, or under other laws. The notice shall briefly:

(i) Identify and generally describe the facility;

(ii) Identify the person(s) who are parties to the consent decree;

(iii) Generally describe the remedial action proposed in the proposed consent decree, including institutional controls and permit exemptions authorized under RCW 70.105D.090;

(iv) Indicate the date, place, and time of the public hearing on the proposed consent decree. Where a public hearing is not planned, indicate that a public hearing will only be held if at least ten persons request one and the procedures for requesting a public hearing; and

(v) Invite the public to comment at the public hearing (if applicable) or in writing. The public comment period shall run for at least thirty days from the date of the issuance of the notice.

(d) Public hearing. The department shall hold a public hearing on the proposed consent decree for the purpose of providing the public with an opportunity to comment whenever ten or more persons request a public hearing or whenever the department determines a public hearing is necessary.

(e) Revisions. If the state and the potentially liable person agree to substantial changes to the proposed consent decree, the department shall provide additional public notice and opportunity to comment.

(f) Extensions. The department shall publish in the next *Site Register* the extension of deadlines for designated high priority sites.

(11) Agreed orders. In addition to any other applicable public participation requirements, the following shall be required for agreed orders under WAC 173-340-530.

(a) Public participation plan. A plan meeting the requirements of subsection (9) of this section shall be developed when required by subsection (9)(d) of this section.

(b) Notice of discussions. When the department decides to proceed with discussions it shall place a notice in the *Site Register* advising the public that discussions have commenced. This notice shall include the name of the facility, a general description of the subject of the order and the deadlines for discussions.

(c) Notice of agreed orders. Public notice shall be provided by the department for any agreed order. For all agreed orders, notice shall be mailed no later than three days after the issuance of the agreed order. For all agreed orders, the comment period shall be at least thirty days. The agreed order may be effective before the comment period is over, unless the department determines it is in the public interest to complete the public comment period before the effective date of the agreed order. The department may determine that it is in the public interest to provide public notice before the effective date of any agreed order or to hold a public meeting or hearing on the agreed order. Notice of agreed orders shall briefly:

(i) Identify and generally describe the facility;

(ii) Identify the person(s) who are parties to the agreed order;

(iii) Generally describe the remedial action proposed in the proposed agreed order, including institutional controls and permit exemptions authorized under RCW 70.105D.090; and

(iv) Invite the public to comment on the proposed agreed order.

(d) Revisions. If the department and the potentially liable person agree to substantial changes to the proposed agreed order, the department shall provide additional public notice and opportunity to comment.

(e) Extensions. The department shall publish in the next *Site Register* the extension of deadlines for designated high priority sites.

(12) Enforcement orders. In addition to any other applicable public participation requirements, the department shall provide public notice of all enforcement orders. Except in the case of emergencies, notice shall be mailed no later than three days after the date of the issuance of the order. In emergencies, notice shall be mailed no later than ten days after the issuance of the order.

(a) Contents of notice. All notices shall briefly:

(i) Identify and generally describe the facility;

(ii) Identify the person(s) who are parties to the order;

(iii) Generally describe the terms of the proposed order, including institutional controls and permit exemptions authorized under RCW 70.105D.090; and

(iv) Invite the public to comment on the proposed order.

(b) The department may amend the order on the basis of public comments. The department shall provide additional public notice and opportunity to comment if the order is substantially changed.

(13) Remedial investigation/feasibility study. In addition to any other applicable public participation requirements, the following shall be required during a remedial investigation/feasibility study.

(a) Scoping. When the department elects to perform a remedial investigation/feasibility study, the department shall provide public notice and an opportunity to comment on the scope of the remedial investigation/feasibility study.

(b) Extensions. The department shall publish in the next *Site Register* the extension of deadlines for designated high priority sites.

(c) Report. The department shall provide or require public notice of remedial investigation/feasibility study reports prepared under WAC 173-340-350. This public notice may be combined with public notice of the draft cleanup action plan. At a minimum, public notice shall briefly:

(i) Describe the site and remedial investigation/feasibility study results;

(ii) If available, identify the department's proposed cleanup action and provide an explanation for its selection;

(iii) Invite public comment on the report. The public comment period shall extend for at least thirty days from the date of mailing of the notice.

(14) Selection of cleanup actions. In addition to any other applicable public participation requirements, the department shall:

(a) Provide a notice of availability of draft or final cleanup action plans and a brief description of the proposed or selected alternative in the *Site Register*;

(b) Provide public notice of the draft cleanup action plan. A notice of a draft cleanup plan may be combined with notice on the remedial investigation/feasibility study. Notice of a draft cleanup action plan may be combined with notice on a draft consent decree or on an order. At a minimum, public notice shall briefly:

(i) Describe the site;

(ii) Identify the department's proposed cleanup action and provide an explanation for its selection;

(iii) Invite public comment on the draft cleanup action plan. The public comment period shall run for at least thirty days from the date of publication of the public notice.

(c) Whenever the cleanup action plan proposes a restrictive covenant as part of the draft cleanup plan, provide notice to and seek comments from the city or county department with land use planning authority for real property subject to the restrictive covenant. The purpose of this notification is to solicit comment on whether the proposed restrictive covenant is consistent with any current or proposed land use plans.

(15) Cleanup action implementation. In addition to any other applicable public participation requirements, the following shall be required during cleanup action implementation.

(a) Public notice and opportunity to comment on any plans prepared under WAC 173-340-400 that represent a substantial change from the cleanup action plan.

(b) When the department conducts a cleanup action, public notice and an opportunity to comment shall be provided on the engineering design report and notice shall be given in the *Site Register*.

(16) Routine cleanup and interim actions. In addition to any other applicable public participation requirements, the following will be required for routine cleanup actions and interim actions.

(a) Public notice shall be provided for any proposed routine cleanup or interim actions. This public notice shall be combined with public notice of an order or settlement whenever practicable.

(b) At a minimum, public notice shall briefly:

(i) Describe the site;

(ii) Identify the proposed action, including institutional controls and the permit exemptions authorized under RCW 70.105D.090;

(iii) Identify the likely or planned schedule for the action;

(iv) Reference any planning documents prepared for the action;

(v) Identify department staff who may be contacted for further information; and

(vi) Invite public comment on the routine cleanup or interim action. The public comment period shall extend for at least thirty days from the date of the mailing of notice.

(17) Public participation grants. RCW 70.105D.070(4) requires funds be allocated for public participation grants to persons, including groups who may be adversely affected by a release or threatened release of a hazardous substance. Persons interested in applying for such grants are encouraged to contact the department to learn about available funding, grant application procedures and deadlines. See chapter 173-321 WAC for additional information on public participation grants.

(18) Technical assistance. There is created within the department a citizen technical advisor office to provide independent technical assistance to citizens concerning the Model Toxics Control Act and remedial actions occurring under the act. This office will be established upon the effective date of this rule revision and continue for three years. Before the end of the three-year period, the department will work with citizen and business representatives to evaluate the effectiveness of this office and to determine whether the office should continue. The costs of this office shall be recovered by the department as provided for in WAC 173-340-550.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-600, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-600, filed 4/3/90, effective 5/4/90.]

WAC 173-340-610 Regional citizens' advisory committees. (1) The department shall establish regional citizens' advisory committees as part of a public participation program. The regional citizens' advisory committees are intended to promote meaningful and effective public involvement in the department's remedial action program under chapter 70.105D RCW. The committees will advise the department as to the concerns of citizens locally and regionally regarding the remedial actions within each committee's region, with emphasis on issues that affect the region as a whole, rather than site-specific concerns.

(2) Location. There shall be a regional citizens' advisory committee representing each geographic region of the state served by a regional office of the department.

(3) Membership. At any time, each committee shall have no fewer than five and no more than twelve members. The director shall, no later than July 1, 1990, appoint five members to each committee to represent citizens' interests in the region. These members shall serve three-year terms that may be renewed at the director's discretion. These members should represent citizen interests in the region.

(a) The director may appoint up to seven additional members to represent communities that may be affected by the remedial actions within each region. These members shall serve two-year terms that may be renewed at the director's discretion.

(b) At no time shall more than twenty-five percent of the membership of any committee consist of persons who are elected or appointed public officials or their representatives.

(c) The department shall advise the public as to whether any vacancies exist on the committees, and shall accept applications from interested citizens.

(d) The following persons shall not be eligible to serve on any committee:

(i) Persons whom the department has found are potentially liable persons under WAC 173-340-500 with regard to any facility that is currently the subject of department inves-

tigative, remedial or enforcement actions, not including compliance monitoring;

(ii) Agents or employees of such potentially liable persons as described in (d)(i) of this subsection; and

(iii) Agents or employees of the department.

(e) A member shall refrain from participating in a committee matter if that member for any reason cannot act fairly and in the public interest with regard to that matter.

(f) The director may dismiss a member for cause in accordance with the terms of the regional citizens' advisory committee charter.

(4) Meetings. The committees shall meet at least twice a year at the regional offices or elsewhere as agreed upon by a committee and the department. Appropriate department staff may attend these meetings. The department shall brief the committees on the program's major planned and ongoing activities for the year.

(a) The department and the committees may agree to additional meetings.

(b) Each committee will designate one of its members to serve as chair. The committee chairs shall meet every year with the program manager or his/her designee.

(c) All committee meetings shall be open to the public. The department shall inform the public of committee meetings.

(5) Resources allocated to the committees.

(a) The department shall determine, after consulting with the committees, the amount of staff time and other department resources that shall be available to the committees for each biennium.

(b) The department shall designate staff to work with the committees.

(c) Members shall be reimbursed for travel expenses (as provided for in chapter 43.03 RCW) for any meetings approved by the department.

(6) Responsibilities. The committees are directed to:

(a) Meet at least twice annually;

(b) Inform citizens within each region as to the existence of the committees and their availability as a resource;

(c) Review the department's biennial program priorities, and advise the department of citizen concerns regarding the program priorities;

(d) Advise the department of community concerns about the cleanup program's activities and develop proposals for addressing these concerns. Committees may use issues at specific sites as a foundation for understanding regional issues;

(e) Annually prepare a brief report to the department describing:

(i) Major citizen concerns that have been brought to the committee's attention during the past year;

(ii) Any committee proposals or recommendations to address these concerns;

(iii) The committee's plans for the coming year; and

(iv) Any other information or issues which the committee believes appropriate for inclusion.

(f) The committees are encouraged to work with the department and the public to develop additional committee goals or responsibilities.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-610, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-610, filed 4/3/90, effective 5/4/90.]

PART VII—CLEANUP STANDARDS

WAC 173-340-700 Overview of cleanup standards. (1) **Purpose.** This section provides an overview of the methods for establishing cleanup standards that apply to a release or threatened release of a hazardous substance at a site. If there are any inconsistencies between this section and any specifically referenced section, the referenced section shall govern.

(2) **Explanation of term "cleanup level."** A cleanup level is the concentration of a hazardous substance in soil, water, air or sediment that is determined to be protective of human health and the environment under specified exposure conditions. Cleanup levels, in combination with points of compliance, typically define the area or volume of soil, water, air or sediment at a site that must be addressed by the cleanup action.

(3) **Explanation of term "cleanup standards."** Cleanup standards consist of the following:

(a) Cleanup levels for hazardous substances present at the site;

(b) The location where these cleanup levels must be met (point of compliance); and

(c) Other regulatory requirements that apply to the site because of the type of action and/or location of the site ("applicable state and federal laws").

(4) **Relationship between cleanup standards and cleanup actions.**

(a) Cleanup standards are identified for the particular hazardous substances at a site and the specific areas or pathways, such as land or water, where humans and the environment can become exposed to these substances. This part provides uniform methods statewide for identifying cleanup standards and requires that all cleanups under the act meet these standards. The actual degree of cleanup may vary from site to site and will be determined by the cleanup action alternative selected under WAC 173-340-350 through 173-340-390.

(b) For most sites, there are several cleanup technologies or combinations of cleanup technologies ("cleanup action alternatives") that may be used to comply with cleanup standards at individual sites. Other parts of this rule govern the process for planning and deciding on the cleanup action to be taken at a site. This may include establishing "remediation levels," or the concentrations of hazardous substances above which a particular cleanup technology will be applied. See WAC 173-340-350 through 173-340-390. WAC 173-340-355 contains detailed information on establishing remediation levels. WAC 173-340-410 specifies the monitoring required to ensure that the remedy is effective.

(c) Where a cleanup action involves containment of soils with hazardous substances above cleanup levels, the cleanup action may be determined to comply with cleanup standards, provided the compliance monitoring program is designed to ensure the long-term integrity of the containment system, and the other requirements for containment in this chapter are met.

(5) **Methods for setting cleanup levels.** The first step in setting cleanup levels is to identify the nature of the contamination, the potentially contaminated media, the current and potential pathways of exposure, the current and potential receptors, and the current and potential land and resource uses. A conceptual site model may be developed as part of this scoping process. Cleanup levels may then be established for each media. Both the conceptual site model and cleanup levels may be refined as additional information is collected during the remedial investigation/feasibility study. See WAC 173-340-708(3) for additional information on how to determine current and potential future land and resource uses for the conceptual site model. These rules provide three approaches for establishing cleanup levels:

(a) **Method A: ARARs and Tables.** On some sites, the cleanup action may be routine (WAC 173-340-200) or may involve relatively few hazardous substances. Under Method A, cleanup levels at these sites are set at concentrations at least as stringent as concentrations specified in applicable state and federal laws (ARARs) and Tables 720-1, 740-1, and 745-1 of this chapter.

Method A cleanup levels for hazardous substances that are deemed indicator hazardous substances at the site under WAC 173-340-708(2) and are not addressed under applicable state and federal laws or Tables 720-1, 740-1, and 745-1 must be established at concentrations which do not exceed the natural background concentration or the practical quantitation limit, whichever is higher.

For soil contamination, the potential impact of hazardous substances on terrestrial ecological receptors must be evaluated under WAC 173-340-7490 through 173-340-7494. Specifically, either an exclusion must be established for the site under WAC 173-340-7491 or a terrestrial ecological evaluation must be conducted under WAC 173-340-7492 or 173-340-7493. The terrestrial ecological evaluation may result in a more stringent Method A soil cleanup level than is required to protect human health.

Except where institutional controls are required by WAC 173-340-440(4), site cleanups that achieve Method A cleanup levels may be used without future restrictions on the property due to residual levels of contamination.

(b) **Method B: Universal method.** Method B is the universal method for determining cleanup levels for all media at all sites. Under Method B, cleanup levels for individual hazardous substances are established using applicable state and federal laws and the risk equations and other requirements specified in WAC 173-340-720 through 173-340-760.

Method B is divided into two tiers: Standard and modified. Standard Method B uses generic default assumptions to calculate cleanup levels. Modified Method B provides for the use of chemical-specific or site-specific information to change selected default assumptions, within the limitations allowed in WAC 173-340-708. Modified Method B may be used to establish cleanup levels.

Modified Method B may also be used in a quantitative risk assessment to help assess the protectiveness of a remedy by modifying input parameters as described in WAC 173-340-720 through 173-340-750 or by using other modifications that meet the requirements of WAC 173-340-702 and 173-340-708. See WAC 173-340-355 and 173-340-357 for more information on remediation levels and quantitative risk assessment.

For individual carcinogens, both standard and modified Method B cleanup levels are based upon the upper bound of the estimated excess lifetime cancer risk of one in one million (1×10^{-6}).

For individual noncarcinogenic substances, both standard and modified Method B cleanup levels are set at concentrations which are anticipated to result in no acute or chronic toxic effects on human health (that is, hazard quotient of one (1) or less) and no significant adverse effects on the propagation of aquatic and terrestrial organisms.

Where a hazardous waste site involves multiple hazardous substances and/or multiple pathways of exposure, then standard and modified Method B cleanup levels for individual substances must be adjusted downward for additive health effects in accordance with the procedures in WAC 173-340-708 if the total excess lifetime cancer risk for a site exceeds one in one hundred thousand (1×10^{-5}) or the hazard index for substances with similar noncarcinogenic toxic effects exceeds one (1).

For soil contamination, the potential impact of hazardous substances on terrestrial ecological receptors must be evaluated under WAC 173-340-7490 through 173-340-7494. Specifically, either an exclusion must be established for the site under WAC 173-340-7491 or a terrestrial ecological evaluation must be conducted under WAC 173-340-7492 or 173-340-7493. The terrestrial ecological evaluation may result in a more stringent Method B soil cleanup level for the site than is required to protect human health.

Except where institutional controls are required by WAC 173-340-440(4), site cleanups that achieve Method B cleanup levels may be used without future restrictions on the property due to residual levels of contamination.

(c) **Method C: Conditional method.** Compliance with cleanup levels developed under Method A or B may be impossible to achieve or may cause greater environmental harm. In those situations, Method C cleanup levels for individual hazardous substances may be established for surface water, ground water, and air. Method C industrial soil and air cleanup levels may also be established at industrial properties that meet the criteria in WAC 173-340-745.

Under Method C, cleanup levels for individual hazardous substances are established using applicable state and federal laws and the risk equations and other requirements specified in WAC 173-340-720 through 173-340-760. Method C is divided into two tiers: Standard and modified. Standard Method C uses generic default assumptions to calculate cleanup levels. Modified Method C provides for the use of chemical-specific or site-specific information to change selected default assumptions, within the limitations allowed in WAC 173-340-708. Modified Method C may be used to establish cleanup levels.

Modified Method C may also be used in a quantitative risk assessment to help assess the protectiveness of a remedy by modifying input parameters as described in WAC 173-340-720 through 173-340-750 or by using other modifications that meet the requirements of WAC 173-340-702 and 173-340-708. See WAC 173-340-355 and 173-340-357 for more information on remediation levels and quantitative risk assessment.

For individual carcinogens, both standard and modified Method C cleanup levels are based upon the upper bound of the estimated lifetime cancer risk of one in one hundred thousand (1×10^{-5}).

For individual noncarcinogenic substances, both standard and modified Method C cleanup levels are set at concentrations which are anticipated to result in no acute or chronic toxic effects on human health (that is, hazard quotient of one (1) or less) and no significant adverse effects on the protection and propagation of aquatic and terrestrial organisms.

Where a hazardous waste site involves multiple hazardous substances and/or multiple pathways of exposure, then both standard and modified Method C cleanup levels for individual substances must be adjusted downward for additive health effects in accordance with the procedures in WAC 173-340-708 if the total excess lifetime cancer risk for a site exceeds one in one hundred thousand (1×10^{-5}) or the hazard index for substances with similar noncarcinogenic toxic effects exceeds one (1).

For soil contamination, the potential impact of hazardous substances on terrestrial ecological receptors must be evaluated under WAC 173-340-7490 through 173-340-7494. Specifically, either an exclusion must be established for the site under WAC 173-340-7491 or a terrestrial ecological evaluation must be conducted under WAC 173-340-7492 or 173-340-7493. The terrestrial ecological evaluation may result in a more stringent Method C soil cleanup level for the site than is required to protect human health.

Site cleanups establishing Method C cleanup levels must have restrictions placed on the property (institutional controls) to ensure future protection of human health and the environment.

(6) **Requirements for setting cleanup levels.** Several requirements apply to cleanups under any of the three methods. Some of these requirements, such as the identification of applicable state and federal laws, describe analyses used along with Methods A, B or C in order to set cleanup levels for particular substances at a site. Others describe the technical procedures to be used.

(a) **Applicable state and federal laws.** RCW 70.105D.-030 (2)(d) requires the cleanup standards in these rules to be "at least as stringent as all applicable state and federal laws." In addition to establishing minimum requirements for cleanup standards, applicable state and federal laws may also impose certain technical and procedural requirements for performing cleanup actions. These requirements are described in WAC 173-340-710 and are similar to the "ARAR" (applicable, relevant and appropriate requirements) approach of the federal superfund law. Sites that are cleaned up under an order or decree may be exempt from obtaining a permit under certain other laws but they must still meet the substantive requirements of these other laws. (See WAC 173-340-710(9).)

(b) **Cross-media contamination.** In some situations, migration of hazardous substances from one medium may cause contamination in a second media. For example, the release of hazardous substances in soil may cause ground water contamination. Under Methods A, B, and C, cleanup levels must be established at concentrations that prevent violations of cleanup levels for other media.

(c) **Risk assessment procedures.** The analyses performed under Methods B and C use several default assumptions for defining cleanup levels for carcinogens and noncarcinogens. The individual default assumptions and procedures for modifying these assumptions based on site-specific information are specified in WAC 173-340-708 and 173-340-720 through 173-340-750. WAC 173-340-708 also provides rules for use of indicator hazardous substances. The standards for review of new scientific information are described in WAC 173-340-702 (14), (15) and (16).

(d) **Natural background and analytical considerations.** In some cases, cleanup levels calculated using the methods specified in this chapter are less than natural background levels or levels that can be reliably measured. In those situations, the cleanup level shall be established at a concentration equal to the practical quantitation limit or natural background concentration, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional information.

(7) **Procedures for demonstrating compliance with cleanup standards.** Setting cleanup standards also involves being able to demonstrate that they have been met. This involves specifying where on the site the cleanup levels must be met ("points of compliance"), how long it takes for a site to meet cleanup levels ("restoration time frame"), and conducting sufficient monitoring to demonstrate that the cleanup standards have been met and will continue to be met in the future. The provisions for establishing points of compliance are in WAC 173-340-720 through 173-340-750. The provisions for establishing restoration time frames are in WAC 173-340-360. The compliance monitoring plan prepared under WAC 173-340-410 specifies precisely how these are measured for each site. At sites where remediation levels are used, the compliance monitoring plan will also need to describe the performance monitoring to be conducted to demonstrate the remediation levels have been achieved.

(8) **Specific procedures for setting cleanup levels at petroleum contaminated sites.** In addition to the other requirements in this section, this chapter provides for the following specific procedures to establish cleanup levels at sites where there has been a release of total petroleum hydrocarbons (TPH) and hazardous substances associated with a release of TPH.

(a) For soil contamination, the potential impact of TPH on terrestrial ecological receptors must be evaluated under WAC 173-340-7490 through 173-340-7494. Specifically, either an exclusion must be established for the site under WAC 173-340-7491 or a terrestrial ecological evaluation must be conducted under WAC 173-340-7492 or 173-340-7493. The terrestrial ecological evaluation may result in a more stringent soil cleanup level than is required to protect human health.

(b) It is necessary to analyze for and evaluate certain carcinogenic and noncarcinogenic hazardous substances that may be associated with a release of TPH. These are identified in Table 830-1. In cases where the cleanup level for one or more of these associated hazardous substances is exceeded but the TPH cleanup level is not, the cleanup level shall be based on the associated hazardous substance.

(i) **Method A.** Method A may be used to establish cleanup levels for TPH and associated hazardous substances at qualifying sites (see WAC 173-340-704). At these sites,

the presence, location and concentration of TPH may be established by using the NWTPH method described under Method 6 (see WAC 173-340-830 (3)(a)(vi)). The NWTPH method is a simplified, and relatively inexpensive, analytical method for evaluating TPH. Method A cleanup levels have been determined for four common petroleum mixtures: Gasoline range organics (GRO), diesel range organics (DRO), heavy oils, and electrical insulating mineral oil, as well as many hazardous substances that may be associated with the TPH. A site owner may decide to use Method A for some substances or media and Method B or C for others, depending upon site conditions and qualifications.

(ii) **Method B and Method C tiered approach.** This chapter provides for a three-tiered approach for establishing Method B and Method C cleanup levels at sites that involve a release of TPH. These tiers are not required to be approached sequentially (that is, the process may be started at any tier). The tiered process allows one to calculate different cleanup levels for TPH and associated hazardous substances using progressively more complex and site-specific information, and also allows for basing the cleanup levels on the presence or absence of exposure pathways, determined as part of the conceptual site model. In establishing a TPH cleanup level using the tiered process, it is still necessary to comply with other requirements and procedures under WAC 173-340-700 through 173-340-750.

(A) **Conceptual site model.** The first step in setting Method B or C cleanup levels for TPH is to identify the nature of the contamination, the potentially contaminated media, the current and potential pathways of exposure, the current and potential receptors, and the current and potential land and resource uses. A conceptual site model should be developed as part of this scoping process. See WAC 173-340-708(3) for additional information on how to determine current and potential future land and resource uses for the conceptual site model.

(B) **General description of the three tiers.**

(I) Tier 1 consists of the standard Method B and Method C formulas and requirements under WAC 173-340-720 through 173-340-750 for each applicable pathway identified by the conceptual site model, including specific requirements set forth in those sections for petroleum mixtures.

(II) Tier 2 consists of the site-specific use of modified Method B and Method C formulas and requirements under WAC 173-340-720 through 173-340-750 for each applicable exposure pathway identified by the conceptual site model; and inclusion and development of additional, site-specific exposure pathways not addressed in Method A or Tier 1.

(III) Tier 3 consists of the site-specific use of standard or modified Method B and Method C formulas and requirements for each applicable exposure pathway identified by the conceptual site model and the use of new scientific information to establish a cleanup level as provided under WAC 173-340-702 (14), (15) and (16). It is considered a more complex evaluation in terms of technical sophistication (such as the use of new fate and transport models), data needs, cost and time.

(IV) A single tier may be used for all exposure pathways or more than one tier may be used when there are multiple exposure pathways.

(C) **Fractionated approach.** Method B and Method C cleanup levels for TPH are determined using the fractionated analytical approach for petroleum as described under Method 6 (see WAC 173-340-830 (3)(a)(vi)). This approach divides the TPH mixture into equivalent carbon numbers. Use of the fractionated approach requires testing or knowledge to define product composition as described under subsection (8)(b)(ii)(D) of this section ("Determination of product composition"). Cleanup levels are then calculated using reference doses that have been determined by the department for each fraction. Cleanup levels also need to consider the measured or predicted ability of the fractions to migrate from one medium to other media. Where multiple pathways of exposure for a particular medium are identified in the conceptual site model, the most stringent of the concentrations calculated for the various pathways becomes the cleanup level. For example, for soil contamination, if the direct contact and leaching pathways are potential exposure pathways, then a soil concentration would be calculated for each pathway and the lowest calculated concentration would become the cleanup level.

(D) **Determination of product composition.** Product composition may be determined by analyzing each sample in accordance with the VPH/EPH method described under Method 6 (see WAC 173-340-830 (3)(a)(vi)). Alternatively, product composition may be determined by one of the following methods:

(I) Correlation. Where WTPH or NWTPH methods described in Method 6 are used to collect and analyze the presence, location and concentration of TPH, knowledge of the fraction-specific composition of the petroleum released at the site may be based on analysis and correlation of a portion of the site samples with both the VPH/EPH and WTPH/NWTPH methods.

(II) Retrofitting. Where WTPH or NWTPH methods were used to collect and analyze the presence, location and concentration of TPH before the effective date of this provision, knowledge of the fraction-specific composition of the petroleum released at the site may be based on the fraction-specific composition assumptions used by the department to calculate Method A cleanup levels, which the department shall publish in guidance. If the identity of the petroleum product released at the site is not known, or is a mixture of products, retrofitting under this provision shall be based on the composition that yields the lowest TPH cleanup level.

(E) **Consultation with the department.** Because of the complexity of the development of site-specific Method B and Method C petroleum cleanup levels using the second or third tiers described above, or the use of correlated or retrofitted data, persons planning on using these methods are encouraged to contact the department to obtain appropriate technical guidance.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-700, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-700, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-700, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-700, filed 4/3/90, effective 5/4/90.]

WAC 173-340-702 General policies. (1) **Purpose.** This section defines the general policies and principles that shall be followed when establishing and implementing

cleanup standards. This section shall be used in combination with other sections of this chapter.

(2) **Policy on expediting cleanups.** Establishing cleanup standards and selecting an appropriate cleanup action involves many technical and public policy decisions. This chapter is intended to constrain the range of decisions made on individual sites to promote expeditious cleanups.

(3) **Goal for cleanups.** The Model Toxics Control Act contains policies that state, in part, each person has a fundamental and inalienable right to a healthful environment and it is essential that sites be cleaned up well. Consistent with these policies, cleanup standards and cleanup actions selected under this chapter shall be established that provide conservative estimates of human health and environmental risks that protect susceptible individuals as well as the general population.

(4) **Current and potential site and resource uses.** Cleanup standards and cleanup actions selected under this chapter shall be established that protect human health and the environment for current and potential future site and resource uses.

(5) **Presumption for cleanup actions.** Cleanup actions that achieve cleanup levels at the applicable point of compliance under Methods A, B, or C (as applicable) and comply with applicable state and federal laws shall be presumed to be protective of human health and the environment.

(6) **Cost considerations.** Except as provided for in applicable state and federal laws, cost shall not be a factor in determining what cleanup level is protective of human health and the environment. In addition, where specifically provided for in this chapter, cost may be appropriate for certain other determinations related to cleanup standards such as point of compliance. Cost shall, however, be considered when selecting an appropriate cleanup action.

(7) **Cleanup action alternatives.** At most sites, there is more than one hazardous substance and more than one pathway for hazardous substances to get into the environment. For many sites there is more than one method of cleanup (cleanup action component) that could address each of these. When evaluating cleanup action alternatives it is appropriate to consider a representative range of cleanup action components that could address each of these as well as different combinations of these components to accomplish the overall site cleanup.

(8) **Cross-media impacts.** The cleanup of a particular medium at a site will often affect other media at the site. These cross-media impacts shall be considered when establishing cleanup standards and selecting a cleanup action. Cleanup actions conducted under this chapter shall use appropriate engineering controls or other measures to minimize these cross-media impacts.

(9) **Relationship between cleanup levels and cleanup actions.** In general, cleanup levels must be met throughout a site before the site will be considered clean. A cleanup action that leaves hazardous substances on a site in excess of cleanup levels may be acceptable as long as the cleanup action complies with WAC 173-340-350 through 173-340-390. However, these rules are intended to promote thorough cleanups rather than long-term partial cleanups or containment measures.

(10) **Relationship to federal cleanup law.** When evaluating cleanup actions performed under the federal cleanup law, the department shall consider WAC 173-340-350, 173-340-355, 173-340-357, 173-340-360, 173-340-410, 173-340-420, 173-340-440, 173-340-450, 173-340-700 through 173-340-760, and 173-340-830 to be legally applicable requirements under Section 121(d) of the Federal Cleanup Law.

(11) **Reviewing and updating cleanup standards.** The department shall review and, as appropriate, update WAC 173-340-700 through 173-340-760 at least once every five years.

(12) **Applicability of new cleanup levels.**

(a) For cleanup actions conducted by the department, or under an order or decree, the department shall determine the cleanup level that applies to a release based on the rules in effect under this chapter at the time the department issues a final cleanup action plan for that release.

(b) In reviewing the adequacy of independent remedial actions, the department shall determine the cleanup level that applies to a release based on the rules in effect at the time the final cleanup action for that release began or in effect when the department reviews the cleanup action, whichever is less stringent.

(c) A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provisions in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment.

(d) Nothing in this subsection constitutes a settlement or release of liability under the Model Toxics Control Act.

(13) **Institutional controls.** Institutional controls shall be required whenever any of the circumstances identified in WAC 173-340-440(4) are present at a site.

(14) **Burden of proof.** Any person responsible for undertaking a cleanup action under this chapter who proposes to:

(a) Use a reasonable maximum exposure scenario other than the default provided for each medium;

(b) Use assumptions other than the default values provided for in this chapter;

(c) Establish a cleanup level under Method C; or

(d) Use a conditional point of compliance, shall have the burden of demonstrating to the department that requirements in this chapter have been met to ensure protection of human health and the environment. The department shall only approve of such proposals when it determines that this burden of proof is met.

(15) **New scientific information.** The department shall consider new scientific information when establishing cleanup levels and remediation levels for individual sites. In making a determination on how to use this new information, the department shall, as appropriate, consult with the science advisory board, the department of health, and the United States Environmental Protection Agency. Any proposal to use new scientific information shall meet the quality of information requirements in subsection (16) of this section. To minimize delay in cleanups, any proposal to use new scientific information should be introduced as early in the cleanup process as possible. Proposals to use new scientific informa-

tion may be considered up to the time of issuance of the final cleanup action plan governing the cleanup action for a site unless triggered as part of a periodic review under WAC 173-340-420 or through a reopener under RCW 70.105D.040 (4)(c).

(16) **Criteria for quality of information.**

(a) The intent of this subsection is to establish minimum criteria to be considered when evaluating information used by or submitted to the department proposing to modify the default methods or assumptions specified in this chapter or proposing methods or assumptions not specified in this chapter for calculating cleanup levels and remediation levels. This subsection does not establish a burden of proof or alter the burden of proof provided for elsewhere in this chapter.

(b) When deciding whether to approve or require modifications to the default methods or assumptions specified in this chapter for establishing cleanup levels and remediation levels or when deciding whether to approve or require alternative or additional methods or assumptions, the department shall consider information submitted by all interested persons and the quality of that information. When evaluating the quality of the information the department shall consider the following factors, as appropriate for the type of information submitted:

(i) Whether the information is based on a theory or technique that has widespread acceptance within the relevant scientific community;

(ii) Whether the information was derived using standard testing methods or other widely accepted scientific methods;

(iii) Whether a review of relevant available information, both in support of and not in support of the proposed modification, has been provided along with the rationale explaining the reasons for the proposed modification;

(iv) Whether the assumptions used in applying the information to the facility are valid and would ensure the proposed modification would err on behalf of protection of human health and the environment;

(v) Whether the information adequately addresses populations that are more highly exposed than the population as a whole and are reasonably likely to be present at the site; and

(vi) Whether adequate quality assurance and quality control procedures have been used, any significant anomalies are adequately explained, the limitations of the information are identified, and the known or potential rate of error is acceptable.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-702, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-702, filed 1/28/91, effective 2/28/91.]

WAC 173-340-703 Selection of indicator hazardous substances. (1) **Purpose.** When defining cleanup requirements at a site that is contaminated with a large number of hazardous substances, the department may eliminate from consideration those hazardous substances that contribute a small percentage of the overall threat to human health and the environment. The remaining hazardous substances shall serve as indicator hazardous substances for purposes of defining site cleanup requirements.

(2) **Approach.** If the department considers this approach appropriate for a particular site, the factors evaluated when eliminating individual hazardous substances from further consideration shall include:

(a) The toxicological characteristics of the hazardous substance that influence its ability to adversely affect human health or the environment relative to the concentration of the hazardous substance at the site, including consideration of essential nutrient requirements;

(b) The chemical and physical characteristics of the hazardous substance which govern its tendency to persist in the environment;

(c) The chemical and physical characteristics of the hazardous substance which govern its tendency to move into and through environmental media;

(d) The natural background concentrations of the hazardous substance;

(e) The thoroughness of testing for the hazardous substance at the site;

(f) The frequency that the hazardous substance has been detected at the site; and

(g) Degradation by-products of the hazardous substance.

(3) When the department determines that the use of indicator hazardous substances is appropriate for a particular site, it may also require biological testing to address potential toxic effects associated with hazardous substances eliminated from consideration under this subsection.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-703, filed 2/12/01, effective 8/15/01.]

WAC 173-340-704 Use of Method A. (1) **Applicability.** Method A may be used to establish cleanup levels at sites that have few hazardous substances and that meet one of the following criteria:

(a) Sites undergoing a routine cleanup action as defined in WAC 173-340-200; or

(b) Sites where numerical standards are available in this chapter or applicable state and federal laws for all indicator hazardous substances in the media for which the Method A cleanup level is being used.

(2) **Procedures.** Method A cleanup levels shall be established in accordance with the procedures in WAC 173-340-720 through 173-340-760. Method A cleanup levels shall be at least as stringent as all of the following:

(a) Concentrations of individual hazardous substances listed in Tables 720-1, 740-1, or 745-1 in this chapter;

(b) Concentrations of individual hazardous substances established under applicable state and federal laws;

(c) Concentrations that result in no significant adverse effects on the protection and propagation of terrestrial ecological receptors using the procedures specified in WAC 173-340-7490 through 173-340-7493, unless it is demonstrated under those sections that establishing a soil concentration is unnecessary; and

(d) For individual hazardous substances deemed indicator hazardous substances for the medium of concern under WAC 173-340-708(2) and not addressed under (a) and (b) of this subsection, concentrations that do not exceed natural background levels or the practical quantitation limit, whichever is higher, for the substance in question.

(3) **More stringent cleanup levels.** The department may establish Method A cleanup levels more stringent than those required by subsection (2) of this section, when based

on a site-specific evaluation, the department determines that such levels are necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(4) **Remediation levels.** Under Method A, the Method B formulas may be modified for the purpose of using a human health risk assessment to evaluate the protectiveness of a remedy. WAC 173-340-708 (3) and (10) describe the adjustments that can be made to the Method B formulas. Also see WAC 173-340-355 and 173-340-357 for more detailed information on remediation levels and quantitative risk assessment.

(5) **Inconsistencies.** If there are any inconsistencies between this section and any specifically referenced sections, the referenced section shall govern.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-704, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-704, filed 1/28/91, effective 2/28/91.]

WAC 173-340-705 Use of Method B. (1) **Applicability.** Method B is applicable to all sites. It shall be used to develop cleanup levels unless one or more of the conditions for using Method A or Method C are demonstrated to exist and the person conducting the cleanup action elects to use that method.

(2) **Cleanup levels.** Method B consists of two approaches, standard and modified. Standard Method B uses default formulas, assumptions, and procedures to develop cleanup levels. Under modified Method B chemical-specific or site-specific information may be used to change certain assumptions to calculate different cleanup levels. When the term "Method B" is used in this chapter, it means both standard and modified Method B. Method B cleanup levels shall be established in accordance with the procedures in WAC 173-340-720 through 173-340-760. Method B cleanup levels shall be at least as stringent as all of the following:

(a) Concentrations of individual hazardous substances established under applicable state and federal laws;

(b) Concentrations that are estimated to result in no adverse effects on the protection and propagation of aquatic life, and no significant adverse effects on terrestrial ecological receptors using the procedures specified in WAC 173-340-7490 through 173-340-7494;

(c) For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which protect human health as determined by the following methods:

(i) Concentrations that are estimated to result in no acute or chronic toxic effects on human health as determined using a hazard quotient of one (1) and the procedures specified in WAC 173-340-720 through 173-340-760;

(ii) For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one million (1×10^{-6}) as determined using the procedures specified in WAC 173-340-720 through 173-340-760; and

(iii) Concentrations that eliminate or minimize the potential for food chain contamination as necessary to protect human health.

(3) **More stringent cleanup levels.** The department may establish Method B cleanup levels that are more stringent than those required by subsection (2) of this section, when based upon a site-specific evaluation, the department determines that such levels are necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(4) **Multiple hazardous substances or pathways.** Concentrations of individual hazardous substances established under subsections (2) and (3) of this section, including those based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(5) **Adjustments to cleanup levels based on applicable laws.** Where a cleanup level is based on an applicable state or federal law, and the level of risk upon which the applicable state and federal law is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level must be adjusted downward so that the total excess cancer risk and hazard index at the site does not exceed the limits established in subsection (4) of this section.

(6) **Limitation on adjustments.** Cleanup levels determined using Method B, including cleanup levels adjusted under subsections (4) and (5) of this section, shall not be set at levels below the practical quantitation limit or natural background, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements on practical quantitation limits and natural background.

(7) **Remediation levels.** Method B formulas may be modified for the purpose of using a human health risk assessment to evaluate the protectiveness of a remedy. WAC 173-340-708 (3) and (10) describe the adjustments that can be made to the Method B formulas. Also see WAC 173-340-355 and 173-340-357 for more detailed information on remediation levels and quantitative risk assessment.

(8) **Inconsistencies.** If there are any inconsistencies between this section and any specifically referenced sections, the referenced section shall govern.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-705, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-705, filed 1/28/91, effective 2/28/91.]

WAC 173-340-706 Use of Method C. (1) **Applicability.** Method C cleanup levels represent concentrations that are protective of human health and the environment for specified site uses and conditions. A site (or portion of a site) that qualifies for a Method C cleanup level for one medium does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the

criteria applicable to that medium. Method C cleanup levels may be used in the following situations:

(a) For surface water, ground water and air, Method C cleanup levels may be established where the person conducting the cleanup action can demonstrate that such levels comply with applicable state and federal laws, that all practicable methods of treatment are used, that institutional controls are implemented in accordance with WAC 173-340-440, and that one or more of the following conditions exist:

(i) Where Method A or B cleanup levels are below area background concentrations, Method C cleanup levels may be established at concentrations that are equal to area background concentrations, but in no case greater than concentrations specified in subsection (2) of this section;

(ii) Where attainment of Method A or B cleanup levels has the potential for creating a significantly greater overall threat to human health or the environment than attainment of Method C cleanup levels established under this chapter, Method C cleanup levels may be established at concentrations that minimize those overall threats, but in no case greater than concentrations specified in subsection (2) of this section. Factors that shall be considered in making this determination include:

(A) Results of a site-specific risk assessment;

(B) Duration of threats;

(C) Reversibility of threats;

(D) Magnitude of threats; and

(E) Nature of affected population.

(iii) Where Method A or B cleanup levels are below technically possible concentrations, Method C cleanup levels may be established at the technically possible concentrations, but in no case greater than levels specified in subsection (2) of this section.

(b) Method C soil cleanup levels may only be established where the person conducting the cleanup action can demonstrate that the area under consideration is an industrial property and meets the criteria for establishing industrial soil cleanup levels under WAC 173-340-745.

(c) Method C air cleanup levels may also be established for facilities qualifying as industrial property under WAC 173-340-745 and for utility vaults and manholes. (See WAC 173-340-750.)

(2) **Cleanup levels.** Method C consists of two approaches, standard and modified. Standard Method C uses default formulas, assumptions, and procedures to develop cleanup levels. Under modified Method C, chemical-specific or site-specific information may be used to change certain assumptions to calculate different cleanup levels. When the term "Method C" is used in this chapter, it means both standard and modified Method C. Method C cleanup levels shall be established in accordance with the procedures in WAC 173-340-720 through 173-340-760. Method C cleanup levels shall be at least as stringent as all of the following:

(a) Concentrations established under applicable state and federal laws;

(b) Concentrations that are estimated to result in no significant adverse effects on the protection and propagation of aquatic life, and no significant adverse effects on wildlife using the procedures specified in WAC 173-340-7490 through 173-340-7494;

(c) For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which are protective of human health as determined by the following methods:

(i) Concentrations that are estimated to result in no significant adverse acute or chronic toxic effects on human health as estimated using a hazard quotient of one (1) and the procedures defined in WAC 173-340-720 through 173-340-760;

(ii) For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand (1×10^{-5}) as determined using the procedures defined in WAC 173-340-720 through 173-340-760; and

(iii) Concentrations that eliminate or minimize the potential for food chain contamination as necessary to protect human health.

(3) **More stringent cleanup levels.** The department may establish Method C cleanup levels that are more stringent than those required by subsection (2) of this section when based upon a site-specific evaluation, the department determines that such levels are necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(4) **Multiple hazardous substances or pathways.** Concentrations of individual hazardous substances established under subsections (2) and (3) of this section, including those based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(5) **Adjustments to cleanup levels based on applicable laws.** When a cleanup level is based on an applicable state or federal law and the level of risk upon which the applicable law is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level must be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(6) **Limitation on adjustments.** Cleanup levels determined using Method C, including cleanup levels adjusted under subsections (4) and (5) of this section, shall not be set at levels below the practical quantitation limit or natural background, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements on practical quantitation limits and natural background.

(7) **Remediation levels.** Method C formulas may be modified for the purpose of using a human health risk assessment to evaluate the protectiveness of a remedy. WAC 173-340-708 (3) and (10) describe the adjustments that can be made to the Method C formulas. Also see WAC 173-340-355

and 173-340-357 for more detailed information on remediation levels and quantitative risk assessment.

(8) **Inconsistencies.** If there are any inconsistencies between this subsection and any specifically referenced sections, the referenced section shall govern.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-706, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-706, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-706, filed 1/28/91, effective 2/28/91.]

WAC 173-340-707 Analytical considerations. (1) Analytical methods used to evaluate the effectiveness of a cleanup action shall comply with the requirements in WAC 173-340-830.

(2) The department recognizes that there may be situations where a hazardous substance is not detected or is detected at a concentration below the practical quantitation limit utilizing sampling and analytical procedures which comply with the requirements of WAC 173-340-830. If those situations arise and the practical quantitation limit is higher than the cleanup level for that substance, the cleanup level shall be considered to have been attained, subject to subsection (4) of this section, only when the more stringent of the following conditions are met:

(a) The practical quantitation limit is no greater than ten times the method detection limit; or

(b) The practical quantitation limit for the particular hazardous substance, medium, and analytical procedure is no greater than the practical quantitation limit established by the United States Environmental Protection Agency and used to establish requirements in 40 CFR 136, 40 CFR 141 through 143, or 40 CFR 260 through 270.

(3) In cases where a cleanup level required by this chapter is less than the practical quantitation limit using an approved analytical procedure, the department may also require one or more of the following:

(a) Use of surrogate measures of hazardous substance contamination;

(b) Use or development of specialized sample collection or analysis techniques to improve the method detection limit or practical quantitation limit for the hazardous substances at the site; or

(c) Monitoring to assure that the concentration of a hazardous substance does not exceed detectable levels.

(4) When the practical quantitation limit is above the cleanup level, the department shall consider the availability of improved analytical techniques when performing periodic reviews under WAC 173-340-420. Subsequent to those reviews, the department may require the use of improved analytical techniques with lower practical quantitation limits and other appropriate actions.

[Statutory Authority: Chapter 70.105D RCW. 91-04-019, § 173-340-707, filed 1/28/91, effective 2/28/91.]

WAC 173-340-708 Human health risk assessment procedures. (1) **Purpose.** This section defines the risk assessment framework that shall be used to establish cleanup levels, and remediation levels using a quantitative risk assessment, under this chapter. As used in this section, cleanup levels and remediation levels means the human health risk assessment component of these levels. This chapter defines certain default values and methods to be used in calculating cleanup levels and remediation levels. This section allows varying from these default values and methods under certain circumstances. When deciding whether to approve alternate values and methods the department shall ensure that the use of alternative values and methods will not significantly delay site cleanups.

(2) **Selection of indicator hazardous substances.**

When defining cleanup requirements at a site that is contaminated with a large number of hazardous substances, the department may eliminate from consideration those hazardous substances that contribute a small percentage of the overall threat to human health and the environment. The remaining hazardous substances shall serve as indicator hazardous substances for purposes of defining site cleanup requirements. See WAC 173-340-703 for additional information on establishing indicator hazardous substances.

(3) **Reasonable maximum exposure.**

(a) Cleanup levels and remediation levels shall be based on estimates of current and future resource uses and reasonable maximum exposures expected to occur under both current and potential future site use conditions, as specified further in this chapter.

(b) The reasonable maximum exposure is defined as the highest exposure that is reasonably expected to occur at a site under current and potential future site use. WAC 173-340-720 through 173-340-760 define the reasonable maximum exposures for ground water, surface water, soil, and air. These reasonable maximum exposures will apply to most sites where individuals or groups of individuals are or could be exposed to hazardous substances. For example, the reasonable maximum exposure for most ground water is defined as exposure to hazardous substances in drinking water and other domestic uses.

(c) Persons performing cleanup actions under this chapter may use the evaluation criteria in WAC 173-340-720 through 173-340-760, where allowed in those sections, to demonstrate that the reasonable maximum exposure scenarios specified in those sections are not appropriate for cleanup levels for a particular site. For example, the criteria in WAC 173-340-720(2) could be used to demonstrate that the reasonable maximum exposure for ground water beneath a site does not need to be based on drinking water use. The use of an alternate exposure scenario shall be documented by the person performing the cleanup action. Documentation for the use of alternate exposure scenarios under this provision shall be based on the results of investigations performed in accordance with WAC 173-340-350.

(d) Persons performing cleanup actions under this chapter may also use alternate reasonable maximum exposure scenarios to help assess the protectiveness to human health of a cleanup action alternative that incorporates remediation levels and uses engineered controls and/or institutional controls to limit exposure to the contamination remaining on the site.

(i) An alternate reasonable maximum exposure scenario shall reflect the highest exposure that is reasonably expected to occur under current and potential future site conditions considering, among other appropriate factors, the potential for institutional controls to fail and the extent of the time period of failure under these scenarios and the land uses at the site.

(ii) Land uses other than residential and industrial, such as agricultural, recreational, and commercial, shall not be used as the basis for a reasonable maximum exposure scenario for the purpose of establishing a cleanup level. However, these land uses may be used as a basis for an alternate reasonable maximum exposure scenario for the purpose of assessing the protectiveness of a remedy. For example, if a cap (with appropriate institutional controls) is the proposed cleanup action at a commercial site, the reasonable maximum exposure scenario for assessing the protectiveness of the cap with regard to direct soil contact could be changed from a child living on the site to a construction or maintenance worker and child trespasser scenario.

(iii) The department expects that in evaluating the protectiveness of a remedy with regard to the soil direct contact pathway, many types of commercial sites may, where appropriate, qualify for alternative exposure scenarios under this provision since contaminated soil at these sites is typically characterized by a cover of buildings, pavement, and landscaped areas. Examples of these types of sites include:

(A) Commercial properties in a location removed from single family homes, duplexes or subdivided individual lots;

(B) Private and public recreational facilities where access to these facilities is physically controlled (e.g., a private golf course to which access is restricted by fencing);

(C) Urban residential sites (e.g., upper-story residential units over ground floor commercial businesses);

(D) Offices, restaurants, and other facilities primarily devoted to support administrative functions of a commercial/industrial nature (e.g., an employee credit union or cafeteria in a large office or industrial complex).

(e) A conceptual site model may be used to identify when individuals or groups of individuals may be exposed to hazardous substances through more than one exposure pathway. For example, a person may be exposed to hazardous substances from a site by drinking contaminated ground water, eating contaminated fish, and breathing contaminated air. At sites where the same individuals or groups of individuals are or could be consistently exposed through more than one pathway, the reasonable maximum exposure shall represent the total exposure through all of those pathways. At such sites, the cleanup levels and remediation levels derived for individual pathways under WAC 173-340-720 through 173-340-760 and WAC 173-340-350 through 173-340-390 shall be adjusted downward to take into account multiple exposure pathways.

(4) **Cleanup levels for individual hazardous substances.** Cleanup levels for individual hazardous substances will generally be based on a combination of requirements in applicable state and federal laws and risk assessment.

(5) **Multiple hazardous substances.**

(a) Cleanup levels for individual hazardous substances established under Methods B and C and remediation levels shall be adjusted downward to take into account exposure to multiple hazardous substances. This adjustment needs to be made only if, without this adjustment, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}).

(b) Adverse effects resulting from exposure to two or more hazardous substances with similar types of toxic response are assumed to be additive unless scientific evidence is available to demonstrate otherwise. Cancer risks resulting from exposure to two or more carcinogens are assumed to be additive unless scientific evidence is available to demonstrate otherwise.

(c) For noncarcinogens, for purposes of establishing cleanup levels under Methods B and C, and for remediation levels, the health threats resulting from exposure to two or more hazardous substances with similar types of toxic response may be apportioned between those hazardous substances in any combination as long as the hazard index does not exceed one (1).

(d) For carcinogens, for purposes of establishing cleanup levels under Methods B and C, and for remediation levels, the cancer risks resulting from exposure to multiple hazardous substances may be apportioned between hazardous substances in any combination as long as the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}).

(e) The department may require biological testing to assess the potential interactive effects associated with chemical mixtures.

(f) When making adjustments to cleanup levels and remediation levels for multiple hazardous substances, the concentration for individual hazardous substances shall not be adjusted downward to less than the practical quantitation limit or natural background.

(6) **Multiple pathways of exposure.**

(a) Estimated doses of individual hazardous substances resulting from more than one pathway of exposure are assumed to be additive unless scientific evidence is available to demonstrate otherwise.

(b) Cleanup levels and remediation levels based on one pathway of exposure shall be adjusted downward to take into account exposures from more than one exposure pathway. The number of exposure pathways considered at a given site shall be based on the reasonable maximum exposure scenario as defined in WAC 173-340-708(3). This adjustment needs to be made only if exposure through multiple pathways is likely to occur at a site and, without the adjustment, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}).

(c) For noncarcinogens, for purposes of establishing cleanup levels under Methods B and C, and remediation levels, the health threats associated with exposure via multiple pathways may be apportioned between exposure pathways in any combination as long as the hazard index does not exceed one (1).

(d) For carcinogens, for purposes of establishing cleanup levels under Methods B and C, and for remediation levels, the cancer risks associated with exposure via multiple pathways may be apportioned between exposure pathways in any combination as long as the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}).

(e) When making adjustments to cleanup levels and remediation levels for multiple pathways of exposure, the concentration for individual hazardous substances shall not be adjusted downward to less than the practical quantitation limit or natural background.

(7) **Reference doses.**

(a) The chronic reference dose/reference concentration and the developmental reference dose/reference concentration shall be used to establish cleanup levels and remediation

levels under this chapter. Cleanup levels and remediation levels shall be established using the value which results in the most protective concentration.

(b) Inhalation reference doses/reference concentrations shall be used in WAC 173-340-750. Where the inhalation reference dose/reference concentration is reported as a concentration in air, that value shall be converted to a corresponding inhaled intake (mg/kg-day) using a human body weight of 70 kg and an inhalation rate of 20 m^3/day, and take into account, where available, the respiratory deposition and absorption characteristics of the gases and inhaled particles.

(c) A subchronic reference dose/reference concentration may be used to evaluate potential noncarcinogenic effects resulting from exposure to hazardous substances over short periods of time. This value may be used in place of the chronic reference dose/reference concentration where it can be demonstrated that a particular hazardous substance will degrade to negligible concentrations during the exposure period.

(d) For purposes of establishing cleanup levels and remediation levels for hazardous substances under this chapter, a reference dose/reference concentration established by the United States Environmental Protection Agency and available through the "integrated risk information system" (IRIS) data base shall be used. If a reference dose/reference concentration is not available through the IRIS data base, a reference dose/reference concentration from the U.S. EPA Health Effects Assessment Summary Table ("HEAST") data base or, if more appropriate, the National Center for Environmental Assessment ("NCEA") shall be used.

(e) If a reference dose/reference concentration is available through IRIS, HEAST, or the NCEA, it shall be used unless the department determines that there is clear and convincing scientific data which demonstrates that the use of this value is inappropriate.

(f) If a reference dose/reference concentration for a hazardous substance including petroleum fractions and petroleum constituents is not available through IRIS, HEAST or the NCEA or is demonstrated to be inappropriate under (e) of this subsection and the department determines that development of a reference dose/reference concentration is necessary for the hazardous substance at the site, then a reference dose/reference concentration shall be established on a case-by-case basis. When establishing a reference dose on a case-by-case basis, the methods described in "Reference Dose (RfD): Description and Use in Health Risk Assessment: Background Document 1A", USEPA, March 15, 1993, shall be used.

(g) In estimating a reference dose/reference concentration for a hazardous substance under (e) or (f) of this subsection, the department shall, as appropriate, consult with the science advisory board, the department of health, and the United States Environmental Protection Agency and may, as appropriate, consult with other qualified persons. Scientific data supporting such a change shall be subject to the requirements under WAC 173-340-702 (14), (15) and (16). Once the department has established a reference dose/reference concentration for a hazardous substance under this provision, the department is not required to consult again for the same hazardous substance.

(h) Where a reference dose/reference concentration other than those established under (d) or (g) of this subsection is used to establish a cleanup level or remediation level at individual sites, the department shall summarize the scientific rationale for the use of those values in the cleanup action plan. The department shall provide the opportunity for public review and comment on this value in accordance with the requirements of WAC 173-340-380 and 173-340-600.

(8) **Carcinogenic potency factor.**

(a) For purposes of establishing cleanup levels and remediation levels for hazardous substances under this chapter, a carcinogenic potency factor established by the United States Environmental Protection Agency and available through the IRIS data base shall be used. If a carcinogenic potency factor is not available from the IRIS data base, a carcinogenic potency factor from HEAST or, if more appropriate, from the NCEA shall be used.

(b) If a carcinogenic potency factor is available from the IRIS, HEAST or the NCEA, it shall be used unless the department determines that there is clear and convincing scientific data which demonstrates that the use of this value is inappropriate.

(c) If a carcinogenic potency factor is not available through IRIS, HEAST or the NCEA or is demonstrated to be inappropriate under (b) of this subsection and the department determines that development of a cancer potency factor is necessary for the hazardous substance at the site, then one of the following methods shall be used to establish a carcinogenic potency factor:

(i) The carcinogenic potency factor may be derived from appropriate human epidemiology data on a case-by-case basis; or

(ii) The carcinogenic potency factor may be derived from animal bioassay data using the following procedures:

(A) All carcinogenicity bioassays shall be reviewed and data of appropriate quality shall be used for establishing the carcinogenic potency factor.

(B) The linearized multistage extrapolation model shall be used to estimate the slope of the dose-response curve unless the department determines that there is clear and convincing scientific data which demonstrates that the use of an alternate extrapolation model is more appropriate;

(C) All doses shall be adjusted to give an average daily dose over the study duration; and

(D) An interspecies scaling factor shall be used to take into account differences between animals and humans. For oral carcinogenic toxicity values this scaling factor shall be based on the assumption that milligrams per surface area is an equivalent dose between species unless the department determines there is clear and convincing scientific data which demonstrates that an alternate procedure is more appropriate. The slope of the dose response curve for the test species shall be multiplied by this scaling factor in order to obtain the carcinogenic potency factor, except where such scaling factors are incorporated into the extrapolation model under (B) of this subsection. The procedure to derive a human equivalent concentration of inhaled particles and gases shall take into account, where available, the respiratory deposition and absorption characteristics of the gases and inhaled particles. Where adequate pharmacokinetic and metabolism studies are

available, data from these studies may be used to adjust the interspecies scaling factor.

(d) **Mixtures of dioxins and furans.** When establishing and determining compliance with cleanup levels and remediation levels for mixtures of chlorinated dibenzo-p-dioxins (dioxins) and/or chlorinated dibenzofurans (furans), the following procedures shall be used:

(i) **Assessing as single hazardous substance.** When establishing and determining compliance with cleanup levels and remediation levels, including when determining compliance with the excess cancer risk requirements in this chapter, mixtures of dioxins and/or furans shall be considered a single hazardous substance.

(ii) **Establishing cleanup levels and remediation levels.** The cleanup levels and remediation levels established for 2,3,7,8 tetrachloro dibenzo-p-dioxin (2,3,7,8-TCDD) shall be used, respectively, as the cleanup levels and remediation levels for mixtures of dioxins and/or furans.

(iii) **Determining compliance with cleanup levels and remediation levels.** When determining compliance with the cleanup levels and remediation levels established for mixtures of dioxins and/or furans, the following procedures shall be used:

(A) Calculate the total toxic equivalent concentration of 2,3,7,8-TCDD for each sample of the mixture. The total toxic equivalent concentration shall be calculated using the following method, unless the department determines that there is clear and convincing scientific data which demonstrates that the use of this method is inappropriate:

(I) Analyze samples from the medium of concern to determine the concentration of each dioxin and furan congener listed in Table 708-1;

(II) For each sample analyzed, multiply the measured concentration of each congener in the sample by its corresponding toxicity equivalency factor (TEF) in Table 708-1 to obtain the toxic equivalent concentration of 2,3,7,8-TCDD for that congener; and

(III) For each sample analyzed, add together the toxic equivalent concentrations of all the congeners within the sample to obtain the total toxic equivalent concentration of 2,3,7,8-TCDD for that sample.

(B) After calculating the total toxic equivalent concentration of each sample of the mixture, use the applicable compliance monitoring requirements in WAC 173-340-720 through 173-340-760 to determine whether the total toxic equivalent concentrations of the samples comply with the cleanup level or remediation level for the mixture at the applicable point of compliance.

(iv) **Protecting the quality of other media.** When establishing cleanup levels and remediation levels for mixtures of dioxins and/or furans in a medium of concern that are based on protection of another medium (the receiving medium) (e.g., soil levels protective of ground water quality), the following procedures shall be used:

(A) The cleanup level or remediation level for 2,3,7,8-TCDD in the receiving medium shall be used, respectively, as the cleanup level or remediation level for the receiving medium.

(B) When determining the concentrations in the medium of concern that will achieve the cleanup level or remediation level in the receiving medium, the congener-specific physical and chemical properties shall be considered during that assessment.

(e) **Mixtures of carcinogenic PAHs.** When establishing and determining compliance with cleanup levels and remediation levels for mixtures of carcinogenic polycyclic aromatic hydrocarbons (carcinogenic PAHs), the following procedures shall be used:

(i) **Assessing as single hazardous substance.** When establishing and determining compliance with cleanup levels and remediation levels, including when determining compliance with the excess cancer risk requirements in this chapter, mixtures of carcinogenic PAHs shall be considered a single hazardous substance.

(ii) **Establishing cleanup levels and remediation levels.** The cleanup levels and remediation levels established for benzo(a)pyrene shall be used, respectively, as the cleanup levels and remediation levels for mixtures of carcinogenic PAHs.

(iii) **Determining compliance with cleanup levels and remediation levels.** When determining compliance with cleanup levels and remediation levels established for mixtures of carcinogenic PAHs, the following procedures shall be used:

(A) Calculate the total toxic equivalent concentration of benzo (a) pyrene for each sample of the mixture. The total toxic equivalent concentration shall be calculated using the following method, unless the department determines that there is clear and convincing scientific data which demonstrates that the use of this method is inappropriate:

(I) Analyze samples from the medium of concern to determine the concentration of each carcinogenic PAH listed in Table 708-2 and, for those carcinogenic PAHs required by the department under WAC 173-340-708 (8)(e)(iv), in Table 708-3;

(II) For each sample analyzed, multiply the measured concentration of each carcinogenic PAH in the sample by its corresponding toxicity equivalency factor (TEF) in Tables 708-2 and 708-3 to obtain the toxic equivalent concentration of benzo(a)pyrene for that carcinogenic PAH; and

(III) For each sample analyzed, add together the toxic equivalent concentrations of all the carcinogenic PAHs within the sample to obtain the total toxic equivalent concentration of benzo(a)pyrene for that sample.

(B) After calculating the total toxic equivalent concentration of each sample of the mixture, use the applicable compliance monitoring requirements in WAC 173-340-720 through 173-340-760 to determine whether the total toxic equivalent concentrations of the samples comply with the cleanup level or remediation level for the mixture at the applicable point of compliance.

(iv) **Protecting the quality of other media.** When establishing cleanup levels and remediation levels for mixtures of carcinogenic PAHs in a medium of concern that are based on protection of another medium (the receiving medium) (e.g., soil levels protective of ground water quality), the following procedures shall be used:

(A) The cleanup level or remediation level for benzo(a)pyrene in the receiving medium shall be used, respectively, as the cleanup level or remediation level for the receiving medium.

(B) When determining the concentrations in the medium of concern that will achieve the cleanup level or remediation level in the receiving medium, the carcinogenic PAH-specific physical and chemical properties shall be considered during that assessment.

(v) When using this methodology, at a minimum, the compounds in Table 708-2 shall be analyzed for and included in the calculations. The department may require additional compounds in Table 708-3 to be included in the methodology should site testing data or information from other comparable sites or waste types indicate the additional compounds are potentially present at the site. *NOTE: Many of the polycyclic aromatic hydrocarbons in Table 708-3 are found primarily in air emissions from combustion sources and may not be present in the soil or water at contaminated sites. Users should consult with the department for information on the need to test for these additional compounds.*

(f) **PCB mixtures.** When establishing and determining compliance with cleanup levels and remediation levels for polychlorinated biphenyls (PCBs) mixtures, the following procedures shall be used:

(i) **Assessing as single hazardous substance.** When establishing and determining compliance with cleanup levels and remediation levels, including when determining compliance with the excess cancer risk requirements in this chapter, PCB mixtures shall be considered a single hazardous substance.

(ii) **Establishing cleanup levels and remediation levels.** When establishing cleanup levels and remediation levels under Methods B and C for PCB mixtures, the following procedures shall be used unless the department determines that there is clear and convincing scientific data which demonstrates that the use of these methods is inappropriate:

(A) Assume the PCB mixture is equally potent and use the appropriate carcinogenic potency factor provided for under WAC 173-340-708 (8)(a) through (c) for the entire mixture; or

(B) Use the toxicity equivalency factors for the dioxin-like PCBs congeners in Table 708-4 and procedures approved by the department. When using toxicity equivalency factors, the department may require that the health effects posed by the dioxin-like PCB congeners and non-dioxin-like PCB congeners be considered in the evaluation.

(iii) **Determining compliance with cleanup levels and remediation levels.** When determining compliance with cleanup levels and remediation levels established for PCB mixtures, the following procedures shall be used:

(A) Analyze compliance monitoring samples for a total PCB concentration and use the applicable compliance monitoring requirements in WAC 173-340-720 through 173-340-760 to determine whether the total PCB concentrations of the samples complies with the cleanup level or remediation level for the mixture at the applicable point of compliance; or

(B) When using toxicity equivalency factors to determine compliance with cleanup or remediation levels for PCB mixtures, use procedures approved by the department.

(g) In estimating a carcinogenic potency factor for a hazardous substance under (c) of this subsection, or approving the use of a toxicity equivalency factor other than that established under (d), (e) or (f) of this subsection, the department shall, as appropriate, consult with the science advisory board, the department of health, and the United States Environmental Protection Agency and may, as appropriate, consult with other qualified persons. Scientific data supporting such a change shall be subject to the requirements under WAC 173-340-702 (14), (15) and (16). Once the department has established a carcinogenic potency factor or approved an alternative toxicity equivalency factor for a hazardous substance under this provision, the department is not required to consult again for the same hazardous substance.

(h) Where a carcinogenic potency factor other than that established under (a) of this subsection or a toxicity equivalency factor other than that established under (d), (e) or (f) of this subsection is used to establish cleanup levels or remediation levels at individual sites, the department shall summarize the scientific rationale for the use of that value in the cleanup action plan. The department shall provide the opportunity for public review and comment on this value in accordance with the requirements of WAC 173-340-380 and 173-340-600.

(9) **Bioconcentration factors.**

(a) For purposes of establishing cleanup levels and remediation levels for a hazardous substance under WAC 173-340-730, a bioconcentration factor established by the United States Environmental Protection Agency and used to establish the ambient water quality criterion for that substance under section 304 of the Clean Water Act shall be used. These values shall be used unless the department determines that there is adequate scientific data which demonstrates that the use of an alternate value is more appropriate. If the department determines that a bioconcentration factor is appropriate for a specific hazardous substance and no such factor has been established by USEPA, then other appropriate EPA documents, literature sources or empirical information may be used to determine a bioconcentration factor.

(b) When using a bioconcentration factor other than that used to establish the ambient water quality criterion, the department shall, as appropriate, consult with the science advisory board, the department of health, and the United States Environmental Protection Agency. Scientific data supporting such a value shall be subject to the requirements under WAC 173-340-702 (14), (15) and (16). Once the department has established a bioconcentration factor for a hazardous substance under this provision, the department is not required to consult again for the same hazardous substance.

(c) Where a bioconcentration factor other than that established under (a) of this subsection is used to establish cleanup levels or remediation levels at individual sites, the department shall summarize the scientific rationale for the use of that factor in the draft cleanup action plan. The department shall provide the opportunity for public review and comment on the value in accordance with the requirements of WAC 173-340-380 and 173-340-600.

(10) **Exposure parameters.**

(a) As a matter of policy, the department has defined in WAC 173-340-720 through 173-340-760 the default values for exposure parameters to be used when establishing cleanup levels and remediation levels under this chapter. Except as provided for in (b) and (c) of this subsection and in WAC 173-340-720 through 173-340-760, these default values shall not be changed for individual hazardous substances or sites.

(b) Exposure parameters that are primarily a function of the exposed population characteristics (such as body weight and lifetime) and those that are primarily a function of human behavior that cannot be controlled through an engineered or institutional control (such as: Fish consumption rate; soil ingestion rate; drinking water ingestion rate; and breathing rate) are not expected to vary on a site-by-site basis. The default values for these exposure parameters shall not be changed when calculating cleanup levels except when necessary to establish a more stringent cleanup level to protect human health. For remediation levels the default values for these exposure parameters may only be changed when an alternate reasonable maximum exposure scenario is used, as provided for in WAC 173-340-708 (3)(d), that reflects a different exposed population such as using an adult instead of a child exposure scenario. Other exposure parameters may be changed only as follows:

(i) For calculation of cleanup levels, the types of exposure parameters that may be changed are those that are:

(A) Primarily a function of reliably measurable characteristics of the hazardous substance, soil, hydrologic or hydrogeologic conditions at the site; and

(B) Not dependent on the success of engineered controls or institutional controls for controlling exposure of persons to the hazardous substances at the site.

The default values for these exposure parameters may be changed where there is adequate scientific data to demonstrate that use of an alternative or additional value would be more appropriate for the conditions present at the site. Examples of exposure parameters for which the default values may be changed under this provision are as follows: Contaminant leaching and transport variables (such as the soil organic carbon content, aquifer permeability and soil sorption coefficient); inhalation correction factor; fish bioconcentration factor; soil gastrointestinal absorption fraction; and inhalation absorption percentage.

(ii) For calculation of remediation levels, in addition to the exposure parameters that may be changed under (b)(i) of this subsection, the types of exposure parameters that may be changed from the default values are those where a demonstration can be made that the proposed cleanup action uses engineered controls and/or institutional controls that can be successfully relied on, for the reasonably foreseeable future, to control contaminant mobility and/or exposure to the contamination remaining on the site. In general, exposure parameters that may be changed under this provision are those that define the exposure frequency, exposure duration and exposure time. The default values for these exposure parameters may be changed where there is adequate scientific data to demonstrate that use of an alternative or additional value would be more appropriate for the conditions present at the site. Examples of exposure parameters for which the default value may be changed under this provision are as follows: Infiltration rate; frequency of soil contact; duration of soil exposure; duration of drinking water exposure; duration of air exposure; drinking water fraction; and fish diet fraction.

(c) When the modifications provided for in (b) of this subsection result in significantly higher values for cleanup levels or remediation levels than would be calculated using the default values for exposure parameters, the risk from other potentially relevant pathways of exposure shall be addressed under the procedures provided for in WAC 173-340-720 through 173-340-760. For exposure pathways and parameters for which default values are not specified in this chapter, the framework provided for by this subsection, along with the quality of information requirements in WAC 173-340-702, shall be used to establish appropriate or additional assumptions for these parameters and pathways.

(d) Where the department approves the use of exposure parameters other than those established under WAC 173-340-720 through 173-340-760 to establish cleanup levels or remediation levels at individual sites, the department shall summarize the scientific rationale for the use of those parameters in the cleanup action plan. The department shall provide the opportunity for public review and comment on those values in accordance with the requirements of WAC 173-340-380 and 173-340-600. Scientific data supporting such a change shall be subject to the requirements under WAC 173-340-702 (14), (15) and (16).

(11) **Probabilistic risk assessment.** Probabilistic risk assessment methods may be used under this chapter only on an informational basis for evaluating alternative remedies. Such methods shall not be used to replace cleanup standards and remediation levels derived using deterministic methods under this chapter until the department has adopted rules describing adequate technical protocols and policies for the use of probabilistic risk assessment under this chapter.

[Statutory Authority: RCW 70.105D.030(2). 07-21-065 (Order 06-10), § 173-340-708, filed 10/12/07, effective 11/12/07. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-708, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-708, filed 1/28/91, effective 2/28/91.]

WAC 173-340-709 Methods for defining background concentrations. (1) **Purpose.** Sampling of hazardous substances in background areas may be conducted to distinguish site-related concentration from nonsite related concentrations of hazardous substances or to support the development of a Method C cleanup level under the provisions of WAC 173-340-706. For purposes of this chapter, two types of background may be determined, natural background and area background concentrations, as defined in WAC 173-340-200.

(2) **Background concentrations.** For purposes of defining background concentrations, samples shall be collected from areas that have the same basic characteristics as the medium of concern at the site, have not been influenced by releases from the site and, in the case of natural background concentrations, have not been influenced by releases from other localized human activities.

(3) **Statistical analysis.**

(a) The statistical methods used to evaluate data sets shall be appropriate for the distribution of each hazardous substance. More than one statistical method may be required at a site.

(b) Background sampling data shall be assumed to be lognormally distributed unless it can be demonstrated that another distribution is more appropriate.

(c) For lognormally distributed data sets, background shall be defined as the true upper 90th percentile or four times the true 50th percentile, whichever is lower.

(d) For normally distributed data sets, background shall be defined as the true upper 80th percentile or four times the true 50th percentile, whichever is lower.

(e) Other statistical methods may be used if approved by the department.

(4) **Sample size.** When determining natural background concentrations for soil, a sample size of ten or more background soil samples shall be required. When determining area background concentrations for soil, a sample size of twenty or more soil samples shall be required. The number of samples for other media shall be sufficient to provide a representative measure of background concentrations and shall be determined on a case-by-case basis.

(5) **Procedures.** For the purposes of estimating background concentrations, the following procedures shall be used for measurements below the practical quantitation limit:

(a) Measurements below the method detection limit shall be assigned a value equal to one-half of the method detection limit.

(b) Measurements above the method detection limit, but below the practical quantitation limit shall be assigned a value equal to the method detection limit.

(c) The department may approve the use of alternate statistical procedures for handling data below the method detection limit or practical quantitation limit.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-709, filed 2/12/01, effective 8/15/01.]

WAC 173-340-710 Applicable local, state and federal laws. (1) **Applicable state and federal laws.**

All cleanup actions conducted under this chapter shall comply with applicable state and federal laws. For purposes of this chapter, the term "applicable state and federal laws" shall include legally applicable requirements and those requirements that the department determines, based on consideration of the criteria in subsection (4) of this section, are relevant and appropriate requirements.

(2) **Department determination.** The person conducting a cleanup action shall identify all applicable state and federal laws. The department shall make the final interpretation on whether these requirements have been correctly identified and are legally applicable or relevant and appropriate.

(3) **Legally applicable requirements.** Legally applicable requirements include those cleanup standards, standards of control, and other environmental protection requirements, criteria, or limitations adopted under state or federal law that specifically address a hazardous substance, cleanup action, location or other circumstances at the site.

(4) **Relevant and appropriate requirements.** Relevant and appropriate requirements include those cleanup standards, standards of control, and other environmental requirements, criteria, or limitations established under state or federal law that, while not legally applicable to the hazardous substance, cleanup action, location, or other circumstance at a site, address problems or situations sufficiently similar to those encountered at the site that their use is well suited to the particular site. WAC 173-340-710 through 173-340-760 identifies several requirements the department shall consider relevant and appropriate for establishing cleanup standards. For other regulatory requirements, the following criteria shall be evaluated, where pertinent, to determine whether such requirements are relevant and appropriate for a particular hazardous substance, remedial action, or site:

(a) Whether the purpose for which the statute or regulations under which the requirement was created is similar to the purpose of the cleanup action;

(b) Whether the media regulated or affected by the requirement is similar to the media contaminated or affected at the site;

(c) Whether the hazardous substance regulated by the requirement is similar to the hazardous substance found at the site;

(d) Whether the entities or interests affected or protected by the requirement are similar to the entities or interests affected by the site;

(e) Whether the actions or activities regulated by the requirement are similar to the cleanup action contemplated at the site;

(f) Whether any variance, waiver, or exemption to the requirements are available for the circumstances of the site;

(g) Whether the type of place regulated is similar to the site;

(h) Whether the type and size of structure or site regulated is similar to the type and size of structure or site affected by the release or contemplated by the cleanup action; and

(i) Whether any consideration of use or potential use of affected resources in the requirement is similar to the use or potential use of the resources affected by the site or contemplated cleanup action.

(5) **Variances.** For purposes of this chapter, a regulatory variance or waiver provision included in an applicable state and federal law shall be considered potentially applicable to interim actions and cleanup actions and the department may determine that a particular regulatory variance or waiver is appropriate if the substantive conditions for such a regulatory variance or waiver are met. In all such cases, interim actions and cleanup actions shall be protective of human health and the environment.

(6) **New requirements.** The department shall consider new applicable state and federal laws as part of the periodic review under WAC 173-340-420. Cleanup actions shall be evaluated in light of these new requirements to determine whether the cleanup action is still protective of human health and the environment.

(7) **Selection of cleanup actions.** To demonstrate compliance with WAC 173-340-350 through 173-340-390, cleanup actions shall comply with all applicable state and federal laws in addition to the other requirements of this chapter. The following, which is not a complete list, are selected applications of specific applicable state and federal laws to cleanup actions.

(a) **Water discharge requirements.** Hazardous substances that are directly or indirectly released or proposed to be released to waters of the state shall be provided with all known, available and reasonable methods of treatment consistent with the requirements of chapters 90.48 and 90.54 RCW and the regulations that implement those statutes.

(b) **Air emission requirements.** Best available control technologies consistent with the requirements of chapter 70.94 RCW and the regulations that implement this statute shall be applied to releases of hazardous substances to the air resulting from cleanup actions at a site.

(c) **Solid waste landfill closure requirements.** For solid waste landfills, the solid waste closure requirements in chapter 173-304 WAC shall be minimum requirements for cleanup actions conducted under this chapter. In addition, when the department determines that the closure requirements in chapters 173-351 or 173-303 WAC are legally applicable or relevant and appropriate requirements, the more stringent closure requirements under those laws shall also apply to cleanup actions conducted under this chapter.

(d) **Sediment management requirements.** Sediment cleanup actions conducted under this chapter shall comply with the sediment cleanup standards in chapter 173-204 WAC. In addition, a remedial investigation/feasibility study conducted under WAC 173-340-350 shall also comply with the cleanup study plan requirements under chapter 173-204 WAC. The process for selecting sediment cleanup actions under this chapter shall comply with the requirements in WAC 173-340-350 through 173-340-390.

(8) **Interim actions.** Interim actions conducted under this chapter shall comply with legally applicable requirements. The department may also determine, based on the criteria in subsection (3) of this section, that other requirements, criteria, or limitations are relevant and appropriate for interim actions.

(9) **Permits and exemptions.**

(a) Independent remedial actions must obtain permits required by other federal, state and local laws.

(b) Under RCW 70.105D.090, remedial actions conducted under a consent decree, order, or agreed order, and the department when it conducts a remedial action are exempt from the procedural requirements of certain laws. This exemption shall not apply if the department determines that the exemption would result in loss of approval from a federal agency necessary for the state to administer any federal law. This exemption applies to the following laws:

(i) Chapter 70.94 RCW;

(ii) Chapter 70.95 RCW;

(iii) Chapter 70.105 RCW;

(iv) Chapter 75.20 RCW;

(v) Chapter 90.48 RCW;

(vi) Chapter 90.58 RCW; and

(vii) Any laws requiring or authorizing local government permits or approvals for the remedial action.

(c) Remedial actions exempt from procedural requirements under (a) and (b) of this subsection still must comply with the substantive requirements of these laws.

(d) The department shall ensure compliance with substantive requirements and provide an opportunity for comment by the public and by the state agencies and local governments that would otherwise implement these laws as follows:

(i) Before proposing any substantive requirements, the department or potentially liable persons, if directed to do so by the department, shall consult with the state agencies and local governments to identify potential permits and to obtain written documentation from the consulted agencies regarding the substantive requirements for permits exempted under RCW 70.105D.090.

(ii) The permit exemptions and the substantive requirements, to the extent they are known, shall be identified by the department in the order, decree, or if the cleanup is being conducted by the department, in the work plan prepared by the department.

(iii) A public notice of the order, decree or work plan shall be issued in accordance with WAC 173-340-600. The notice shall specifically identify the permits exempted under RCW 70.105D.090 and seek comment on the substantive requirements proposed to be applied to the remedial action. This notice shall be mailed to the state agencies and local governments that would otherwise implement these permits. This notice shall also be mailed to the same individuals that the state agencies and local government have identified that would normally be mailed notice to if a permit was being issued.

(iv) Substantive requirements, to the extent known and identified by the state agencies and local governments before issuing the order, decree or work plan and those identified by the state agencies and local government during the public comment period shall be incorporated into the order, decree or work plan if approved by the department.

(e) It shall be the continuing obligation of persons conducting remedial actions to determine whether additional permits or approvals or substantive requirements are required. In the event that either the person conducting the remedial action or the department becomes aware of additional permits or approvals or substantive requirements that apply to the remedial action, they shall promptly notify the other party of this knowledge. The department, or the potentially liable person at the department's request, shall consult with the state or local agency on these additional requirements. The department shall make the final determination on the application of any additional substantive requirements at the site.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-710, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-710, filed 1/28/91, effective 2/28/91.]

WAC 173-340-720 Ground water cleanup standards.

(1) **General considerations.**

(a) Ground water cleanup levels shall be based on estimates of the highest beneficial use and the reasonable maximum exposure expected to occur under both current and potential future site use conditions. The department has determined that at most sites use of ground water as a source of drinking water is the beneficial use requiring the highest quality of ground water and that exposure to hazardous substances through ingestion of drinking water and other domestic uses represents the reasonable maximum exposure. Unless a site qualifies under subsection (2) of this section for a different ground water beneficial use, ground water cleanup levels shall be established using this presumed exposure scenario and be established in accordance with subsection (3), (4) or (5) of this section. If the site qualifies for a different ground water beneficial use, ground water cleanup levels shall be established under subsection (6) of this section.

(b) In the event of a release of a hazardous substance at a site, a cleanup action complying with this chapter shall be conducted to address all areas where the concentration of the hazardous substance in ground water exceeds cleanup levels.

(c) Ground water cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of surface water, sediments, soil, or air cleanup standards established under this chapter or other applicable state

and federal laws. A site that qualifies for a Method C ground water cleanup level under this section does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(d) The department may require more stringent cleanup levels than specified in this section where necessary to protect other beneficial uses or otherwise protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708. The following are examples of situations that may require more stringent cleanup levels:

(i) Concentrations that are necessary to protect sensitive subgroups;

(ii) Concentrations that eliminate or minimize the potential for food chain contamination;

(iii) Concentrations that eliminate or minimize the potential for damage to soils or biota in the soils which could impair the use of the soil for agricultural or silvicultural purposes;

(iv) Concentrations that eliminate or minimize the potential for the accumulation of vapors in buildings or other structures to concentrations which pose a threat to human health or the environment; and

(v) Concentrations that protect nearby surface waters.

(2) **Potable ground water defined.** Ground water shall be classified as potable to protect drinking water beneficial uses unless the following can be demonstrated:

(a) The ground water does not serve as a current source of drinking water;

(b) The ground water is not a potential future source of drinking water for any of the following reasons:

(i) The ground water is present in insufficient quantity to yield greater than 0.5 gallon per minute on a sustainable basis to a well constructed in compliance with chapter 173-160 WAC and in accordance with normal domestic water well construction practices for the area in which the site is located;

(ii) The ground water contains natural background concentrations of organic or inorganic constituents that make use of the water as a drinking water source not practicable. Ground water containing total dissolved solids at concentrations greater than 10,000 mg/l shall normally be considered to have fulfilled this requirement; *(NOTE: The total dissolved solids concentration provided here is an example. There may be other situations where high natural background levels also meet this requirement.)* or

(iii) The ground water is situated at a great depth or location that makes recovery of water for drinking water purposes technically impossible; and

(c) The department determines it is unlikely that hazardous substances will be transported from the contaminated ground water to ground water that is a current or potential future source of drinking water, as defined in (a) and (b) of this subsection, at concentrations which exceed ground water quality criteria published in chapter 173-200 WAC.

In making a determination under this provision, the department shall consider site-specific factors including:

(i) The extent of affected ground water;

(ii) The distance to existing water supply wells;

(iii) The likelihood of interconnection between the contaminated ground water and ground water that is a current or potential future source of drinking water due to well construction practices in the area of the state where the site is located;

(iv) The physical and chemical characteristics of the hazardous substance;

(v) The hydrogeologic characteristics of the site;

(vi) The presence of discontinuities in the affected geologic stratum; and

(vii) The degree of confidence in any predictive modeling performed.

(d) Even if ground water is classified as a potential future source of drinking water under (b) of this subsection, the department recognizes that there may be sites where there is an extremely low probability that the ground water will be used for that purpose because of the site's proximity to surface water that is not suitable as a domestic water supply. An example of this situation would be shallow ground waters in close proximity to marine waters such as on Harbor Island in Seattle. At such sites, the department may allow ground water to be classified as nonpotable for the purposes of this section if each of the following conditions can be demonstrated. These determinations must be for reasons other than that the ground water or surface water has been contaminated by a release of a hazardous substance at the site.

(i) The conditions specified in (a) and (c) of this subsection are met;

(ii) There are known or projected points of entry of the ground water into the surface water;

(iii) The surface water is not classified as a suitable domestic water supply source under chapter 173-201A WAC; and

(iv) The ground water is sufficiently hydraulically connected to the surface water that the ground water is not practicable to use as a drinking water source.

(3) **Method A cleanup levels for potable ground water.**

(a) **Applicability.** Method A ground water cleanup levels may only be used at sites qualifying under WAC 173-340-704(1).

(b) **General requirements.** Method A cleanup levels shall be at least as stringent as all of the following:

(i) Concentrations listed in Table 720-1 and compliance with the corresponding footnotes;

(ii) Concentrations established under applicable state and federal laws, including the following requirements:

(A) Maximum contaminant levels established under the Safe Drinking Water Act and published in 40 C.F.R. 141;

(B) Maximum contaminant level goals for noncarcinogens established under the Safe Drinking Water Act and published in 40 C.F.R. 141;

(C) Maximum contaminant levels established by the state board of health and published in chapter 246-290 WAC.

(iii) For hazardous substances deemed indicator hazardous substances for ground water under WAC 173-340-708(2) and for which there is no value in Table 720-1 or applicable state and federal laws, concentrations that do not exceed natural background or the practical quantitation limit, subject to the limitations in this chapter.

(iv) **Protection of surface water beneficial uses.** Concentrations established in accordance with the methods specified in WAC 173-340-730 for protecting surface water ben-

eficial uses, unless it can be demonstrated that the hazardous substances are not likely to reach surface water. This demonstration must be based on factors other than implementation of a cleanup action at the site.

(4) **Method B cleanup levels for potable ground water.**

(a) **Applicability.** Method B potable ground water cleanup levels consist of standard and modified cleanup levels determined using the procedures in this subsection. Either standard or modified Method B ground water cleanup levels based on drinking water beneficial uses may be used at any site.

(b) **Standard Method B potable ground water cleanup levels.** Where the ground water cleanup level is based on a drinking water beneficial use, standard Method B cleanup levels shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws, including the requirements in subsection (3)(b)(ii) of this section;

(ii) **Protection of surface water beneficial uses.** Concentrations established in accordance with the methods specified in WAC 173-340-730 for protecting surface water beneficial uses, unless it can be demonstrated that the hazardous substances are not likely to reach surface water. This demonstration must be based on factors other than implementation of a cleanup action at the site.

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which protect human health as determined by the following methods:

(A) **Noncarcinogens.** Concentrations that are estimated to result in no acute or chronic toxic effects on human health as determined using Equation 720-1.

[Equation 720-1]

$$\text{Ground water cleanup level (ug/l)} = \frac{\text{RfD x ABW x UCF x HQ x AT}}{\text{DWIR x INH x DWF x ED}}$$

Where:

RfD	=	Reference dose as specified in WAC 173-340-708(7) (mg/kg-day)
ABW	=	Average body weight during the exposure duration (16 kg)
UCF	=	Unit conversion factor (1,000 ug/mg)
HQ	=	Hazard quotient (1) (unitless)
AT	=	Averaging time (6 years)
DWIR	=	Drinking water ingestion rate (1.0 liter/day)
INH	=	Inhalation correction factor (use value of 2 for volatile organic compounds and 1 for all other substances [unitless])
DWF	=	Drinking water fraction (1.0) (unitless)
ED	=	Exposure duration (1.0) (6 years)

(B) **Carcinogens.** For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one million (1×10^{-6}) as determined using Equation 720-2.

[Equation 720-2]

$$\text{Ground water cleanup level (ug/l)} = \frac{\text{RISK x ABW x AT x UCF}}{\text{CPF x DWIR x ED x INH x DWF}}$$

Where:

RISK	=	Acceptable cancer risk level (1 in 1,000,000) (unitless)
ABW	=	Average body weight during the exposure duration (70 kg)
AT	=	Averaging time (75 years)
UCF	=	Unit conversion factor (1,000 ug/mg)
CPF	=	Carcinogenic potency factor as specified in WAC 173-340-708(8) (kg-day/mg)
DWIR	=	Drinking water ingestion rate (2.0 liters/day)
ED	=	Exposure duration (30 years)
INH	=	Inhalation correction factor (use value of 2 for volatile organic compounds and 1 for all other substances [unitless])
DWF	=	Drinking water fraction (1.0) (unitless)

(C) **Petroleum mixtures.** For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated taking into account the additive effects of the petroleum fractions and volatile organic compounds present in the petroleum mixture. Equation 720-3 shall be used for this calculation. Cleanup levels for other noncarcinogens and known or suspected carcinogens within the petroleum mixture shall be calculated using Equations 720-1 and 720-2. See Table 830-1 for the analyses required for various petroleum products to use this method. A total petroleum hydrocarbon cleanup level for petroleum mixtures derived using Equation 720-3 shall be adjusted when necessary so that biological degradation of the petroleum does not result in exceedances of the maximum contaminant levels in chapter 246-290 WAC or natural background, whichever is higher.

[Equation 720-3]

$$C_w = \frac{HI \times AT}{\left[\frac{DWIR \times DWF \times ED}{ABW \times UCF}\right] \times \sum_{i=1}^{n} \frac{F(i) \times INH(i)}{RfD(i)}}$$

AT and ED added to above equation

Where:

C_w	=	TPH ground water cleanup level (ug/l)
HI	=	Hazard index (1) (unitless)
AT	=	Averaging time (6 years)
DWIR	=	Drinking water intake rate (1.0 liter/day)
DWF	=	Drinking water fraction (1.0) (unitless)
ED	=	Exposure duration (6 years)
ABW	=	Average body weight during the exposure duration (16 kg)
UCF	=	Unit conversion factor (1,000 ug/mg)
F(i)	=	Fraction by weight of petroleum component (i). (Unitless) (Use site-specific ground water composition data, provided the data is representative of present and future conditions at the site, or use the ground water composition predicted under WAC 173-340-747
INH(i)	=	Inhalation correction fraction for petroleum component (i) (use value of 2 for volatile organic compounds and 1 for all other components [unitless])
RfD(i)	=	Reference dose of petroleum component (i) as specified in WAC 173-340-708(7) (mg/kg-day)
n	=	The number of petroleum components (petroleum fractions plus volatile organic compounds with an RfD) present in the petroleum mixture. (See Table 830-1.)

(c) **Modified Method B potable ground water cleanup levels.** Modified Method B ground water cleanup levels for

drinking water beneficial uses are standard Method B ground water cleanup levels modified with chemical-specific or site-specific data. When making these adjustments, the resultant cleanup levels shall meet applicable state and federal laws and health risk levels for standard Method B ground water cleanup levels. Changes to exposure assumptions must comply with WAC 173-340-708(10). The following adjustments may be made to the default assumptions in the standard Method B equations to derive modified Method B ground water cleanup levels for drinking water beneficial uses:

(i) The inhalation correction factor is an adjustment factor that takes into account exposure to hazardous substances that are volatilized and inhaled during showering and other domestic activities. When available, hazardous substance-specific information may be used to estimate this factor;

(ii) Where separate toxicity factors (reference doses and carcinogenic potency factors) are available for inhalation and oral exposures, the health hazards associated with the inhalation of hazardous substances in ground water during showering and other domestic activities may be evaluated separately from the health hazards associated with ingestion of drinking water. In these cases, the ground water cleanup level based on ingestion of drinking water shall be modified to take into account multiple exposure pathways in accordance with WAC 173-340-708(6);

(iii) The toxicity equivalency factor procedures described in WAC 173-340-708(8) may be used for assessing the potential carcinogenic risk of mixtures of chlorinated dibenzo-p-dioxins, chlorinated dibenzofurans and polycyclic aromatic hydrocarbons;

(iv) Adjustments to the reference dose and cancer potency factor may be made if the requirements in WAC 173-340-708 (7) and (8) are met; and

(v) Modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16).

(d) **Using modified Method B to evaluate ground water remediation levels.** In addition to the adjustments allowed under (c) of this subsection, other adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(5) **Method C cleanup levels for potable ground water.**

(a) **Applicability.** Method C potable ground water cleanup levels consist of standard and modified cleanup levels as described in this subsection.

The department may approve of both standard and modified Method C ground water cleanup levels based on drinking water beneficial uses only at sites qualifying under WAC 173-340-706(1).

(b) **Standard Method C potable ground water cleanup levels.** Where the ground water cleanup level is based on a drinking water beneficial use and the site qualifies for a Method C ground water cleanup level, the standard Method C cleanup levels for ground water shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws, including the requirements in subsection (3)(b)(ii) of this section;

(ii) **Protection of surface water beneficial uses.** Concentrations established in accordance with the methods specified in WAC 173-340-730 for protecting surface water beneficial uses, unless it can be demonstrated that the hazardous substances are not likely to reach surface water. This demonstration must be based on factors other than implementation of a cleanup action at the site.

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based standards or criteria have not been established under applicable state and federal laws, those concentrations that protect human health as determined using the following methods:

(A) **Noncarcinogens.** Concentrations that are estimated to result in no significant acute or chronic toxic effects on human health and are estimated using Equation 720-1, except that the average body weight shall be 70 kg and the drinking water intake rate shall be 2 liters/day;

(B) **Carcinogens.** Concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand (1×10^{-5}), using Equation 720-2;

(C) **Petroleum mixtures.** Cleanup levels for petroleum mixtures shall be determined as specified in subsection (4)(b)(iii)(C) of this section except that the average body weight shall be 70 kg and the drinking water rate shall be 2 liters/day.

(c) **Modified Method C potable ground water cleanup levels.** Modified Method C ground water cleanup levels for drinking water beneficial uses are standard Method C ground water cleanup levels modified with chemical-specific or site-specific data. The same limitations and adjustments specified for modified Method B in subsection (4)(c) of this section apply to modified Method C ground water cleanup levels.

(d) **Using Modified Method C to evaluate ground water remediation levels.** In addition to the adjustments allowed under (c) of this subsection, other adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(6) **Cleanup levels for nonpotable ground water.**

(a) **Applicability.** Ground water cleanup levels may be established under this subsection only if the contaminated ground water is not classified as potable under subsection (2) of this section.

(b) **Requirements.** Cleanup levels shall be established in accordance with either of the following:

(i) The methods specified in subsections (3), (4) or (5) of this section, as applicable, for protection of drinking water beneficial uses; or

(ii) A site-specific risk assessment as provided for under (c) of this subsection for protection of other ground water beneficial uses.

(c) **Site-specific risk assessment.**

(i) **Method B site-specific ground water cleanup levels.** Where a site-specific risk assessment is used to establish a Method B ground water cleanup level under (b)(ii) of this subsection, the risk assessment shall conform to the requirements in WAC 173-340-702 and 173-340-708. The risk assessment shall evaluate all potential exposure pathways

and ground water uses at the site, including potential impacts to persons engaged in site development or utility construction and maintenance activities. The risk assessment shall demonstrate the following:

(A) The cleanup levels will meet any applicable state and federal laws (drinking water standards are not applicable to these sites);

(B) The cleanup levels will result in no significant acute or chronic toxic effects on human health as demonstrated by not exceeding a hazard quotient of one (1) for individual hazardous substances;

(C) The cleanup levels will result in an upper bound on the estimated excess cancer risk that is less than or equal to one in one million (1×10^{-6}) for individual hazardous substances;

(D) For organic hazardous substances and petroleum products, the cleanup levels comply with the limitation on free product in subsection (7)(d) of this section;

(E) The cleanup levels will not exceed the surface water cleanup levels derived under WAC 173-340-730 at the ground water point of compliance or exceed the surface water or sediment quality standards at any point downstream, unless it can be demonstrated that the hazardous substances are not likely to reach surface water. This demonstration must be based on factors other than implementation of a cleanup action at the site; and

(F) Where it is demonstrated that hazardous substances are not likely to reach surface water, the use of a ground water cleanup level less stringent than a surface water cleanup level will not pose a threat to surface water through pathways that could result in ground water affected by the site entering surface water (such as use of the water for irrigation or discharges from foundation drains or utility corridors).

(ii) **Method C site-specific ground water cleanup levels.**

(A) **Applicability.** The department may approve of a site-specific Method C ground water cleanup level derived under (b)(ii) of this subsection only at sites qualifying under WAC 173-340-706(1).

(B) **Requirements.** Where a site-specific risk assessment is used to establish a Method C ground water cleanup level under (b)(ii) of this subsection, the site-specific risk assessment shall comply with the requirements in (c)(i) of this subsection except that the level of risk for individual carcinogens shall be one in one hundred thousand (1×10^{-5}).

(iii) **Limitations on the use of site-specific risk assessment.** If the site-specific risk assessment results in a Method B or Method C ground water cleanup level that exceeds the applicable potable ground water cleanup level derived under (b)(i) of this subsection, then the potable ground water cleanup level shall be used unless the following conditions are met:

(A) All potentially affected property owners, local governments, tribes and water purveyors with jurisdiction in the area potentially affected by the ground water contamination have been mailed a notice of the proposal and provided an opportunity to comment. The notice shall specifically ask for information on existing and planned uses of the ground water. The notice shall be in addition to any notice provided under WAC 173-340-600. In determining whether it is appropriate to use a cleanup level less stringent than the potable ground water cleanup level, the department will give greater weight to information based on an adopted or pending plan or similar preexisting document.

(B) For sites where the ground water is classified as nonpotable under WAC 173-340-720 (2)(d), the cleanup action includes institutional controls complying with WAC 173-340-440 that will prevent the use of contaminated ground water for drinking water purposes at any point between the source of hazardous substances and the point(s) of entry of ground water into the surface water.

(C) For sites where the risk assessment includes assumptions of restricted use or contact with the ground water (other than for the reason of being nonpotable), or restricted use of the land above the ground water, the cleanup action includes institutional controls complying with WAC 173-340-440 that will implement the restrictions.

(7) **Adjustments to cleanup levels.**

(a) **Total site risk adjustments.** Ground water cleanup levels for individual hazardous substances developed in accordance with subsection (4), (5) or (6) of this section, including those based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(b) **Adjustments to applicable state and federal laws.** Where a cleanup level developed under subsection (3), (4), (5), or (6) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level shall be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) **Natural background and PQL considerations.** Cleanup levels determined under subsection (3), (4), (5), or (6) of this section, including cleanup levels adjusted under subsection (7)(a) and (b) of this section, shall not be set at levels below the practical quantitation limit or natural background concentrations, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements pertaining to practical quantitation limits and natural background.

(d) **Nonaqueous phase liquid limitation.** For organic hazardous substances and total petroleum hydrocarbons, the cleanup level determined under subsection (3), (4), (5), or (6) shall not exceed a concentration that would result in nonaqueous phase liquid being present in or on the ground water. Physical observations of ground water at or above the cleanup level, such as the lack of a film, sheen, or discoloration of the ground water or lack of sludge or emulsion in the ground water, may be used to determine compliance with this requirement.

(8) **Point of compliance.**

(a) **Point of compliance defined.** For ground water, the point of compliance is the point or points where the ground water cleanup levels established under subsection (3), (4), (5), or (6) of this section must be attained for a site to be in compliance with the cleanup standards. Ground water cleanup levels shall be attained in all ground waters from the point of compliance to the outer boundary of the hazardous substance plume.

(b) **Standard point of compliance for all sites.** The standard point of compliance shall be established throughout the site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the site.

(c) **Conditional point of compliance.** Where it can be demonstrated under WAC 173-340-350 through 173-340-390 that it is not practicable to meet the cleanup level throughout the site within a reasonable restoration time frame, the department may approve a conditional point of compliance that shall be as close as practicable to the source of hazardous substances, and except as provided under (d) of this subsection, not to exceed the property boundary. Where a conditional point of compliance is proposed, the person responsible for undertaking the cleanup action shall demonstrate that all practicable methods of treatment are to be used in the site cleanup.

(d) **Off-property conditional point of compliance.** A conditional point of compliance shall not exceed the property boundary except in the three situations described below. In each of these three situations the person responsible for undertaking the cleanup action shall demonstrate that, in addition to making the demonstration required by (c) of this subsection, the following requirements are met:

(i) **Properties abutting surface water.** Where the ground water cleanup level is based on protection of surface water beneficial uses under subsection (3), (4), (5), or (6) of this section, and the property containing the source of contamination directly abuts the surface water, the department may approve a conditional point of compliance that is located within the surface water as close as technically possible to the point or points where ground water flows into the surface water subject to the following conditions:

(A) It has been demonstrated that the contaminated ground water is entering the surface water and will continue to enter the surface water even after implementation of the selected cleanup action;

(B) It has been demonstrated under WAC 173-340-350 through 173-340-390 that it is not practicable to meet the cleanup level at a point within the ground water before entering the surface water, within a reasonable restoration time frame;

(C) Use of a mixing zone under WAC 173-201A-100 to demonstrate compliance with surface water cleanup levels shall not be allowed;

(D) Ground water discharges shall be provided with all known available and reasonable methods of treatment before being released into surface waters;

(E) Ground water discharges shall not result in violations of sediment quality values published in chapter 173-204 WAC;

(F) Ground water and surface water monitoring shall be conducted to assess the long-term performance of the selected cleanup action including potential bioaccumulation problems resulting from surface water concentrations below method detection limits; and

(G) Before approving the conditional point of compliance, a notice of the proposal shall be mailed to the natural resource trustees, the Washington state department of natural resources and the United States Army Corps of Engineers. The notice shall be in addition to any notice provided under WAC 173-340-600 and invite comments on the proposal.

(ii) **Properties near, but not abutting, surface water.** Where the ground water cleanup level is based on protection of surface water beneficial uses under subsection (3), (4), (5), or (6) of this section and the property that is the source of the contamination is located near, but does not directly abut, a surface water body, the department may approve a conditional point of compliance that is located as close as practicable to the source, not to exceed the point or points where the ground water flows into the surface water.

For a conditional point of compliance to be approved under this provision the conditions specified in (d)(i) of this section must be met and the affected property owners between the source of contamination and the surface water body must agree in writing to the use of the conditional point of compliance. Also, if the ground water cleanup level is not exceeded in the ground water prior to its entry into the surface water, the conditional point of compliance cannot extend beyond the extent of ground water contamination above the cleanup level at the time the department approves the conditional point of compliance.

(iii) **Area-wide conditional point of compliance.** As part of remedy selection, the department may approve an area-wide conditional point of compliance to address an area-wide ground water contamination problem. The area-wide conditional point(s) of compliance shall be as close as practicable to each source of hazardous substances, not to exceed the extent of ground water contamination at the time the department approves an area-wide conditional point of compliance.

This provision may be applied only at areas that are affected by hazardous substances released from multiple sources that have resulted in commingled plumes of contaminated ground water that are not practicable to address separately. A site may have more than one area-wide conditional point of compliance to address multiple sources and types of contaminants. An area-wide conditional point of compliance may be approved under this provision only if all of the following conditions have been met:

(A) The person conducting the cleanup action has complied with WAC 173-340-350 through 173-340-390, including a demonstration that it is not practicable to meet a point of compliance throughout the ground water contamination within a reasonable restoration time frame;

(B) A plan has been developed for implementation of the cleanup action, including a description of how any necessary access to the affected properties will be obtained;

(C) If the contaminated ground water is considered to be potable under WAC 173-340-720(2), current developments in the area encompassed by the area-wide conditional point of compliance and any other areas potentially affected by the

ground water contamination are served by a public water system that obtains its water from an offsite source and it can be demonstrated that the water system has sufficient capacity to serve future development in these areas. This demonstration may be made by obtaining a written statement to this effect from the water system operator;

(D) All property owners, tribes, local governments, and water purveyors with jurisdiction in the area potentially affected by the ground water contamination, have been mailed a notice of the proposal to establish an area-wide conditional point of compliance and provided an opportunity to comment. The notice shall specifically ask for information on existing and planned uses of the ground water. The notice shall be in addition to any notice provided under WAC 173-340-600. The department will give greater weight to information based on an adopted or pending plan or similar preexisting document. When the department is providing technical assistance under WAC 173-340-515, the department shall also provide an opportunity to comment to the public through the *Site Register* before issuing a written opinion.

(E) Other conditions as determined by the department on a case-by-case basis.

(e) **Monitoring wells and surface water compliance.**

(i) The department may require or approve the use of upland monitoring wells located between the surface water and the source of contamination to establish compliance where a conditional point of compliance has been established under subsection (8)(d)(i) or (ii) of this section.

(ii) Where such monitoring wells are used, the department should consider an estimate of natural attenuation between the monitoring well and the point or points where ground water flows into the surface water in evaluating whether compliance has been achieved.

(iii) When evaluating how much, if any, natural attenuation will occur, the department shall consider site-specific factors including:

(A) Whether the ground water could reach the surface water in ways that would not provide for natural attenuation within the ground water flow system (such as short circuiting through high permeability zones, utility corridors or foundation drains); and

(B) Whether changes to the ground water chemistry due to natural attenuation processes would cause an exceedance of surface water or sediment quality standards.

(9) **Compliance monitoring.**

(a) When ground water cleanup levels have been established at a site, sampling of the ground water shall be conducted to determine if compliance with the ground water cleanup levels has been achieved. Compliance with ground water cleanup levels shall be determined by analysis of ground water samples representative of the ground water. Surface water analysis, bioassays or other biomonitoring methods may also be required where the ground water cleanup level is based on protection of surface water. Sampling and analytical procedures shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. The sample design shall provide data that are representative of the site.

(b) Analyses shall be conducted on unfiltered ground water samples, unless it can be demonstrated that a filtered sample provides a more representative measure of ground water quality. The department expects that filtering will generally be acceptable for iron and manganese and other naturally occurring inorganic substances where:

(i) A properly constructed monitoring well cannot be sufficiently developed to provide low turbidity water samples;

(ii) Due to the natural background concentration of hazardous substances in the aquifer material, unfiltered samples would not provide a representative measure of ground water quality; and

(iii) Filtering is performed in the field with all practicable measures taken to avoid exposing the ground water sample to the ambient air before filtering.

(c) The data analysis and evaluation procedures used to evaluate compliance with ground water cleanup levels shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. These procedures shall meet the following general requirements:

(i) Methods of data analysis shall be consistent with the sampling design;

(ii) When cleanup levels are based on requirements specified in applicable state and federal laws, the procedures for evaluating compliance that are specified in those requirements shall be used to evaluate compliance with cleanup levels unless those procedures conflict with the intent of this section;

(iii) Where procedures for evaluating compliance are not specified in an applicable state and federal law, statistical methods used shall be appropriate for the distribution of sampling data for each hazardous substance. If the distributions for hazardous substances differ, more than one statistical method may be required;

(iv) Compliance with ground water cleanup levels shall be determined for each ground water monitoring well or other monitoring points such as a spring;

(v) The data analysis procedures identified in the compliance monitoring plan shall specify the statistical parameters to be used to determine compliance with ground water cleanup levels.

(A) For cleanup levels based on short-term or acute toxic effects on human health or the environment, an upper percentile concentration shall be used to evaluate compliance with ground water cleanup levels.

(B) For cleanup levels based on chronic or carcinogenic threats, the true mean concentration shall be used to evaluate compliance with ground water cleanup levels.

(vi) When active ground water restoration is performed, or containment technologies are used that incorporate active pumping of ground water, compliance with ground water cleanup levels shall be determined when the ground water characteristics at the site are no longer influenced by the cleanup action.

(d) When data analysis procedures for evaluating compliance are not specified in an applicable state or federal law, the following procedures shall be used:

(i) A confidence interval approach that meets the following requirements:

(A) The upper one-sided ninety-five percent confidence limit on the true mean ground water concentration shall be less than the ground water cleanup level. For lognormally

distributed data, the upper one-sided ninety-five percent confidence limit shall be calculated using Land's method; and

(B) Data shall be assumed to be lognormally distributed unless this assumption is rejected by a statistical test. If a lognormal distribution is inappropriate, data shall be assumed to be normally distributed unless this assumption is rejected by a statistical test. The W test, D'Agostino's test, or, censored probability plots, as appropriate for the data, shall be the statistical methods used to determine whether the data is lognormally or normally distributed.

(ii) Evaluations conducted under subsection (9)(c)(v)(A) of this subsection may use a parametric test for percentiles based on tolerance intervals to test the proportion of ground water samples having concentrations less than the ground water cleanup level. When using this method, the true proportion of samples that do not exceed the ground water cleanup level shall not be less than ninety percent. Statistical tests shall be performed with a Type I error level of 0.05; or

(iii) Other statistical methods approved by the department.

(e) All data analysis methods used, including those specified in state or federal law, must meet the following requirements:

(i) No single sample concentration shall be greater than two times the ground water cleanup level. Higher exceedances to control false positive error rates at five percent may be approved by the department when the cleanup level is based on background concentrations; and

(ii) Less than ten percent of the sample concentrations shall exceed the ground water cleanup level during a representative sampling period. Higher exceedances to control false positive error rates at five percent may be approved by the department when the cleanup level is based on background concentrations; and

(f) When using statistical methods to demonstrate compliance with ground water cleanup levels, the following procedures shall be used for measurements below the practical quantitation limit:

(i) Measurements below the method detection limit shall be assigned a value equal to one-half the method detection limit when not more than fifteen percent of the measurements are below the practical quantitation limit.

(ii) Measurements above the method detection limit but below the practical quantitation limit shall be assigned a value equal to the method detection limit when not more than fifteen percent of the measurements are below the practical quantitation limit.

(iii) When between fifteen and fifty percent of the measurements are below the practical quantitation limit and the data are assumed to be lognormally or normally distributed, Cohen's method shall be used to calculate a corrected mean and standard deviation for use in calculating an upper confidence limit on the true mean ground water concentration.

(iv) If more than fifty percent of the measurements are below the practical quantitation limit, the largest value in the data set shall be used in place of an upper confidence limit on the true mean ground water calculation.

(v) If a hazardous substance or petroleum fraction has never been detected in any sample at a site and these substances are not suspected of being present at the site based on site history and other knowledge, that hazardous substance or petroleum fraction may be excluded from the statistical analysis.

(vi) The department may approve alternate statistical procedures for handling nondetected values or values below the practical quantitation limit.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-720, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-720, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-730 Surface water cleanup standards.

(1) **General considerations.**

(a) Surface water cleanup levels shall be based on estimates of the highest beneficial use and the reasonable maximum exposure expected to occur under both current and potential future site use conditions. The classification and the highest beneficial use of a surface water body, determined in accordance with chapter 173-201A WAC, shall be used to establish the reasonable maximum exposure for that water body. Surface water cleanup levels shall use this presumed exposure scenario and shall be established in accordance with this section.

(b) In the event of a release of a hazardous substance to surface water from a site, a cleanup action that complies with this chapter shall be conducted to address all areas of the site where the concentration of the hazardous substances in the surface water exceeds cleanup levels.

(c) Surface water cleanup levels established under this section apply to those surface waters of the state affected or potentially affected by releases of hazardous substances from sites addressed under this chapter. The department does not expect that cleanup standards will be applied to storm water runoff that is in the process of being conveyed to a treatment system.

(d) Surface water cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of ground water, soil, sediment, or air cleanup standards established under this chapter or other applicable state and federal laws. A site that qualifies for a Method C surface water cleanup level under this section does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(e) The department may require more stringent cleanup levels than specified in this section where necessary to protect other beneficial uses or otherwise protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(2) **Method A surface water cleanup levels.**

(a) **Applicability.** Method A surface water cleanup levels may only be used at sites that qualify under WAC 173-340-704(1).

(b) **General requirements.** Method A surface water cleanup levels shall be at least as stringent as all of the following:

(i) Concentrations established under applicable state and federal laws, including the following requirements:

(A) All water quality criteria published in the water quality standards for surface waters of the state of Washington, chapter 173-201A WAC, as amended;

(B) Water quality criteria based on the protection of aquatic organisms (acute and chronic criteria) and human health published under section 304 of the Clean Water Act.

(C) National toxics rule (40 C.F.R. Part 131);

(ii) For surface waters that are classified as suitable for use as a domestic water supply under chapter 173-201A (excluding marine waters), concentrations derived using the methods specified in WAC 173-340-720 for drinking water beneficial uses; and

(iii) For a hazardous substance deemed an indicator hazardous substance for surface water under WAC 173-340-708(2) and for which there is no value in applicable state and federal laws, a concentration that does not exceed the natural background concentration or the practical quantitation limit, subject to the limitations in this chapter.

(3) **Method B surface water cleanup levels.**

(a) **Applicability.** Method B surface water cleanup levels consist of standard and modified cleanup levels as described in this subsection. Either standard or modified Method B surface water cleanup levels may be used at any site.

(b) **Standard Method B surface water cleanup levels.** Standard Method B cleanup levels for surface waters shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws, including the following requirements:

(A) All water quality criteria published in the water quality standards for surface waters of the state of Washington, chapter 173-201A WAC;

(B) Water quality criteria based on the protection of aquatic organisms (acute and chronic criteria) and human health published under section 304 of the Clean Water Act unless it can be demonstrated that such criteria are not relevant and appropriate for a specific surface water body or hazardous substance; and

(C) National toxics rule (40 C.F.R. Part 131);

(ii) **Environmental effects.** For hazardous substances for which environmental effects-based concentrations have not been established under applicable state or federal laws, concentrations that are estimated to result in no adverse effects on the protection and propagation of wildlife, fish, and other aquatic life. Whole effluent toxicity testing using the protocols described in chapter 173-205 WAC may be used to make this demonstration for fish and aquatic life;

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations that protect human health as determined by the following methods:

(A) **Noncarcinogens.** For surface waters that support or have the potential to support fish or shellfish populations, concentrations which are estimated to result in no acute or chronic toxic effects on human health as determined using Equation 730-1.

[Equation 730-1]

$$\text{Surface water cleanup level (ug/l)} = \frac{\text{RfD x ABW x UCF1 x UCF2 x HQ x AT}}{\text{BCF x FCR x FDF x ED}}$$

Where:

RfD	=	Reference dose as specified in WAC 173-340-708(7) (mg/kg-day)
ABW	=	Average body weight during the exposure duration (70 kg)
UCF1	=	Unit conversion factor (1,000 ug/mg)
UCF2	=	Unit conversion factor (1,000 grams/liter)
BCF	=	Bioconcentration factor as defined in WAC 173-340-708(9) (liters/kilogram)
FCR	=	Fish consumption rate (54 grams/day)
FDF	=	Fish diet fraction (0.5) (unitless)
HQ	=	Hazard quotient (1) (unitless)
AT	=	Averaging time (30 years)
ED	=	Exposure duration (30 years)

(B) **Carcinogens.** For surface waters which support or have the potential to support fish or shellfish populations, concentrations that are estimated to result in an excess cancer risk less than or equal to one in one million (1×10^{-6}) as determined using Equation 730-2.

[Equation 730-2]

$$\text{Surface water cleanup level (ug/l)} = \frac{\text{RISK x ABW x AT x UCF1 x UCF2}}{\text{CPF x BCF x FCR x FDF x ED}}$$

Where:

CPF	=	Carcinogenic potency factor as specified in WAC 173-340-708(8) (kg-day/mg)
RISK	=	Acceptable cancer risk level (1 in 1,000,000) (unitless)
ABW	=	Average body weight during the exposure duration (70 kg)
AT	=	Averaging time (75 years)
UCF1	=	Unit conversion factor (1,000 ug/mg)
UCF2	=	Unit conversion factor (1,000 grams/liter)
BCF	=	Bioconcentration factor as defined in WAC 173-340-708(9) (liters/kilogram)
FCR	=	Fish consumption rate (54 grams/day)
FDF	=	Fish diet fraction (0.5) (unitless)
ED	=	Exposure duration (30 years)

(C) **Petroleum mixtures.** For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated using Equation 730-1 and by taking into account the additive effects of the petroleum fractions and volatile hazardous substances present in the petroleum mixture. As an alternative to this calculation, the total petroleum hydrocarbon cleanup levels in Table 720-1 may be used. Cleanup levels for other noncarcinogens and known or suspected carcinogens within the petroleum mixture shall be calculated using Equations 730-1 and 730-2. See Table 830-1 for the analyses required for various petroleum products to use this method; and

(iv) **Drinking water considerations.** For surface waters that are classified as suitable for use as a domestic water supply under chapter 173-201A WAC, concentrations derived using the methods specified in WAC 173-340-720 for drinking water beneficial uses.

(c) **Modified Method B surface water cleanup levels.** Modified Method B surface water cleanup levels are standard Method B surface water cleanup levels modified with chemical-specific or site-specific data. When making these adjustments, the resultant cleanup levels shall meet applicable state and federal laws and health risk levels required for standard

Method B surface water cleanup levels. Changes to exposure assumptions must comply with WAC 173-340-708(10). The following adjustments may be made to the default assumptions in the standard Method B equations to derive modified Method B surface water cleanup levels:

(i) Adjustments to the reference dose and cancer potency factor may be made if the requirements in WAC 173-340-708 (7) and (8) are met;

(ii) Adjustments to the bioconcentration factor may be made if the requirements in WAC 173-340-708(9) are met;

(iii) Where a numeric environmental effects-based water quality standard does not exist, bioassays that use methods other than those specified in chapter 173-205 WAC may be approved by the department to establish concentrations for the protection of fish and other aquatic life;

(iv) The toxicity equivalency factor procedures described in WAC 173-340-708(8) may be used for assessing the potential carcinogenic risk of mixtures of chlorinated dibenzo-p-dioxins, chlorinated dibenzofurans and polycyclic aromatic hydrocarbons; and

(v) Modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16).

(d) **Using modified Method B to evaluate surface water remediation levels.** In addition to the adjustments allowed under subsection (3)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(4) **Method C surface water cleanup levels.**

(a) **Applicability.** Method C surface water cleanup levels consist of standard and modified cleanup levels as described in this subsection. Either standard or modified Method C cleanup levels may be approved by the department if the person undertaking the cleanup action can demonstrate that such levels are consistent with applicable state and federal laws, that all practicable methods of treatment have been used, that institutional controls are implemented in accordance with WAC 173-340-440, and that one or more of the conditions in WAC 173-340-706(1) exist.

(b) **Standard Method C surface water cleanup levels.** Method C cleanup levels for surface waters shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws, including the requirements identified in subsection (3)(b)(i) of this section;

(ii) **Environmental effects.** For hazardous substances for which an environmental effects based concentration has not been established under applicable state or federal laws, those concentrations which are estimated to result in no significant adverse effects on the protection and propagation of wildlife, fish and other aquatic life. Whole effluent toxicity testing using the protocols described in chapter 173-205 WAC may be used to make this demonstration for fish and aquatic life;

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which protect human health as determined by the following methods:

(A) **Noncarcinogens.** For surface waters that support or have the potential to support fish or shellfish populations, concentrations that are estimated to result in no significant acute or chronic toxic effects on human health and are estimated in accordance with Equation 730-1 except that the fish diet fraction shall be twenty percent (0.2);

(B) **Carcinogens.** For surface waters that support or have the potential to support fish or shellfish populations, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand (1×10^{-5}) and are estimated in accordance with Equation 730-2 except that the fish diet fraction shall be twenty percent (0.2);

(C) **Petroleum mixtures.** Cleanup levels for petroleum mixtures shall be calculated as specified in subsection (3)(b)(iii)(C) of this section, except that the fish diet fraction shall be twenty percent (0.2); and

(iv) **Drinking water considerations.** For surface waters that are classified as suitable for use as a domestic water supply under chapter 173-201A WAC, concentrations derived using the methods specified for drinking water beneficial uses in WAC 173-340-720.

(c) **Modified Method C surface water cleanup levels.** Modified Method C surface water cleanup levels are standard Method C surface water cleanup levels modified with chemical-specific or site-specific data. The same limitations and adjustments specified for modified Method B in subsection (3)(c) of this section apply to modified Method C surface water cleanup levels.

(d) **Using modified Method C to evaluate surface water remediation levels.** In addition to the adjustments allowed under subsection (4)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(5) **Adjustments to cleanup levels.**

(a) **Total site risk adjustments.** Surface water cleanup levels for individual hazardous substances developed in accordance with subsections (3) and (4) of this section, including those based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) and the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures specified in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(b) **Adjustments to applicable state and federal laws.** Where a cleanup level developed under subsection (2), (3) or (4) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level shall

be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) **Natural background and PQL considerations.** Cleanup levels determined under subsections (2), (3) and (4) of this section, including cleanup levels adjusted under subsection (5)(a) and (b) of this subsection, shall not be set at levels below the practical quantitation limit or natural background concentration, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements pertaining to practical quantitation limits and natural background concentrations.

(d) **Nonaqueous phase liquid limitation.** For organic hazardous substances and petroleum hydrocarbons, the cleanup level shall not exceed a concentration that would result in nonaqueous phase liquid being present in or on the surface water. Physical observations of surface water at or above the cleanup level, such as the lack of a film, sheen, discoloration, sludge or emulsion in the surface water or adjoining shoreline, may be used to determine compliance with this requirement.

(6) **Point of compliance.**

(a) The point of compliance for the surface water cleanup levels shall be the point or points at which hazardous substances are released to surface waters of the state unless the department has authorized a mixing zone in accordance with chapter 173-201A WAC.

(b) Where hazardous substances are released to the surface water as a result of ground water flows, no mixing zone shall be allowed to demonstrate compliance with surface water cleanup levels. See WAC 173-340-720 (8)(d) for additional requirements for sites where contaminated ground water is flowing into surface water.

(c) As used in this subsection, "mixing zone" means that portion of a surface water body adjacent to an effluent outfall where mixing results in dilution of the effluent with the receiving water. See chapter 173-201A WAC for additional information on mixing zones.

(7) **Compliance monitoring.**

(a) When surface water cleanup levels have been established at a site, sampling of the surface water shall be conducted to determine if compliance with the surface water cleanup levels has been achieved. Sampling and analytical procedures shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. The sample design shall provide data that are representative of the site.

(b) The data analysis and evaluation procedures used to evaluate compliance with surface water cleanup levels shall be defined in a compliance monitoring plan prepared under WAC 173-340-410.

(c) Compliance with surface water cleanup standards shall be determined by analyses of unfiltered surface water samples, unless it can be demonstrated that a filtered sample provides a more representative measure of surface water quality.

(d) When surface water cleanup levels are based on requirements specified in applicable state and federal laws, the procedures for evaluating compliance that are specified in those requirements shall be used to evaluate compliance with surface water cleanup levels unless those procedures conflict with the intent of this section.

(e) Where procedures for evaluating compliance are not specified in an applicable state and federal law, compliance with surface water cleanup levels shall be evaluated using procedures approved by the department. Where statistical methods are used to evaluate compliance, the statistical methods shall be appropriate for the distribution of the hazardous substance sampling data. If the distribution of the hazardous substance sampling data is inappropriate for statistical methods based on a normal distribution, then the data may be transformed. If the distributions of individual hazardous substances differ, more than one statistical method may be required.

(f) Sampling and analysis of fish tissue, shellfish, or other aquatic organisms and sediments may be required to supplement water column sampling during compliance monitoring.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-730, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-730, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-740 Unrestricted land use soil cleanup standards. (1) **General considerations.**

(a) Presumed exposure scenario soil cleanup levels shall be based on estimates of the reasonable maximum exposure expected to occur under both current and future site use conditions. The department has determined that residential land use is generally the site use requiring the most protective cleanup levels and that exposure to hazardous substances under residential land use conditions represents the reasonable maximum exposure scenario. Unless a site qualifies for use of an industrial soil cleanup level under WAC 173-340-745, soil cleanup levels shall use this presumed exposure scenario and be established in accordance with this section.

(b) In the event of a release of a hazardous substance to the soil at a site, a cleanup action complying with this chapter shall be conducted to address all areas where the concentration of hazardous substances in the soil exceeds cleanup levels at the relevant point of compliance.

(c) The department may require more stringent soil cleanup standards than required by this section where, based on a site-specific evaluation, the department determines that this is necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708. The following are examples of situations that may require more stringent cleanup levels.

(i) Concentrations that eliminate or substantially reduce the potential for food chain contamination;

(ii) Concentrations that eliminate or substantially reduce the potential for damage to soils or biota in the soils which could impair the use of soils for agricultural or silvicultural purposes;

(iii) Concentrations necessary to address the potential health risk posed by dust at a site;

(iv) Concentrations necessary to protect the ground water at a particular site;

(v) Concentrations necessary to protect nearby surface waters from hazardous substances in runoff from the site; and

(vi) Concentrations that eliminate or minimize the potential for the accumulation of vapors in buildings or other structures.

(d) Relationship between soil cleanup levels and other cleanup standards. Soil cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of ground water, surface water, sediment, or air cleanup standards established under this chapter or applicable state and federal laws. A property that qualifies for a Method C soil cleanup level under WAC 173-340-745 does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(2) **Method A soil cleanup levels for unrestricted land use.**

(a) **Applicability.** Method A soil cleanup levels may only be used at sites qualifying under WAC 173-340-704(1).

(b) **General requirements.** Method A soil cleanup levels shall be at least as stringent as all of the following:

(i) Concentrations in Table 740-1 and compliance with the corresponding footnotes;

(ii) Concentrations established under applicable state and federal laws;

(iii) Concentrations that result in no significant adverse effects on the protection and propagation of terrestrial ecological receptors using the procedures specified in WAC 173-340-7490 through 173-340-7493, unless it is demonstrated under those sections that establishing a soil concentration is unnecessary; and

(iv) For a hazardous substance that is deemed an indicator hazardous substance under WAC 173-340-708(2) and for which there is no value in Table 740-1 or applicable state and federal laws, a concentration that does not exceed the natural background concentration or the practical quantification limit, subject to the limitations in this chapter.

(3) **Method B soil cleanup levels for unrestricted land use.**

(a) **Applicability.** Method B soil cleanup levels consist of standard and modified cleanup levels determined using the procedures in this subsection. Either standard or modified Method B soil cleanup levels may be used at any site.

(b) **Standard Method B soil cleanup levels.** Standard Method B cleanup levels for soils shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws;

(ii) **Environmental protection.** Concentrations that result in no significant adverse effects on the protection and propagation of terrestrial ecological receptors established using the procedures specified in WAC 173-340-7490 through 173-340-7494 unless it is demonstrated under those sections that establishing a soil concentration is unnecessary.

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations that protect human health as determined by evaluating the following exposure pathways:

(A) **Ground water protection.** Concentrations that will not cause contamination of ground water at levels which exceed ground water cleanup levels established under WAC 173-340-720 as determined using the methods described in WAC 173-340-747.

(B) **Soil direct contact.** Concentrations that, due to direct contact with contaminated soil, are estimated to result in no acute or chronic noncarcinogenic toxic effects on human health using a hazard quotient of one (1) and concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one million (1×10^{-6}). Equations 740-1 and 740-2 and the associated default assumptions shall be used to calculate the concentration for direct contact with contaminated soil.

(I) **Noncarcinogens.** For noncarcinogenic toxic effects of hazardous substances due to soil ingestion, concentrations shall be determined using Equation 740-1. For petroleum mixtures and components of such mixtures, see (b)(iii)(B)(III) of this subsection.

[Equation 740-1]

$$\text{Soil Cleanup Level (mg/kg)} = \frac{\text{RfD} \times \text{ABW} \times \text{UCF} \times \text{HQ} \times \text{AT}}{\text{SIR} \times \text{AB1} \times \text{EF} \times \text{ED}}$$

Where:

RfD	=	Reference dose as defined in WAC 173-340-708(7) (mg/kg-day)
ABW	=	Average body weight over the exposure duration (16 kg)
UCF	=	Unit conversion factor (1,000,000 mg/kg)
SIR	=	Soil ingestion rate (200 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless)
EF	=	Exposure frequency (1.0) (unitless)
HQ	=	Hazard quotient (1) (unitless)
AT	=	Averaging time (6 years)
ED	=	Exposure duration (6 years)

(II) **Carcinogens.** For carcinogenic effects of hazardous substances due to soil ingestion, concentrations shall be determined using Equation 740-2. For petroleum mixtures and components of such mixtures, see (b)(iii)(B)(III) of this subsection.

[Equation 740-2]

$$\text{Soil Cleanup Level (mg/kg)} = \frac{\text{RISK} \times \text{ABW} \times \text{AT} \times \text{UCF}}{\text{CPF} \times \text{SIR} \times \text{AB1} \times \text{ED} \times \text{EF}}$$

Where:

RISK	=	Acceptable cancer risk level (1 in 1,000,000) (unitless)
ABW	=	Average body weight over the exposure duration (16 kg)
AT	=	Averaging time (75 years)
UCF	=	Unit conversion factor (1,000,000 mg/kg)
CPF	=	Carcinogenic potency factor as defined in WAC 173-340-708(8) (kg-day/mg)
SIR	=	Soil ingestion rate (200 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless). May use 0.6 for mixtures of dioxins and/or furans
ED	=	Exposure duration (6 years)
EF	=	Exposure frequency (1.0) (unitless)

(III) **Petroleum mixtures.** For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated taking into account the additive effects of the petroleum fractions and volatile organic compounds substances present in the petroleum mixture. Equation 740-3 shall be used for this calculation. This equation takes into account concurrent exposure due to ingestion and dermal contact with petroleum contaminated soils. Cleanup levels for other noncarcinogens and known or suspected carcinogens within the petroleum mixture shall be calculated using Equations 740-4 and 740-5. See Table 830-1

for the analyses required for various petroleum products to use this method.

[Equation 740-3]

$$C_{soil} = \frac{HI \times ABW \times AT}{EF \times ED \left[\left(\frac{SIR \times AB1}{10^6 mg/kg} \sum_{i=1}^{n} \frac{F(i)}{RfDo(i)} \right) + \left(\frac{SA \times AF}{10^6 mg/kg} \sum_{i=1}^{n} \frac{F(i) \times ABS(i)}{RfDd(i)} \right) \right]}$$

Where:

C_{soil}	=	TPH soil cleanup level (mg/kg)
HI	=	Hazard index (1) (unitless)
ABW	=	Average body weight over the exposure duration (16 kg)
AT	=	Averaging time (6 years)
EF	=	Exposure frequency (1.0) (unitless)
ED	=	Exposure duration (6 years)
SIR	=	Soil ingestion rate (200 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless)
F(i)	=	Fraction (by weight) of petroleum component (i) (unitless)
SA	=	Dermal surface area (2,200 cm^2)
AF	=	Adherence factor (0.2 mg/cm^2-day)
ABS	=	Dermal absorption fraction for petroleum component (i) (unitless). May use chemical-specific values or the following defaults: • 0.0005 for volatile petroleum components with vapor press > = benzene • 0.03 for volatile petroleum components with vapor press < benzene • 0.1 for other petroleum components
RfDo(i)	=	Oral reference dose of petroleum component (i) as defined in WAC 173-340-708(7) (mg/kg-day)
RfDd(i)	=	Dermal reference dose for petroleum component (i) (mg/kg-day) derived by RfDo x GI
GI	=	Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults: • 0.8 for volatile petroleum components • 0.5 for other petroleum components
n	=	The number of petroleum components (petroleum fractions plus volatile organic compounds with an RfD) present in the petroleum mixture. (See Table 830-1.)

(C) **Soil vapors.** The soil to vapor pathway shall be evaluated for volatile organic compounds whenever any of the following conditions exist:

(I) For gasoline range organics, whenever the total petroleum hydrocarbon (TPH) concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(6) using the default assumptions;

(II) For diesel range organics, whenever the total petroleum hydrocarbon (TPH) concentration is greater than 10,000 mg/kg;

(III) For other volatile organic compounds, including petroleum components, whenever the concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(4).

See subsection (3)(c)(iv)(B) of this section for methods that may be used to evaluate the soil to vapor pathway.

(c) **Modified Method B soil cleanup levels.**

(i) **General.** Modified Method B soil cleanup levels are standard Method B soil cleanup levels, modified with chemical-specific or site-specific data. When making these modifications, the resultant cleanup levels shall meet applicable state and federal laws, meet health risk levels for standard Method B soil cleanup levels, and be demonstrated to be environmentally protective using the procedures specified in WAC 173-340-7490 through 173-340-7494. Changes to exposure assumptions must comply with WAC 173-340-708(10).

(ii) **Allowable modifications.** The following modifications can be made to the default assumptions in the standard Method B equations to derive modified Method B soil cleanup levels:

(A) For the protection of ground water, see WAC 173-340-747;

(B) For soil ingestion, the gastrointestinal absorption fraction, may be modified if the requirements of WAC 173-340-702 (14), (15), (16), and 173-340-708(10) are met;

(C) For dermal contact, the adherence factor, dermal absorption fraction and gastrointestinal absorption conversion factor may be modified if the requirements of WAC 173-340-702 (14), (15), (16), and 173-340-708(10) are met;

(D) The toxicity equivalent factors provided in WAC 173-340-708 (8)(d), (e), and (f), may be modified if the requirements of WAC 173-340-708 (8)(g) and (h) are met;

(E) The reference dose and cancer potency factor may be modified if the requirements in WAC 173-340-708 (7) and (8) are met; and

(F) Other modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16).

(iii) **Dermal contact.** For hazardous substances other than petroleum mixtures, dermal contact with the soil shall be evaluated whenever the proposed changes to Equations 740-1 or 740-2 would result in a significantly higher soil cleanup level than would be calculated without the proposed changes. When conducting this evaluation, the following equations and default assumptions shall be used.

(A) For noncarcinogens use Equation 740-4. This equation takes into account concurrent exposure due to ingestion and dermal contact with soil.

[Equation 740-4]

$$C_{soil} = \frac{HQ \times ABW \times AT}{EF \times ED \left[\left(\frac{1}{RfDo} \times \frac{SIR \times AB1}{10^6 mg/kg} \right) + \left(\frac{1}{RfDd} \times \frac{SA \times AF \times ABS}{10^6 mg/kg} \right) \right]}$$

Where:

C_{soil}	=	Soil cleanup level (mg/kg)
HQ	=	Hazard quotient (unitless)
ABW	=	Average body weight over the exposure duration (16 kg)
AT	=	Averaging time (6 years)
EF	=	Exposure frequency (1.0) (unitless)
ED	=	Exposure duration (6 years)
SIR	=	Soil ingestion rate (200 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless)
SA	=	Dermal surface area (2,200 cm^2)
AF	=	Adherence factor (0.2 mg/cm^2-day)
ABS	=	Dermal absorption fraction (unitless). May use chemical-specific values or the following defaults: • 0.01 for inorganic hazardous substances • 0.0005 for volatile organic compounds with vapor press > = benzene

- 0.03 for volatile organic compounds with vapor press < benzene
- 0.1 for other organic hazardous substances

RfDo = Oral reference dose as defined in WAC 173-340-708(7) (mg/kg-day)
RfDd = Dermal reference dose (mg/kg-day) derived by RfDo x GI
GI = Gastrointestinal absorption conversion factor (unitless). May use chemical specific values or the following defaults:

- 0.2 for inorganic hazardous substances
- 0.8 for volatile organic compounds
- 0.5 for other organic hazardous substances

(B) For carcinogens use Equation 740-5. This equation takes into account concurrent exposure due to ingestion and dermal contact with soil.

[Equation 740-5]

$$C_{soil} = \frac{RISK \times ABW \times AT}{EF \times ED \left[\left(\frac{SIR \times AB1 \times CPFo}{10^6 mg/kg} \right) + \left(\frac{SA \times AF \times ABS \times CPFd}{10^6 mg/kg} \right) \right]}$$

Where:

C_{soil} = Soil cleanup level (mg/kg)
RISK = Acceptable cancer risk (1 in 1,000,000) (unitless)
ABW = Average body weight over the exposure duration (16 kg)
AT = Averaging time (75 years)
EF = Exposure frequency (1.0) (unitless)
ED = Exposure duration (6 years)
SIR = Soil ingestion rate (200 mg/day)
AB1 = Gastrointestinal absorption fraction (1.0) (unitless). May use 0.6 for mixtures of dioxins and/or furans
CPFo = Oral cancer potency factor as defined in WAC 173-340-708(8) (kg-day/mg)
CPFd = Dermal cancer potency factor (kg-day/mg) derived by CPFo/GI
GI = Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults:

- 0.2 for inorganic hazardous substances
- 0.8 for volatile organic compounds and for mixtures of dioxins and/or furans
- 0.5 for other organic hazardous substances

SA = Dermal surface area (2,200 cm^2)
AF = Adherence factor (0.2 mg/cm^2-day)
ABS = Dermal absorption fraction (unitless). May use chemical-specific values or the following defaults:

- 0.01 for inorganic hazardous substances
- 0.0005 for volatile organic compounds with vapor press > = benzene
- 0.03 for volatile organic compounds with vapor press < benzene and for mixtures of dioxins and/or furans
- 0.1 for other organic hazardous substances

(C) Modifications may be made to Equations 740-4 and 740-5 as provided for in subsection (3)(c)(ii) of this section.

(iv) **Soil vapors.**

(A) **Applicability.** The soil to vapor pathway shall be evaluated for volatile organic compounds whenever any of the following conditions exist:

(I) For other than petroleum hydrocarbon mixtures, the proposed changes to the standard Method B equations (Equations 740-1 and 740-2) or default values would result in a significantly higher soil cleanup level than would be calculated without the proposed changes;

(II) For petroleum hydrocarbon mixtures, the proposed changes to the standard Method B equations (Equations 740-3, 740-4 and 740-5) or default values would result in a significantly higher soil cleanup level than would be calculated without the proposed changes;

(III) For gasoline range organics, whenever the total petroleum hydrocarbon (TPH) concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(6) using the default assumptions;

(IV) For diesel range organics, whenever the total petroleum hydrocarbon (TPH) concentration is greater than 10,000 mg/kg;

(V) For other volatile organic compounds, including petroleum components, whenever the concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(4).

(B) **Evaluation methods.** Soil cleanup levels that are protective of the indoor and ambient air shall be determined on a site-specific basis. Soil cleanup levels may be evaluated as being protective of air pathways using any of the following methods:

(I) Measurements of the soil vapor concentrations, using methods approved by the department, demonstrating vapors in the soil would not exceed air cleanup levels established under WAC 173-340-750.

(II) Measurements of ambient air concentrations and/or indoor air vapor concentrations throughout buildings, using methods approved by the department, demonstrating air does not exceed cleanup levels established under WAC 173-340-750. Such measurements must be representative of current and future site conditions when vapors are likely to enter and accumulate in structures. Measurement of ambient air may be excluded if it can be shown that indoor air is the most protective point of exposure.

(III) Use of modeling methods approved by the department to demonstrate the air cleanup standards established under WAC 173-340-750 will not be exceeded. When this method is used, the department may require soil vapor and/or air monitoring to be conducted to verify the calculations and compliance with air cleanup standards.

(IV) Other methods as approved by the department demonstrating the air cleanup standards established under WAC 173-340-750 will not be exceeded.

(d) **Using modified Method B to evaluate soil remediation levels.** In addition to the adjustments allowed under subsection (3)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(4) **Method C soil cleanup levels.** This section does not provide procedures for establishing Method C soil cleanup levels. Except for qualifying industrial properties, Method A and Method B, as described in this section, are the only methods available for establishing soil cleanup levels at sites. See WAC 173-340-745 for use of Method C soil cleanup levels at qualifying industrial properties. See also WAC 173-340-357

and 173-340-708 (3)(d) for how land use may be considered when selecting a cleanup action at a site.

(5) **Adjustments to cleanup levels.**

(a) **Total site risk adjustments.** Soil cleanup levels for individual hazardous substances developed in accordance with subsection (3) of this section, including cleanup levels based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures specified in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(b) **Adjustments to applicable state and federal laws.** Where a cleanup level developed under subsection (2) or (3) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level must be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) **Natural background and PQL considerations.** Cleanup levels determined under subsection (2) or (3) of this section, including cleanup levels adjusted under subsection (5)(a) and (b) of this section, shall not be set at levels below the practical quantitation limit or natural background, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements pertaining to practical quantitation limits and natural background.

(6) **Point of compliance.**

(a) The point of compliance is the point or points where the soil cleanup levels established under subsection (2) or (3) of this section shall be attained.

(b) For soil cleanup levels based on the protection of ground water, the point of compliance shall be established in the soils throughout the site.

(c) For soil cleanup levels based on protection from vapors, the point of compliance shall be established in the soils throughout the site from the ground surface to the uppermost ground water saturated zone (e.g., from the ground surface to the uppermost water table).

(d) For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance shall be established in the soils throughout the site from the ground surface to fifteen feet below the ground surface. This represents a reasonable estimate of the depth of soil that could be excavated and distributed at the soil surface as a result of site development activities.

(e) For soil cleanup levels based on ecological considerations, see WAC 173-340-7490 for the point of compliance.

(f) The department recognizes that, for those cleanup actions selected under this chapter that involve containment of hazardous substances, the soil cleanup levels will typically not be met at the points of compliance specified in (b) through (e) of this subsection. In these cases, the cleanup action may be determined to comply with cleanup standards, provided:

(i) The selected remedy is permanent to the maximum extent practicable using the procedures in WAC 173-340-360;

(ii) The cleanup action is protective of human health. The department may require a site-specific human health risk assessment conforming to the requirements of this chapter to demonstrate that the cleanup action is protective of human health;

(iii) The cleanup action is demonstrated to be protective of terrestrial ecological receptors under WAC 173-340-7490 through 173-340-7494;

(iv) Institutional controls are put in place under WAC 173-340-440 that prohibit or limit activities that could interfere with the long-term integrity of the containment system;

(v) Compliance monitoring under WAC 173-340-410 and periodic reviews under WAC 173-340-430 are designed to ensure the long-term integrity of the containment system; and

(vi) The types, levels and amount of hazardous substances remaining on-site and the measures that will be used to prevent migration and contact with those substances are specified in the draft cleanup action plan.

(7) **Compliance monitoring.**

(a) Compliance with soil cleanup levels shall be based on total analyses of the soil fraction less than two millimeters in size. When it is reasonable to expect that larger soil particles could be reduced to two millimeters or less during current or future site use and this reduction could cause an increase in the concentrations of hazardous substances in the soil, soil cleanup levels shall also apply to these larger soil particles. Compliance with soil cleanup levels shall be based on dry weight concentrations. The department may approve the use of alternate procedures for stabilized soils.

(b) When soil levels have been established at a site, sampling of the soil shall be conducted to determine if compliance with the soil cleanup levels has been achieved. Sampling and analytical procedures shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. The sample design shall provide data that are representative of the area where exposure to hazardous substances may occur.

(c) The data analysis and evaluation procedures used to evaluate compliance with soil cleanup levels shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. These procedures shall meet the following general requirements:

(i) Methods of data analysis shall be consistent with the sampling design. Separate methods may be specified for surface soils and deeper soils;

(ii) When cleanup levels are based on requirements specified in applicable state and federal laws, the procedures for evaluating compliance that are specified in those requirements shall be used to evaluate compliance with cleanup levels unless those procedures conflict with the intent of this section;

(iii) Where procedures for evaluating compliance are not specified in an applicable state and federal law, statistical methods shall be appropriate for the distribution of sampling

data for each hazardous substance. If the distributions for hazardous substances differ, more than one statistical method may be required; and

(iv) The data analysis plan shall specify which parameters are to be used to determine compliance with soil cleanup levels.

(A) For cleanup levels based on short-term or acute toxic effects on human health or the environment, an upper percentile soil concentration shall be used to evaluate compliance with cleanup levels.

(B) For cleanup levels based on chronic or carcinogenic threats, the true mean soil concentration shall be used to evaluate compliance with cleanup levels.

(d) When data analysis procedures for evaluating compliance are not specified in an applicable state or federal law the following procedures shall be used:

(i) A confidence interval approach that meets the following requirements:

(A) The upper one sided ninety-five percent confidence limit on the true mean soil concentration shall be less than the soil cleanup level. For lognormally distributed data, the upper one-sided ninety-five percent confidence limit shall be calculated using Land's method; and

(B) Data shall be assumed to be lognormally distributed unless this assumption is rejected by a statistical test. If a lognormal distribution is inappropriate, data shall be assumed to be normally distributed unless this assumption is rejected by a statistical test. The W test, D'Agostino's test, or, censored probability plots, as appropriate for the data, shall be the statistical methods used to determine whether the data are lognormally or normally distributed;

(ii) For an evaluation conducted under (c)(iv)(A) of this subsection, a parametric test for percentiles based on tolerance intervals to test the proportion of soil samples having concentrations less than the soil cleanup level. When using this method, the true proportion of samples that do not exceed the soil cleanup level shall not be less than ninety percent. Statistical tests shall be performed with a Type I error level of 0.05;

(iii) Direct comparison of soil sample concentrations with cleanup levels may be used to evaluate compliance with cleanup levels where selective sampling of soil can be reliably expected to find suspected soil contamination. There must be documented, reliable information that the soil samples have been taken from the appropriate locations. Persons using this method must demonstrate that the basis used for selecting the soil sample locations provides a high probability that any existing areas of soil contamination have been found; or

(iv) Other statistical methods approved by the department.

(e) All data analysis methods used, including those specified in state and federal law, must meet the following requirements:

(i) No single sample concentration shall be greater than two times the soil cleanup level. Higher exceedances to control false positive error rates at five percent may be approved by the department when the cleanup level is based on background concentrations; and

(ii) Less than ten percent of the sample concentrations shall exceed the soil cleanup level. Higher exceedances to control false positive error rates at five percent may be approved by the department when the cleanup level is based on background concentrations.

(f) When using statistical methods to demonstrate compliance with soil cleanup levels, the following procedures shall be used for measurements below the practical quantitation limit:

(i) Measurements below the method detection limit shall be assigned a value equal to one-half the method detection limit when not more than fifteen percent of the measurements are below the practical quantitation limit.

(ii) Measurements above the method detection limit but below the practical quantitation limit shall be assigned a value equal to the method detection limit when not more than fifteen percent of the measurements are below the practical quantitation limit.

(iii) When between fifteen and fifty percent of the measurements are below the practical quantitation limit and the data are assumed to be lognormally or normally distributed, Cohen's method shall be used to calculate a corrected mean and standard deviation for use in calculating an upper confidence limit on the true mean soil concentration.

(iv) If more than fifty percent of the measurements are below the practical quantitation limit, the largest value in the data set shall be used in place of an upper confidence limit on the true mean soil concentration.

(v) The department may approve alternate statistical procedures for handling nondetected values or values below the practical quantitation limit.

(vi) If a hazardous substance or petroleum fraction has never been detected in any sample at a site and these substances are not suspected of being present at the site based on site history and other knowledge, that hazardous substance or petroleum fraction may be excluded from the statistical analysis.

[Statutory Authority: RCW 70.105D.030(2). 07-21-065 (Order 06-10), § 173-340-740, filed 10/12/07, effective 11/12/07. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-740, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-740, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-740, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-745 Soil cleanup standards for industrial properties. (1) **Applicability.**

(a) Criteria. This section shall be used to establish soil cleanup levels where the department has determined that industrial land use represents the reasonable maximum exposure. Soil cleanup levels for this presumed exposure scenario shall be established in accordance with this section. To qualify as an industrial land use and to use an industrial soil cleanup level a site must meet the following criteria:

(i) The area of the site where industrial property soil cleanup levels are proposed must meet the definition of an industrial property under WAC 173-340-200;

Industrial soil cleanup levels are based on an adult worker exposure scenario. It is essential to evaluate land uses and zoning for compliance with this definition in the context of this exposure scenario. Local governments use a variety of zoning categories for industrial land uses so a property does not necessarily have to be in a zone called "industrial" to meet

the definition of "industrial property." Also, there are land uses allowed in industrial zones that are actually commercial or residential, rather than industrial, land uses. Thus, an evaluation to determine compliance with this definition should include a review of the actual text in the comprehensive plan and zoning ordinance pertaining to the site and a visit to the site to observe land uses in the zone. When evaluating land uses to determine if a property use not specifically listed in the definition is a "traditional industrial use" or to determine if the property is "zoned for industrial use," the following characteristics shall be considered:

(A) People do not normally live on industrial property. The primary potential exposure is to adult employees of businesses located on the industrial property;

(B) Access to industrial property by the general public is generally not allowed. If access is allowed, it is highly limited and controlled due to safety or security considerations;

(C) Food is not normally grown/raised on industrial property. (However, food processing operations are commonly considered industrial facilities);

(D) Operations at industrial properties are often (but not always) characterized by use and storage of chemicals, noise, odors and truck traffic;

(E) The surface of the land at industrial properties is often (but not always) mostly covered by buildings or other structures, paved parking lots, paved access roads and material storage areas—minimizing potential exposure to the soil; and

(F) Industrial properties may have support facilities consisting of offices, restaurants, and other facilities that are commercial in nature but are primarily devoted to administrative functions necessary for the industrial use and/or are primarily intended to serve the industrial facility employees and not the general public.

(ii) The cleanup action provides for appropriate institutional controls implemented in accordance with WAC 173-340-440 to limit potential exposure to residual hazardous substances. This shall include, at a minimum, placement of a covenant on the property restricting use of the area of the site where industrial soil cleanup levels are proposed to industrial property uses; and

(iii) Hazardous substances remaining at the property after remedial action would not pose a threat to human health or the environment at the site or in adjacent nonindustrial areas. In evaluating compliance with this criterion, at a minimum the following factors shall be considered:

(A) The potential for access to the industrial property by the general public, especially children. The proximity of the industrial property to residential areas, schools or childcare facilities shall be considered when evaluating access. In addition, the presence of natural features, manmade structures, arterial streets or intervening land uses that would limit or encourage access to the industrial property shall be considered. Fencing shall not be considered sufficient to limit access to an industrial property since this is insufficient to assure long term protection;

(B) The degree of reduction of potential exposure to residual hazardous substances by the selected remedy. Where the residual hazardous substances are to be capped to reduce exposure, consideration shall be given to the thickness of the cap and the likelihood of future site maintenance activities, utility and drainage work, or building construction reexposing residual hazardous substances;

(C) The potential for transport of residual hazardous substances to off-property areas, especially residential areas, schools and childcare facilities;

(D) The potential for significant adverse effects on wildlife caused by residual hazardous substances using the procedures in WAC 173-340-7490 through 173-340-7494; and

(E) The likelihood that these factors would not change for the foreseeable future.

(b) **Expectations.** In applying the criteria in (a) of this subsection, the department expects the following results:

(i) The department expects that properties zoned for heavy industrial or high intensity industrial use and located within a city or county that has completed a comprehensive plan and adopted implementing zoning regulations under the Growth Management Act (chapter 36.70A RCW) will meet the definition of industrial property. For cities and counties not planning under the Growth Management Act, the department expects that spot zoned industrial properties will not meet the definition of industrial property but that properties that are part of a larger area zoned for heavy industrial or high intensity industrial use will meet the definition of an industrial property;

(ii) For both GMA and non-GMA cities and counties, the department expects that light industrial and commercial zones and uses should meet the definition of industrial property where the land uses are comparable to those cited in the definition of industrial property or the land uses are an integral part of a qualifying industrial use (such as, ancillary or support facilities). This will require a site-by-site evaluation of the zoning text and land uses;

(iii) The department expects that for portions of industrial properties in close proximity to (generally, within a few hundred feet) residential areas, schools or childcare facilities, residential soil cleanup levels will be used unless:

(A) Access to the industrial property is very unlikely or, the hazardous substances that are not treated or removed are contained under a cap of clean soil (or other materials) of substantial thickness so that it is very unlikely the hazardous substances would be disturbed by future site maintenance and construction activities (depths of even shallow footings, utilities and drainage structures in industrial areas are typically three to six feet); and

(B) The hazardous substances are relatively immobile (or have other characteristics) or have been otherwise contained so that subsurface lateral migration or surficial transport via dust or runoff to these nearby areas or facilities is highly unlikely; and

(iv) Note that a change in the reasonable maximum exposure to industrial site use primarily affects the direct contact exposure pathway. Thus, for example, for sites where the soil cleanup level is based primarily on the potential for the hazardous substance to leach and cause ground water contamination, it is the department's expectation that an industrial land use will not affect the soil cleanup level. Similarly, where the soil cleanup level is based primarily on surface water protection or other pathways other than direct human contact, land use is not expected to affect the soil cleanup level.

(2) **General considerations.**

(a) In the event of a release of a hazardous substance at a site qualifying as industrial property, a cleanup action that complies with this chapter shall be conducted to address those soils with hazardous substance concentrations which exceed industrial soil cleanup levels at the relevant point of compliance.

(b) Soil cleanup levels for areas beyond the industrial property boundary that do not qualify for industrial soil cleanup levels under this section (including implementation of institutional controls and a covenant restricting use of the property to industrial property uses) shall be established in accordance with WAC 173-340-740.

(c) Industrial soil cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of ground water, surface water, sediment or air cleanup standards established under this chapter or under applicable state and federal laws. A property that qualifies for an industrial soil cleanup level under this section does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(d) The department may require more stringent soil cleanup standards than required by this section when, based on a site-specific evaluation, the department determines that this is necessary to protect human health and the environment, including consideration of the factors in WAC 173-340-740 (1)(c). Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(3) **Method A industrial soil cleanup levels.**

(a) **Applicability.** Method A industrial soil cleanup levels may be used only at any industrial property qualifying under WAC 173-340-704(1).

(b) **General requirements.** Method A industrial soil cleanup levels shall be at least as stringent as all of the following:

(i) Concentrations in Table 745-1 and compliance with the corresponding footnotes;

(ii) Concentrations established under applicable state and federal laws;

(iii) Concentrations that result in no significant adverse effects on the protection and propagation of terrestrial ecological receptors using the procedures specified in WAC 173-340-7490 through 173-340-7493, unless it is demonstrated under those sections that establishing a soil concentration is unnecessary; and

(iv) For a hazardous substance that is deemed an indicator hazardous substance under WAC 173-340-708(2) and for which there is no value in Table 745-1 or applicable state and federal laws, a concentration that does not exceed the natural background concentration or the practical quantification limit, subject to the limitations in this chapter.

(4) **Method B industrial soil cleanup levels.** This section does not provide procedures for establishing Method B industrial soil cleanup levels. Method C is the standard method for establishing soil cleanup levels at industrial sites and its use is conditioned upon the continued use of the site for industrial purposes. The person conducting the cleanup action also has the option of establishing unrestricted land use soil cleanup levels under WAC 173-340-740 for qualifying industrial properties. This option may be desirable when the person wants to avoid restrictions on the future use of the property. When a site does not qualify for a Method A or Method C industrial soil cleanup level under this section, or the user chooses to establish unrestricted land use soil cleanup levels at a site, soil cleanup levels must be established using Methods A or B under WAC 173-340-740.

(5) **Method C industrial soil cleanup levels.**

(a) **Applicability.** Method C industrial soil cleanup levels consist of standard and modified cleanup levels as described in this subsection. Either standard or modified Method C soil cleanup levels may be used at any industrial property qualifying under subsection (1) of this section.

(b) **Standard Method C industrial soil cleanup levels.** Standard Method C industrial soil cleanup levels for industrial properties shall be at least as stringent as all of the following:

(i) **Applicable state and federal laws.** Concentrations established under applicable state and federal laws;

(ii) **Environmental protection.** Concentrations that result in no significant adverse effects on the protection and propagation of wildlife established using the procedures specified in WAC 173-340-7490 through 173-340-7494, unless it is demonstrated under those sections that establishing a soil concentration is unnecessary.

(iii) **Human health protection.** For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations that protect human health as determined by evaluating the following exposure pathways:

(A) **Ground water protection.** Concentrations that will not cause contamination of ground water to concentrations which exceed ground water cleanup levels established under WAC 173-340-720 as determined using the methods described in WAC 173-340-747.

(B) **Soil direct contact.** Concentrations that, due to direct contact with contaminated soil, are estimated to result in no acute or chronic noncarcinogenic toxic effects on human health using a hazardous quotient of one (1) and concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand (1×10^{-5}). Equations 745-1 and 745-2 and the associated default assumptions shall be used to conduct this calculation.

(I) **Noncarcinogens.** For noncarcinogenic toxic effects of hazardous substances due to soil ingestion, concentrations shall be determined using Equation 745-1. For petroleum mixtures and components of such mixtures, see (b)(iii)(B)(III) of this subsection.

[Equation 745-1]

$$\text{Soil Cleanup Level (mg/kg)} = \frac{\text{RfD} \times \text{ABW} \times \text{UCF} \times \text{HQ} \times \text{AT}}{\text{SIR} \times \text{AB1} \times \text{EF} \times \text{ED}}$$

Where:

RfD	=	Reference dose as specified in WAC 173-340-708(7) (mg/kg-day)
ABW	=	Average body weight over the exposure duration (70 kg)
UCF	=	Unit conversion factor (1,000,000 mg/kg)
SIR	=	Soil ingestion rate (50 mg/day)
AB1	=	Gastrointestinal absorption fraction (1.0) (unitless)
EF	=	Exposure frequency (0.4) (unitless)

HQ = Hazard quotient (1) (unitless)
AT = Averaging time (20 years)
ED = Exposure duration (20 years)

(II) **Carcinogens.** For carcinogenic effects of hazardous substances due to soil ingestion, concentrations shall be determined using Equation 745-2. For petroleum mixtures and components of such mixtures, see (b)(iii)(B)(III) of this subsection.

[Equation 745-2]

$$\text{Soil Cleanup Level (mg/kg)} = \frac{\text{RISK x ABW x AT x UCF}}{\text{CPF x SIR x AB1 x ED x EF}}$$

Where:

RISK = Acceptable cancer risk level (1 in 100,000) (unitless)
ABW = Average body weight over the exposure duration (70 kg)
AT = Averaging time (75 years)
UCF = Unit conversion factor (1,000,000 mg/kg)
CPF = Carcinogenic Potency Factor as specified in WAC 173-340-708(8) (kg-day/mg)
SIR = Soil ingestion rate (50 mg/day)
AB1 = Gastrointestinal absorption fraction (1.0) (unitless). May use 0.6 for mixtures of dioxins and/or furans
ED = Exposure duration (20 years)
EF = Exposure frequency (0.4) (unitless)

(III) **Petroleum mixtures.** For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated taking into account the additive effects of the petroleum fractions and volatile organic compounds present in the petroleum mixture. Equation 745-3 shall be used for this calculation. This equation takes into account concurrent exposure due to ingestion and dermal contact with petroleum contaminated soils. Cleanup levels for other noncarcinogens and known or suspected carcinogens within the petroleum mixture shall be calculated using Equations 745-4 and 745-5. See Table 830-1 for the analyses required for various petroleum products to use this method.

[Equation 745-3]

$$C_{soil} = \frac{HI \times ABW \times AT}{EF \times ED \left[\left(\frac{SIR \times AB1}{10^6 mg/kg} \sum_{i=1}^{n} \frac{F(i)}{RfDo(i)} \right) + \left(\frac{SA \times AF}{10^6 mg/kg} \sum_{i=1}^{n} \frac{F(i) \times ABS(i)}{RfDd(i)} \right) \right]}$$

Where:

C_{soil} = TPH soil cleanup level (mg/kg)
HI = Hazard index (1) (unitless)
ABW = Average body weight over the exposure duration (70 kg)
AT = Averaging time (20 years)
EF = Exposure frequency (0.7) (unitless)
ED = Exposure duration (20 years)
SIR = Soil ingestion rate (50 mg/day)
AB1 = Gastrointestinal absorption fraction (1.0) (unitless)
F(i) = Fraction (by weight) of petroleum component (i) (unitless)
SA = Dermal surface area (2,500 cm^2)
AF = Adherence factor (0.2 mg/cm^2-day)
ABS = Dermal absorption fraction for petroleum component (i) (unitless). May use chemical-specific values or the following defaults:
- 0.0005 for volatile petroleum components with vapor press > = benzene
- 0.03 for volatile petroleum components with vapor press < benzene
- 0.1 for other petroleum components

RfDo(i) = Oral reference dose of petroleum component (i) as defined in WAC 173-340-708(7) (mg/kg-day)
RfDd(i) = Dermal reference dose for petroleum component (i) (mg/kg-day) derived by RfDo x GI
GI = Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults:
- 0.8 for volatile petroleum components
- 0.5 for other petroleum components

n = The number of petroleum components (petroleum fractions plus volatile organic compounds with an RfD) present in the petroleum mixture. (See Table 830-1.)

(C) **Soil vapors.** The soil to vapor pathway shall be evaluated for volatile organic compounds whenever any of the following conditions exist:

(I) For gasoline range organics, whenever the total petroleum hydrocarbon (TPH) concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(6) using the default assumptions;

(II) For diesel range organics, whenever the total petroleum hydrocarbon (TPH) concentration is greater than 10,000 mg/kg;

(III) For other volatile organic compounds, including petroleum components, whenever the concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(4).

See subsection (5)(c)(iv)(B) of this section for methods that may be used to evaluate the soil to vapor pathway.

(c) **Modified Method C soil cleanup levels.**

(i) **General.** Modified Method C soil cleanup levels are standard Method C soil cleanup levels modified with chemical-specific or site-specific data. When making these adjustments, the resultant cleanup levels shall meet applicable state and federal laws, meet health risk levels for standard Method C soil cleanup levels, and be demonstrated to be environmentally protective using the procedures specified in WAC 173-340-7490 through 173-340-7494. Changes to exposure assumptions must comply with WAC 173-340-708(10).

(ii) **Allowable modifications.** The following modifications may be made to the default assumptions in the standard Method C equations to derive modified Method C soil cleanup levels:

(A) For the protection of ground water see WAC 173-340-747;

(B) For soil ingestion, the gastrointestinal absorption fraction may be modified if the requirements of WAC 173-340-702 (14), (15), (16), and 173-340-708(10) are met;

(C) For dermal contact, the adherence factor, dermal absorption fraction and gastrointestinal absorption conversion factor may be modified if the requirements of WAC 173-340-702 (14), (15), (16), and 173-340-708(10) are met;

(D) The toxicity equivalent factors provided in WAC 173-340-708 (8)(d), (e) and (f), may be modified provided the requirements of WAC 173-340-708 (8)(g) and (h) are met;

(E) The reference dose and cancer potency factor may be modified if the requirements in WAC 173-340-708 (7) and (8) are met; and

(F) Modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16).

(iii) **Dermal contact.** For hazardous substances other than petroleum mixtures, dermal contact with the soil shall be evaluated whenever the proposed changes to Equations 745-1 and 745-2 would result in a significantly higher soil cleanup level than would be calculated without the proposed changes. When conducting this evaluation, the following equations and default assumptions shall be used:

(A) For noncarcinogens use Equation 745-4. This equation takes into account concurrent exposure due to ingestion and dermal contact with soil.

[Equation 745-4]

$$C_{soil} = \frac{HQ \times ABW \times AT}{EF \times ED \left[\left(\frac{1}{RfDo} \times \frac{SIR \times AB1}{10^6 mg/kg}\right) + \left(\frac{1}{RfDd} \times \frac{SA \times AF \times ABS}{10^6 mg/kg}\right)\right]}$$

Where:

- C_{soil} = Soil cleanup level (mg/kg)
- HQ = Hazard quotient (unitless)
- ABW = Average body weight over the exposure duration (70 kg)
- AT = Averaging time (20 years)
- EF = Exposure frequency (0.7) (unitless)
- ED = Exposure duration (20 years)
- SIR = Soil ingestion rate (50 mg/day)
- AB1 = Gastrointestinal absorption fraction (1.0) (unitless)
- SA = Dermal surface area (2,500 mg/cm^2)
- AF = Adherence factor (0.2 mg/cm^2-day)
- ABS = Dermal absorption fraction (unitless). May use chemical-specific values or the following defaults:
  - 0.01 for inorganic hazardous substances
  - 0.0005 for volatile organic compounds with vapor press > = benzene
  - 0.03 for volatile organic compounds with vapor press < benzene
  - 0.1 for other organic hazardous substances
- RfDo = Oral reference dose as defined in WAC 173-340-708(7) (mg/kg-day)
- RfDd = Dermal reference dose (mg/kg-day) derived by RfDo x GI
- GI = Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults:
  - 0.2 for inorganic hazardous substances
  - 0.8 for volatile organic compounds
  - 0.5 for other organic hazardous substances

(B) For carcinogens use Equation 745-5. This equation takes into account concurrent exposure due to ingestion and dermal contact with soil.

[Equation 745-5]

$$C_{soil} = \frac{RISK \times ABW \times AT}{EF \times ED \left[\left(\frac{SIR \times AB1 \times CPFo}{10^6 mg/kg}\right) + \left(\frac{SA \times AF \times ABS \times CPFd}{10^6 mg/kg}\right)\right]}$$

Where:

- C_{soil} = Soil cleanup level (mg/kg)
- RISK = Acceptable cancer risk (1 in 100,000) (unitless)
- ABW = Average body weight over the exposure duration (70 kg)
- AT = Averaging time (75 years)
- EF = Exposure frequency (0.7) (unitless)
- ED = Exposure duration (20 years)
- SIR = Soil ingestion rate (50 mg/day)
- AB1 = Gastrointestinal absorption fraction (1.0) (unitless). May use 0.6 for mixtures of dioxins and/or furans
- CPFo = Oral cancer potency factor as defined in WAC 173-340-708(8) (kg-day/mg)
- CPFd = Dermal cancer potency factor (kg-day/mg) derived by CPFo/GI
- GI = Gastrointestinal absorption conversion factor (unitless). May use chemical-specific values or the following defaults:
  - 0.2 for inorganic hazardous substances
  - 0.8 for volatile organic compounds and mixtures of dioxins and/or furans
  - 0.5 for other organic hazardous substances
- SA = Dermal surface area (2,500 cm^2)
- AF = Adherence factor (0.2 mg/cm^2-day)
- ABS = Dermal absorption fraction (unitless). May use chemical-specific values or the following defaults:
  - 0.01 for inorganic hazardous substances
  - 0.0005 for volatile organic compounds with vapor press > = benzene
  - 0.03 for volatile organic compounds substances with vapor press < benzene and for mixtures of dioxins and/or furans
  - 0.1 for other organic hazardous substances

(C) Modifications may be made to Equations 745-4 and 745-5 as provided for in subsection (5)(c)(ii) of this section.

(iv) **Soil vapors.**

(A) **Applicability.** The soil to vapor pathway shall be evaluated for volatile organic compounds whenever any of the following conditions exist:

(I) For other than petroleum hydrocarbon mixtures, the proposed changes to the standard Method C equations (Equations 745-1 and 745-2) or default values would result in a significantly higher soil cleanup level than would be calculated without the proposed changes;

(II) For petroleum hydrocarbon mixtures, the proposed changes to the standard Method C equations (Equations 745-3, 745-4 and 745-5) or default values would result in a significantly higher soil cleanup level than would be calculated without the proposed changes;

(III) For gasoline range organics, whenever the total petroleum hydrocarbon (TPH) concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(6) using the default assumptions;

(IV) For diesel range organics, whenever the total petroleum hydrocarbon (TPH) concentration is greater than 10,000 mg/kg;

(V) For other volatile organic compounds, including petroleum components, whenever the concentration is significantly higher than a concentration derived for protection of ground water for drinking water beneficial use under WAC 173-340-747(4).

(B) **Evaluation methods.** Soil cleanup levels that are protective of the indoor and ambient air shall be determined on a site-specific basis. Soil cleanup levels may be evaluated as being protective of air pathways using any of the following methods:

(I) Measurements of the soil vapor concentrations, using methods approved by the department, demonstrating vapors in the soil would not exceed air cleanup levels established under WAC 173-340-750.

(II) Measurements of ambient air concentrations and/or indoor air vapor concentrations throughout buildings, using

methods approved by the department, demonstrating air does not exceed cleanup levels established under WAC 173-340-750. Such measurements must be representative of current and future site conditions when vapors are likely to enter and accumulate in structures. Measurement of ambient air may be excluded if it can be shown that indoor air is the most protective point of exposure.

(III) Use of modeling methods approved by the department to demonstrate the air cleanup standards established under WAC 173-340-750 will not be exceeded. When this method is used, the department may require soil vapor and/or air monitoring to be conducted to verify the calculations and compliance with air cleanup standards.

(IV) Other methods as approved by the department demonstrating the air cleanup standards established under WAC 173-340-750 will not be exceeded.

(d) **Using modified Method C to evaluate industrial soil remediation levels.** In addition to the adjustments allowed under subsection (5)(c) of this section, other adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357, and 173-340-708 (3)(d) and (10)(b).

(6) **Adjustments to industrial soil cleanup levels.**

(a) **Total site risk adjustments.** Soil cleanup levels for individual hazardous substances developed in accordance with subsection (5) of this section, including cleanup levels based on state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures specified in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(b) **Adjustments to applicable state and federal laws.** Where a cleanup level developed under subsection (3) or (5) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level shall be adjusted downward so that total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) **Natural background and analytical considerations.** Cleanup levels determined under subsection (3) or (5) of this section, including cleanup levels adjusted under subsection (6)(a) and (b) of this section, shall not be set at levels below the practical quantitation limit or natural background concentration, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements pertaining to practical quantitation limits and natural background.

(7) **Point of compliance.** The point of compliance for industrial property soil cleanup levels shall be established in accordance with WAC 173-340-740(6).

(8) **Compliance monitoring.** Compliance monitoring and data analysis and evaluation for industrial property soil cleanup levels shall be performed in accordance with WAC 173-340-410 and 173-340-740(7).

[Statutory Authority: RCW 70.105D.030(2). 07-21-065 (Order 06-10), § 173-340-745, filed 10/12/07, effective 11/12/07. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-745, filed 2/12/01, effective 8/15/01; 96-04-010 (Order 94-37), § 173-340-745, filed 1/26/96, effective 2/26/96; 91-04-019, § 173-340-745, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-747 Deriving soil concentrations for ground water protection. (1) **Purpose.** The purpose of this section is to establish soil concentrations that will not cause contamination of ground water at levels that exceed the ground water cleanup levels established under WAC 173-340-720. Soil concentrations established under this section are used to establish either Method B soil cleanup levels (see WAC 173-340-740 (3)(b)(iii)(A) or Method C soil cleanup levels (see WAC 173-340-745 (5)(b)(iii)(A).

For the purposes of this section, "soil concentration" means the concentration in the soil that will not cause an exceedance of the ground water cleanup level established under WAC 173-340-720.

(2) **General requirements.** The soil concentration established under this section for each hazardous substance shall meet the following two criteria:

(a) The soil concentration shall not cause an exceedance of the ground water cleanup level established under WAC 173-340-720. To determine if this criterion is met, one of the methodologies specified in subsections (4) through (9) of this section shall be used; and

(b) To ensure that the criterion in (a) of this subsection is met, the soil concentration shall not result in the accumulation of nonaqueous phase liquid on or in ground water. To determine if this criterion is met, one of the methodologies specified in subsection (10) of this section shall be used.

(3) **Overview of methods.** This subsection provides an overview of the methods specified in subsections (4) through (10) of this section for deriving soil concentrations that meet the criteria specified in subsection (2) of this section. Certain methods are tailored for particular types of hazardous substances or sites. Certain methods are more complex than others and certain methods require the use of site-specific data. The specific requirements for deriving a soil concentration under a particular method may also depend on the hazardous substance.

(a) **Fixed parameter three-phase partitioning model.** The three-phase partitioning model with fixed input parameters may be used to establish a soil concentration for any hazardous substance. Site-specific data are not required for use of this model. See subsection (4) of this section.

(b) **Variable parameter three-phase partitioning model.** The three-phase partitioning model with variable input parameters may be used to establish a soil concentration for any hazardous substance. Site-specific data are required for use of this model. See subsection (5) of this section.

(c) **Four-phase partitioning model.** The four-phase partitioning model may be used to derive soil concentrations

for any site where hazardous substances are present in the soil as a nonaqueous phase liquid (NAPL). The department expects that this model will be used at sites contaminated with petroleum hydrocarbons. Site-specific data are required for use of this model. See subsection (6) of this section.

(d) **Leaching tests.** Leaching tests may be used to establish soil concentrations for certain metals. Leaching tests may also be used to establish soil concentrations for other hazardous substances, including petroleum hydrocarbons, provided sufficient information is available to demonstrate that the leaching test can accurately predict ground water impacts. Testing of soil samples from the site is required for use of this method. See subsection (7) of this section.

(e) **Alternative fate and transport models.** Fate and transport models other than those specified in subsections (4) through (6) of this section may be used to establish a soil concentration for any hazardous substance. Site-specific data are required for use of such models. See subsection (8) of this section.

(f) **Empirical demonstration.** An empirical demonstration may be used to show that measured soil concentrations will not cause an exceedance of the applicable ground water cleanup levels established under WAC 173-340-720. This empirical demonstration may be used for any hazardous substance. Site-specific data (e.g., ground water samples and soil samples) are required under this method. If the required demonstrations cannot be made, then a protective soil concentration shall be established under one of the methods specified in subsections (4) through (8) of this section. See subsection (9) of this section.

(g) **Residual saturation.** To ensure that the soil concentration established under one of the methods specified in subsections (4) through (9) of this section will not cause an exceedance of the ground water cleanup level established under WAC 173-340-720, the soil concentration must not result in the accumulation of nonaqueous phase liquid (NAPL) on or in ground water. The methodologies and procedures specified in subsection (10) of this section shall be used to determine if this criterion is met.

(4) **Fixed parameter three-phase partitioning model.**

(a) **Overview.** This subsection specifies the procedures and requirements for establishing soil concentrations through the use of the fixed parameter three-phase partitioning model. The model may be used to establish soil concentrations for any hazardous substance. The model may be used to calculate both unsaturated and saturated zone soil concentrations.

This method provides default or fixed input parameters for the three-phase partitioning model that are intended to be protective under most circumstances and conditions; site-specific measurements are not required. In some cases it may be appropriate to use site-specific measurements for the input parameters. Subsection (5) of this section specifies the procedures and requirements to establish site-specific input parameters for use in the three-phase partitioning model.

(b) **Description of the model.** The three-phase partitioning model is described by the following equation:

[Equation 747-1]

$$C_s = C_w (UCF) DF \left[K_d + \frac{(\theta_w + \theta_a H_{cc})}{\rho_b} \right]$$

Where:

C_s	=	Soil concentration (mg/kg)
C_w	=	Ground water cleanup level established under WAC 173-340-720 (ug/l)
UCF	=	Unit conversion factor (1mg/1,000 ug)
DF	=	Dilution factor (dimensionless: 20 for unsaturated zone soil; see (e) of this subsection for saturated zone soil)
K_d	=	Distribution coefficient (L/kg; see (c) of this subsection)
θ_w	=	Water-filled soil porosity (ml water/ml soil: 0.3 for unsaturated zone soil; see (e) of this subsection for saturated zone soil)
θ_a	=	Air-filled soil porosity (ml air/ml soil: 0.13 for unsaturated zone soil; see (e) of this subsection for saturated zone soil)
H_{cc}	=	Henry's law constant (dimensionless; see (d) of this subsection)
ρ_b	=	Dry soil bulk density (1.5 kg/L)

(c) **Distribution coefficient (K_d).** The default K_d values for organics and metals used in Equation 747-1 are as follows:

(i) **Organics.** For organic hazardous substances, the K_d value shall be derived using Equation 747-2. The K_{oc} (soil organic carbon-water partition coefficient) parameter specified in Equation 747-2 shall be derived as follows:

(A) **Nonionic organics.** For individual nonionic hydrophobic organic hazardous substances (e.g., benzene and naphthalene), the K_{oc} values in Table 747-1 shall be used. For hazardous substances not listed in Table 747-1, K_d values may be developed as provided in subsection (5) of this section (variable three-phase partitioning model).

(B) **Ionizing organics.** For ionizing organic hazardous substances (e.g., pentachlorophenol and benzoic acid), the K_{oc} values in Table 747-2 shall be used. Table 747-2 provides K_{oc} values for three different pHs. To select the appropriate K_{oc} value, the soil pH must be measured. The K_{oc} value for the corresponding soil pH shall be used. If the soil pH falls between the pH values provided, an appropriate K_{oc} value shall be selected by interpolation between the listed K_{oc} values.

[Equation 747-2]

$K_d = K_{oc} \times f_{oc}$

Where:

K_d	=	Distribution coefficient (L/kg)
K_{oc}	=	Soil organic carbon-water partitioning coefficient (ml/g). See (c)(i) of this subsection.
f_{oc}	=	Soil fraction of organic carbon (0.1% or 0.001 g/g)

(ii) **Metals.** For metals, the K_d values in Table 747-3 shall be used. For metals not listed in Table 747-3, K_d values may be developed as provided in subsection (5) of this section (variable three-phase partitioning model).

(d) **Henry's law constant.** For petroleum fractions, the values for Henry's law constant in Table 747-4 shall be used in Equation 747-1. For individual organic hazardous sub-

stances, the value shall be based on values in the scientific literature. For all metals present as inorganic compounds except mercury, zero shall be used. For mercury, either 0.47 or a value derived from the scientific literature shall be used. Derivation of Henry's law constant from the scientific literature shall comply with WAC 173-340-702 (14), (15) and (16).

(e) **Saturated zone soil concentrations.** Equation 747-1 may also be used to derive concentrations for soil that is located at or below the ground water table (the saturated zone). The following input parameters shall be changed if Equation 747-1 is used to derive saturated zone soil concentrations:

(i) The dilution factor shall be changed from 20 to 1;

(ii) The water-filled soil porosity value shall be changed from 0.3 ml water/ml soil to 0.43 ml water/ml soil; and

(iii) The air-filled soil porosity value shall be changed from 0.13 ml air/ml soil to zero.

(5) **Variable parameter three-phase partitioning model.**

(a) **Overview.** This section specifies the procedures and requirements to derive site-specific input parameters for use in the three-phase partitioning model. This method may be used to establish soil concentrations for any hazardous substance. This method may be used to calculate both unsaturated and saturated zone soil concentrations.

This method allows for the substitution of site-specific values for the default values in Equation 747-1 for one or more of the following five input parameters: Distribution coefficient, soil bulk density, soil volumetric water content, soil air content, and dilution factor. The methods that may be used and the requirements that shall be met to derive site-specific values for each of the five input parameters are specified in (b) through (f) of this subsection.

(b) **Methods for deriving a distribution coefficient (K_d).** To derive a site-specific distribution coefficient, one of the following methods shall be used:

(i) **Deriving K_d from soil fraction of organic carbon (foc) measurements.** Site-specific measurements of soil organic carbon may be used to derive distribution coefficients for nonionic hydrophobic organics using Equation 747-2. Soil organic carbon measurements shall be based on uncontaminated soil below the root zone (i.e., soil greater than one meter in depth) that is representative of site conditions or in areas through which contaminants are likely to migrate.

The laboratory protocols for measuring soil organic carbon in the Puget Sound Estuary Program (March, 1986) may be used. Other methods may also be used if approved by the department. All laboratory measurements of soil organic carbon shall be based on methods that do not include inorganic carbon in the measurements.

(ii) **Deriving K_d from site data.** Site-specific measurements of the hazardous substance concentrations in the soil and the soil pore water or ground water may be used, subject to department approval, to derive a distribution coefficient. Distribution coefficients that have been derived from site data shall be based on measurements of soil and ground water hazardous substance concentrations from the same depth and location. Soil and ground water samples that have hazardous substances present as a nonaqueous phase liquid (NAPL) shall not be used to derive a distribution coefficient and measures shall be taken to minimize biodegradation and volatilization during sampling, transport and analysis of these samples.

(iii) **Deriving K_d from batch tests.** A site-specific distribution coefficient may be derived by using batch equilibrium tests, subject to department approval, to measure hazardous substance adsorption and desorption. The results from the batch test may be used to derive K_d from the sorption/desorption relationship between hazardous substance concentrations in the soil and water. Samples that have hazardous substances present as a nonaqueous phase liquid (NAPL) shall not be used to derive a distribution coefficient and measures shall be taken to minimize biodegradation and volatilization during testing.

(iv) **Deriving K_d from the scientific literature.** The scientific literature may be used to derive a site-specific distribution coefficient (K_d) for any hazardous substance, provided the requirements in WAC 173-340-702 (14), (15) and (16) are met.

(c) **Deriving soil bulk density.** ASTM Method 2049 or other methods approved by the department may be used to derive soil bulk density values.

(d) **Deriving soil volumetric water content using laboratory methods.** ASTM Method 2216 or other methods approved by the department may be used to derive soil volumetric water content values.

(e) **Estimating soil air content.** An estimate of soil air content may be determined by calculating soil porosity and subtracting the volumetric water content.

(f) **Deriving a dilution factor from site-specific estimates of infiltration and ground water flow volume.** Site-specific estimates of infiltration and ground water flow volume may be used in the following equation to derive a site-specific dilution factor:

[Equation 747-3]

$$DF = (Q_p + Q_a)/Q_p$$

Where:

- DF = Dilution factor (dimensionless)
- Q_p = Volume of water infiltrating (m^3/yr)
- Q_a = Ground water flow (m^3/yr)

(i) **Calculating ground water flow volume.** The following equation shall be used under this method to calculate the volume of ground water flow (Q_a):

[Equation 747-4]

$$Q_a = K \times A \times I$$

Where:

- Q_a = Ground water flow volume (m^3/year)
- K = Hydraulic conductivity (m/year). Site-specific measurements shall be used to derive this parameter.
- A = Aquifer mixing zone (m^2). The aquifer mixing zone thickness shall not exceed 5 meters in depth and be equal to a unit width of 1 meter, unless it can be demonstrated empirically that the mixing zone thickness exceeds 5 meters.
- I = Gradient (m/m). Site-specific measurements shall be used to derive this parameter.

(A) Equation 747-4 assumes the ground water concentrations of hazardous substances of concern upgradient of the site are not detectable. If this assumption is not true, the dilu-

tion factor may need to be adjusted downward in proportion to the upgradient concentration.

(B) Direct measurement of the flow velocity of ground water using methods approved by the department may be used as a substitute for measuring the ground water hydraulic conductivity and gradient.

(ii) **Calculating or estimating infiltration.** The following equation shall be used under this method to calculate the volume of water infiltrating (Q_p):

[Equation 747-5]

Q_p = L x W x Inf

Where:

Q_p = Volume of water infiltrating (m^3/year)
L = Estimated length of contaminant source area parallel to ground water flow (m)
W = Unit width of contaminant source area (1 meter)
Inf = Infiltration (m/year)

(A) If a default annual infiltration value (Inf) is used, the value shall meet the following requirements. For sites west of the Cascade Mountains, the default annual infiltration value shall be 70 percent of the average annual precipitation amount. For sites east of the Cascade Mountains, the default annual infiltration value shall be 25 percent of the average annual precipitation amount.

(B) If a site-specific measurement or estimate of infiltration (Inf) is made, it shall be based on site conditions without surface caps (e.g., pavement) or other structures that would control or impede infiltration. The presence of a cover or cap may be considered when evaluating the protectiveness of a remedy under WAC 173-340-350 through 173-340-360. If a site-specific measurement or estimate of infiltration is made, then it must comply with WAC 173-340-702 (14), (15) and (16).

(6) **Four-phase partitioning model.**

(a) **Overview.** This subsection specifies the procedures and requirements for establishing soil concentrations through the use of the four-phase partitioning model. This model may be used to derive soil concentrations for any site where hazardous substances are present in the soil as a nonaqueous phase liquid (NAPL). The model is described in (c) of this subsection. Instructions on how to use the model to establish protective soil concentrations are provided in (d) of this subsection.

(b) **Restrictions on use of the model for alcohol enhanced fuels.** The four-phase partitioning model may be used on a case-by-case basis for soil containing fuels (e.g., gasoline) that have been enhanced with alcohol. If the model is used for alcohol enhanced fuels, then it shall be demonstrated that the effects of cosolvency have been adequately considered and, where necessary, taken into account when applying the model. Use of the model for alcohol enhanced fuels without considering the effects of cosolvency and increased ground water contamination is prohibited.

(c) **Description of the model.** The four-phase partitioning model is based on the following three equations:

(i) **Conservation of volume equation.**

[Equation 747-6]

$n = \theta_w + \theta_a + \theta_{NAPL}$

Where:

n = Total soil porosity (ml total pore space/ml total soil volume). Use a default value of 0.43 ml/ml or use a value determined from site-specific measurements.
θ_w = Volumetric water content (ml water/ml soil). For unsaturated soil use a default value of 0.3 or a value determined from site-specific measurements. For saturated soil this value is unknown and must be solved for. Volumetric water content equals the total soil porosity minus volume occupied by the NAPL.
θ_a = Volumetric air content (ml air volume/ml total soil volume). For unsaturated soil this value is unknown and must be solved for. Volumetric air content equals the total soil porosity minus the volume occupied by the water and NAPL. For saturated soil this value is zero.
θ_{NAPL} = Volumetric NAPL content (ml NAPL volume/ml total soil volume). For both unsaturated and saturated soil this value is unknown and must be solved for.

(ii) **Four-phase partitioning equation.**

[Equation 747-7]

$$\frac{M^i_T}{m_{soil}} = \frac{x_i S_i}{\rho_b}\left[\theta_w + K^i_{oc} f_{oc} \rho_b + H^i_{cc}\theta_a + \frac{GFW_i}{S_i}\rho_{NAPL}\theta_{NAPL}\right]$$

Where:

M^i_T = Total mass of each component in the system (mg). This value is derived from site-specific measurements.
m_{soil} = Total soil mass (kg).
x_i = Mole fraction (at equilibrium) of each component (dimensionless). This value is unknown and must be solved for.
S_i = Solubility of each component (mg/l). See Table 747-4 for petroleum hydrocarbons; see the scientific literature for other hazardous substances.
P_b = Dry soil bulk density (1.5 kg/l).
K^i_{oc} = Soil organic carbon-water partitioning coefficient for each component (l/kg). See Table 747-4 for petroleum hydrocarbons; see subsection (4)(b) of this section for other hazardous substances.
f_{oc} = Mass fraction of soil natural organic carbon (0.001 g soil organic/g soil).
H^i_{cc} = Henry's law constant for each component (dimensionless). See Table 747-4 for petroleum hydrocarbons; see subsection (4)(c) of this section for other hazardous substances.
GFW_i = Gram formula weight, or molecular weight of each component (mg/mol). See Table 747-4 for petroleum hydrocarbons; see the scientific literature for other hazardous substances.
$\rho NAPL$ = Molar density of the mixture (mol/l). See Equation 747-8.
Component = For petroleum mixtures, this means the petroleum fractions, and organic hazardous substances with a reference dose; for other hazardous substances, this means each organic hazardous substance that is found in the NAPL.

(iii) **Molar density equation.**

[Equation 747-8]

$$\rho_{NAPL} = \frac{\left[\sum x_i GFW_i \Big/ \left(\sum x_i GFW_i/\rho_i\right)\right]}{\sum x_i GFW_i} = \frac{1}{\sum\left(x_i GFW_i/\rho_i\right)}$$

Where:

GFW_i	=	Gram formula weight, or molecular weight of each component (mg/mol). See Table 747-4 for petroleum hydrocarbons; see the scientific literature for other hazardous substances.
x_i	=	Mole fraction (at equilibrium) of each component (dimensionless). This value is unknown and must be solved for.
ρ_i	=	Density of each component (mg/l). See Table 747-4 for petroleum hydrocarbons; see the scientific literature for other hazardous substances.
Component	=	For petroleum mixtures, this means the petroleum fractions plus organic hazardous substances with a reference dose; for other hazardous substances, this means each organic hazardous substance that is found in the NAPL.

(d) **Instructions for using the model.** This subsection provides instructions for using the four-phase partitioning model to predict ground water concentrations and to establish protective soil concentrations. The model uses an iterative process to simultaneously solve multiple equations for several unknowns (see step 4 for the number of equations). To predict a ground water concentration, the mole fraction of each component (at equilibrium) must be known. The predicted ground water concentration is obtained by multiplying the water solubility of each component by the equilibrated mole fraction (Equation 747-7).

(i) **Step 1: Measure hazardous substance soil concentrations.** Collect and analyze soil samples and, if appropriate, samples of the product released, for each component. For petroleum hydrocarbons, see Table 830-1 for a description of what to analyze for.

(ii) **Step 2: Derive physical/chemical data.** For each of the components, determine the Henry's law constant, water solubility, soil organic carbon-water partitioning coefficient, density and molecular weight values. For petroleum hydrocarbons, see Table 747-4.

(iii) **Step 3: Derive soil parameters.** Derive a value for each of the following soil parameters as follows:

(A) **Soil organic carbon content.** Use the default value (0.001 g soil organic/g soil) or a site-specific value derived under subsection (5)(b)(i) of this section.

(B) **Soil volumetric water content.** Use the default value (0.43 minus the volume of NAPL and air) or a site-specific value derived under subsection (5)(d) of this section.

(C) **Soil volumetric air content.** Use the default value (0.13 ml/ml for unsaturated zone soil; zero for saturated zone soil) or a site-specific value derived under subsection (5)(e) of this section.

(D) **Soil bulk density and porosity.** Use the default values of 1.5 kg/l for soil bulk density and 0.43 for soil porosity or use site-specific values. If a site-specific value for bulk density is used, the method specified in subsection (5)(c) of this subsection shall be used. If a site-specific bulk density value is used, a site-specific porosity value shall also be used. The site-specific soil porosity value may be calculated using a default soil specific gravity of 2.65 g/ml or measuring the soil specific gravity using ASTM Method D 854.

(iv) **Step 4: Predict a soil pore water concentration.** Equation 747-7 shall be used to predict the soil pore water concentration for each component. To do this, multiple versions of Equation 747-7 shall be constructed, one for each of the components using the associated parameter inputs for K_{oc}, H_{cc}, GFW, and S. These equations shall then be combined with Equations 747-6 and 747-8 and the condition that $\Sigma x_i = 1$ and solved simultaneously for the unknowns in the equations (mole fraction of each component (X_i), volumetric NAPL content (θ_{NAPL}), and either the volumetric water content (θ_w) or the volumetric air content (θ_a).

(v) **Step 5: Derive a dilution factor.** Derive a dilution factor using one of the following two methods:

(A) Use the default value of 20 for unsaturated soils and 1 for saturated soils); or

(B) Derive a site-specific value using site-specific estimates of infiltration and ground water flow volume under subsection (5)(f) of this section.

(vi) **Step 6: Calculate a predicted ground water concentration.** Calculate a predicted ground water concentration for each component by dividing the predicted soil pore water concentration for each component by a dilution factor to account for the dilution that occurs once the component enters ground water.

(vii) **Step 7: Establishing protective soil concentrations.**

(A) **Petroleum mixtures.** For petroleum mixtures, compare the predicted ground water concentration for each component and for the total petroleum hydrocarbon mixture (sum of the petroleum components in the NAPL) with the applicable ground water cleanup level established under WAC 173-340-720.

(I) If the predicted ground water concentration for each of the components and for the total petroleum hydrocarbon mixture is less than or equal to the applicable ground water cleanup level, then the soil concentrations measured at the site are protective.

(II) If the condition in (d)(vii)(A)(I) of this subsection is not met, then the soil concentrations measured at the site are not protective. In this situation, the four-phase partitioning model can be used in an iterative process to calculate protective soil concentrations.

(B) **Other mixtures.** For mixtures that do not include petroleum hydrocarbons, compare the predicted ground water concentration for each hazardous substance in the mixture with the applicable ground water cleanup level established under WAC 173-340-720.

(I) If the predicted ground water concentration for each of the hazardous substances in the mixture is less than or equal to the applicable ground water cleanup level, then the soil concentrations measured at the site are protective.

(II) If the condition in (d)(vii)(B)(I) of this subsection is not met, then the soil concentrations measured at the site are not protective. In this situation, the four-phase partitioning model can be used in an iterative process to calculate protective soil concentrations.

(7) **Leaching tests.**

(a) **Overview.** This subsection specifies the procedures and requirements for deriving soil concentrations through the use of leaching tests. Leaching tests may be used to establish soil concentrations for the following specified metals: Arsenic, cadmium, total chromium, hexavalent chromium, copper, lead, mercury, nickel, selenium, and zinc (see (b) and (c) of this subsection). Leaching tests may also be used to establish soil concentrations for other hazardous substances,

including petroleum hydrocarbons, provided sufficient information is available to correlate leaching test results with ground water impacts (see (d) of this subsection). Testing of soil samples from the site is required for use of this method.

(b) **Leaching tests for specified metals.** If leaching tests are used to establish soil concentrations for the specified metals, the following two leaching tests may be used:

(i) EPA Method 1312, Synthetic Precipitation Leaching Procedure (SPLP). Fluid #3 (pH = 5.0), representing acid rain in the western United States, shall be used when conducting this test. This test may underestimate ground water impacts when acidic conditions exist due to significant biological degradation or for other reasons. Underestimation of ground water impacts may occur, for example, when soils contaminated with metals are located in wood waste, in municipal solid waste landfills, in high sulfur content mining wastes, or in other situations with a pH < 6. Consequently, this test shall not be used in these situations and the TCLP test should be used instead.

(ii) **EPA Method 1311, Toxicity Characteristic Leaching Procedure (TCLP).** Fluid #1 (pH = 4.93), representing organic acids generated by biological degradation processes, shall be used when conducting this test. This test is intended to represent situations where acidic conditions are present due to biological degradation such as in municipal solid waste landfills. Thus, it may underestimate ground water impacts where this is not the case and the metals of interest are more soluble under alkaline conditions. An example of this would be arsenic occurring in alkaline (pH > 8) waste or soils. Consequently, this test shall not be used in these situations and the SPLP test should be used instead.

(c) **Criteria for specified metals.** When using either EPA Method 1312 or 1311, the analytical methods used for analysis of the leaching test effluent shall be sufficiently sensitive to quantify hazardous substances at concentrations at the ground water cleanup level established under WAC 173-340-720. For a soil metals concentration derived under (b) of this subsection to be considered protective of ground water, the leaching test effluent concentration shall meet the following criteria:

(i) For cadmium, lead and zinc, the leaching test effluent concentration shall be less than or equal to ten times the applicable ground water cleanup level established under WAC 173-340-720.

(ii) For arsenic, total chromium, hexavalent chromium, copper, mercury, nickel and selenium, the leaching test effluent concentration shall be less than or equal to the applicable ground water cleanup level established under WAC 173-340-720.

(d) **Leaching tests for other hazardous substances.** Leaching tests using the methods specified in this subsection may also be used for hazardous substances other than the metals specifically identified in this subsection, including petroleum hydrocarbons. Alternative leaching test methods may also be used for any hazardous substance, including the metals specifically identified in this subsection. Use of the leaching tests specified in (b) and (c) of this subsection for other hazardous substances or in a manner not specified in (b) and (c) of this subsection, or use of alternative leaching tests for any hazardous substance, is subject to department approval and the user must demonstrate with site-specific field or laboratory data or other empirical data that the leaching test can accurately predict ground water impacts. The department will use the criteria in WAC 173-340-702 (14), (15) and (16) to evaluate the appropriateness of these alternative methods under WAC 173-340-702 (14), (15) and (16).

(8) **Alternative fate and transport models.**

(a) **Overview.** This subsection specifies the procedures and requirements for establishing soil concentrations through the use of fate and transport models other than those specified in subsections (4) through (6) of this section. These alternative models may be used to establish a soil concentration for any hazardous substance. Site-specific data are required for use of these models.

(b) **Assumptions.** When using alternative models, chemical partitioning and advective flow may be coupled with other processes to predict contaminant fate and transport, provided the following conditions are met:

(i) **Sorption.** Sorption values shall be derived in accordance with either subsection (4)(c) of this section or the methods specified in subsection (5)(b) of this section.

(ii) **Vapor phase partitioning.** If Henry's law constant is used to establish vapor phase partitioning, then the constant shall be derived in accordance with subsection (4)(d) of this section.

(iii) **Natural biodegradation.** Rates of natural biodegradation shall be derived from site-specific measurements.

(iv) **Dispersion.** Estimates of dispersion shall be derived from either site-specific measurements or literature values.

(v) **Decaying source.** Fate and transport algorithms may be used that account for decay over time.

(vi) **Dilution.** Dilution shall be based on site-specific measurements or estimated using a model incorporating site-specific characteristics. If detectable concentrations of hazardous substances are present in upgradient ground water, then the dilution factor may need to be adjusted downward in proportion to the background (upgradient) concentration.

(vii) **Infiltration.** Infiltration shall be derived in accordance with subsection (5)(f)(ii)(A) or (B) of this section.

(c) **Evaluation criteria.** Proposed fate and transport models, input parameters, and assumptions shall comply with WAC 173-340-702 (14), (15) and (16).

(9) **Empirical demonstration.**

(a) **Overview.** This subsection specifies the procedures and requirements for demonstrating empirically that soil concentrations measured at the site will not cause an exceedance of the applicable ground water cleanup levels established under WAC 173-340-720. This empirical demonstration may be used for any hazardous substance. Site-specific data (e.g., ground water and soil samples) are required under this method. If the demonstrations required under (b) of this subsection cannot be made, then a protective soil concentration shall be established under one of the methods specified in subsections (4) through (8) of this section.

(b) **Requirements.** To demonstrate empirically that measured soil concentrations will not cause an exceedance of the applicable ground water cleanup levels established under WAC 173-340-720, the following shall be demonstrated:

(i) The measured ground water concentration is less than or equal to the applicable ground water cleanup level established under WAC 173-340-720; and

(ii) The measured soil concentration will not cause an exceedance of the applicable ground water cleanup level established under WAC 173-340-720 at any time in the future. Specifically, it must be demonstrated that a sufficient amount of time has elapsed for migration of hazardous substances from soil into ground water to occur and that the characteristics of the site (e.g., depth to ground water and infiltration) are representative of future site conditions. This demonstration may also include a measurement or calculation of the attenuating capacity of soil between the source of the hazardous substance and the ground water table using site-specific data.

(c) **Evaluation criteria.** Empirical demonstrations shall be based on methods approved by the department. Those methods shall comply with WAC 173-340-702 (14), (15) and (16).

(10) **Residual saturation.**

(a) **Overview.** To ensure the soil concentrations established under one of the methods specified in subsections (4) through (9) of this section will not cause an exceedance of the ground water cleanup level established under WAC 173-340-720, the soil concentrations must not result in the accumulation of nonaqueous phase liquid on or in ground water (see subsection (2)(b) of this section). To determine if this criterion is met, either an empirical demonstration must be made (see (c) of this subsection) or residual saturation screening levels must be established and compared with the soil concentrations established under one of the methods specified in subsections (4) through (9) of this section (see (d) and (e) of this subsection). This subsection applies to any site where hazardous substances are present as a nonaqueous phase liquid (NAPL), including sites contaminated with petroleum hydrocarbons.

(b) **Definition of residual saturation.** When a nonaqueous phase liquid (NAPL) is released to the soil, some of the NAPL will be held in the soil pores or void spaces by capillary force. For the purpose of this subsection, the concentration of hazardous substances in the soil at equilibrium conditions is called residual saturation. At concentrations above residual saturation, the NAPL will continue to migrate due to gravimetric and capillary forces and may eventually reach the ground water, provided a sufficient volume of NAPL is released.

(c) **Empirical demonstration.** An empirical demonstration may be used to show that soil concentrations measured at the site will not result in the accumulation of nonaqueous phase liquid on or in ground water. An empirical demonstration may be used for any hazardous substance. Site-specific data (e.g., ground water and soil samples) are required under this method. If the demonstrations required under (c)(i) of this subsection cannot be made, then a protective soil concentration shall be established under (d) and (e) of this subsection.

(i) **Requirements.** To demonstrate empirically that measured soil concentrations will not result in the accumulation of nonaqueous phase liquid on or in ground water, the following shall be demonstrated:

(A) Nonaqueous phase liquid has not accumulated on or in ground water; and

(B) The measured soil concentration will not result in nonaqueous phase liquid accumulating on or in ground water at any time in the future. Specifically, it must be demonstrated that a sufficient amount of time has elapsed for migration of hazardous substances from soil into ground water to occur and that the characteristics of the site (e.g., depth to ground water and infiltration) are representative of future site conditions. This demonstration may also include a measurement or calculation of the attenuating capacity of soil between the source of the hazardous substance and the ground water table using site-specific data.

(iii) **Evaluation criteria.** Empirical demonstrations shall be based on methods approved by the department. Those methods shall comply with WAC 173-340-702 (14), (15) and (16).

(d) **Deriving residual saturation screening levels.** Unless an empirical demonstration is made under (c) of this subsection, residual saturation screening levels shall be derived and compared with the soil concentrations derived under the methods specified in subsections (4) through (9) of this subsection to ensure that those soil concentrations will not result in the accumulation of nonaqueous phase liquid on or in ground water. Residual saturation screening levels shall be derived using one of the following methods.

(i) **Default screening levels for petroleum hydrocarbons.** Residual saturation screening levels for petroleum hydrocarbons may be obtained from the values specified in Table 747-5.

(ii) **Site-specific screening levels.** Residual saturation screening levels for petroleum hydrocarbons and other hazardous substances may be derived from site-specific measurements. Site-specific measurements of residual saturation shall be based on methods approved by the department. Laboratory measurements or theoretical estimates (i.e., those that are not based on site-specific measurements) of residual saturation shall be supported and verified by site data. This may include an assessment of ground water monitoring data and soil concentration data with depth and an analysis of the soil's texture (grain size), porosity and volumetric water content.

(e) **Adjustment to the derived soil concentrations.** After residual saturation screening levels have been derived under (d) of this subsection, the screening levels shall be compared with the soil concentrations derived under one of the methods specified in subsections (4) through (9) of this subsection. If the residual saturation screening level is greater than or equal to the soil concentration derived using these methods, then no adjustment for residual saturation is necessary. If the residual saturation screening level is less than the soil concentration derived using these methods, then the soil concentration shall be adjusted downward to the residual saturation screening level.

(11) **Ground water monitoring requirements.** The department may, on a case-by-case basis, require ground water monitoring to confirm that hazardous substance soil concentrations derived under this section meet the criterion specified in subsection (2) of this section.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-747, filed 2/12/01, effective 8/15/01.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-7490 Terrestrial ecological evaluation procedures. (1) **Purpose.**

(a) WAC 173-340-7490 through 173-340-7494 define the goals and procedures the department will use for:

(i) Determining whether a release of hazardous substances to soil may pose a threat to the terrestrial environment;

(ii) Characterizing existing or potential threats to terrestrial plants or animals exposed to hazardous substances in soil; and

(iii) Establishing site-specific cleanup standards for the protection of terrestrial plants and animals.

(b) Information collected during a terrestrial ecological evaluation shall also be used in developing and evaluating cleanup action alternatives and in selecting a cleanup action under WAC 173-340-350 through 173-340-390. WAC 173-340-7490 through 173-340-7494 do not necessarily require a cleanup action for terrestrial ecological protection separate from a human health-based cleanup action. Where appropriate, a terrestrial ecological evaluation may be conducted so as to avoid duplicative studies of soil contamination that will be remediated to address other concerns, as provided in WAC 173-340-350 (7)(c)(iii)(F)(II).

(c) These procedures are not intended to be used to evaluate potential threats to ecological receptors in sediments, surface water, or wetlands. Procedures for sediment evaluations are described in WAC 173-340-760, and for surface water evaluations in WAC 173-340-730. Procedures for wetland evaluations shall be determined by the department on a case-by-case basis.

(2) **Requirements.** In the event of a release of a hazardous substance to the soil at a site, one of the following actions shall be taken:

(a) Document an exclusion from any further terrestrial ecological evaluation using the criteria in WAC 173-340-7491;

(b) Conduct a simplified terrestrial ecological evaluation as set forth in WAC 173-340-7492; or

(c) Conduct a site-specific terrestrial ecological evaluation as set forth in WAC 173-340-7493.

(3) **Goal.** The goal of the terrestrial ecological evaluation process is the protection of terrestrial ecological receptors from exposure to contaminated soil with the potential to cause significant adverse effects. For species protected under the Endangered Species Act or other applicable laws that extend protection to individuals of a species, a significant adverse effect means an impact that would significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering. For all other species, significant adverse effects are effects that impair reproduction, growth or survival.

(a) The simplified terrestrial ecological evaluation process has been developed to be protective of terrestrial ecological receptors at most qualifying sites, while the site-specific terrestrial ecological evaluation process is intended to be highly likely to be protective at any site.

(b) The following policy on terrestrial ecological receptors to be protected applies to all terrestrial ecological evaluations. For land uses other than industrial or commercial, protectiveness is evaluated relative to terrestrial plants, wildlife, and ecologically important functions of soil biota that affect plants or wildlife.

For industrial or commercial properties, current or future potential for exposure to soil contamination need only be evaluated for terrestrial wildlife protection. Plants and soil biota need not be considered unless:

(i) The species is protected under the federal Endangered Species Act; or

(ii) The soil contamination is located on an area of an industrial or commercial property where vegetation must be maintained to comply with local government land use regulations.

(c) For the purposes of this section, "industrial property" means properties meeting the definition in WAC 173-340-200. "Commercial property" means properties that are currently zoned for commercial or industrial property use and that are characterized by or are committed to traditional commercial uses such as offices, retail and wholesale sales, professional services, consumer services, and, warehousing.

(d) Any terrestrial remedy, including exclusions, based at least in part on future land use assumptions shall include a completion date for such future development acceptable to the department.

(4) **Point of compliance.**

(a) **Conditional point of compliance.** For sites with institutional controls to prevent excavation of deeper soil, a conditional point of compliance may be set at the biologically active soil zone. This zone is assumed to extend to a depth of six feet. The department may approve a site-specific depth based on a demonstration that an alternative depth is more appropriate for the site. In making this demonstration, the following shall be considered:

(i) Depth to which soil macro-invertebrates are likely to occur;

(ii) Depth to which soil turnover (bioturbation) is likely to occur due to the activities of soil invertebrates;

(iii) Depth to which animals likely to occur at the site are expected to burrow; and

(iv) Depth to which plant roots are likely to extend.

(b) **Standard point of compliance.** An institutional control is not required for soil contamination that is at least fifteen feet below the ground surface. This represents a reasonable estimate of the depth of soil that could be excavated and distributed at the soil surface as a result of site development activities, resulting in exposure by ecological receptors.

(5) **Additional measures.** The department may require additional measures to evaluate potential threats to terrestrial ecological receptors notwithstanding the provisions in this and the following sections, when based upon a site-specific review, the department determines that such measures are necessary to protect the environment.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7490, filed 2/12/01, effective 8/15/01.]

WAC 173-340-7491 Exclusions from a terrestrial ecological evaluation. (1) **Criteria for determining that no further evaluation is required.** No further evaluation is required if the department determines that a site meets any of the criteria in (a) through (d) of this subsection:

(a) All soil contaminated with hazardous substances is, or will be, located below the point of compliance established under WAC 173-340-7490(4). To qualify for this exclusion, an institutional control shall be required by the department

under WAC 173-340-440. An institutional control is not required if the contamination is at least fifteen feet below the ground surface (WAC 173-340-7490 (4)(b)). An exclusion based on planned future land use shall include a completion date for such future development that is acceptable to the department.

(b) All soil contaminated with hazardous substances is, or will be, covered by buildings, paved roads, pavement, or other physical barriers that will prevent plants or wildlife from being exposed to the soil contamination. To qualify for this exclusion, an institutional control shall be required by the department under WAC 173-340-440. An exclusion based on planned future land use shall include a completion date for such future development that is acceptable to the department;

(c) Where the site conditions are related or connected to undeveloped land in the following manner:

(i) For sites contaminated with hazardous substances other than those specified in (c)(ii) of this subsection, there is less than 1.5 acres of contiguous undeveloped land on the site or within 500 feet of any area of the site; and

(ii) For sites contaminated with any of the following hazardous substances: Chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor or heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene, there is less than 1/4 acre of contiguous undeveloped land on or within 500 feet of any area of the site affected by these hazardous substances. This list does not imply that sampling must be conducted for each of these chemicals at every site. Sampling should be conducted for those chemicals that might be present based on available information, such as current and past uses of chemicals at the site; and

(iii) For the purposes of (c)(i) and (ii) of this subsection, and Table 749-1, "undeveloped land" shall mean land that is not covered by buildings, roads, paved areas or other barriers that would prevent wildlife from feeding on plants, earthworms, insects or other food in or on the soil. "Contiguous" undeveloped land means an area of undeveloped land that is not divided into smaller areas by highways, extensive paving or similar structures that are likely to reduce the potential use of the overall area by wildlife. Roads, sidewalks and other structures that are unlikely to reduce potential use of the area by wildlife shall not be considered to divide a contiguous area into smaller areas.

(d) Concentrations of hazardous substances in soil do not exceed natural background levels, as determined under WAC 173-340-709.

(2) **Procedure for a site that does not qualify for an exclusion.**

(a) Sites that do not qualify for an exclusion under subsection (1) of this section shall conduct a site-specific terrestrial ecological evaluation if any of the following criteria apply:

(i) The site is located on, or directly adjacent to, an area where management or land use plans will maintain or restore native or seminative vegetation (e.g., green-belts, protected wetlands, forestlands, locally designated environmentally sensitive areas, open space areas managed for wildlife, and some parks or outdoor recreation areas. This does not include park areas used for intensive sport activities such as baseball or football).

(ii) The site is used by a threatened or endangered species; a wildlife species classified by the Washington state department of fish and wildlife as a "priority species" or "species of concern" under Title 77 RCW; or a plant species classified by the Washington state department of natural resources natural heritage program as "endangered," "threatened," or "sensitive" under Title 79 RCW. For plants, "used" means that a plant species grows at the site or has been found growing at the site. For animals, "used" means that individuals of a species have been observed to live, feed or breed at the site.

(iii) The site is located on a property that contains at least ten acres of native vegetation within 500 feet of the site, not including vegetation beyond the property boundaries.

(iv) The department determines that the site may present a risk to significant wildlife populations.

(b) If none of the criteria in (a) of this subsection apply to the site, either a simplified terrestrial ecological evaluation described under WAC 173-340-7492 or a site-specific terrestrial ecological evaluation described under WAC 173-340-7493 shall be conducted.

(c) For the purposes of this section, the following definitions shall apply.

(i) "Native vegetation" means any plant community native to the state of Washington. The following sources shall be used in making this determination: *Natural Vegetation of Oregon and Washington*, J.F. Franklin and C.T. Dyrness, Oregon State University Press, 1988, and L.C. Hitchcock, C.L. Hitchcock, J.W. Thompson and A. Cronquist, 1955-1969, *Vascular Plants of the Pacific Northwest* (5 volumes). Areas planted with native species for ornamental or landscaping purposes shall not be considered to be native vegetation.

(ii) "Seminative vegetation" means a plant community that includes at least some vascular plant species native to the state of Washington. The following shall not be considered seminative vegetation: Areas planted for ornamental or landscaping purposes, cultivated crops, and areas significantly disturbed and predominantly covered by noxious, introduced plant species or weeds (e.g., Scotch broom, Himalayan blackberry or knap-weed).

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7491, filed 2/12/01, effective 8/15/01.]

WAC 173-340-7492 Simplified terrestrial ecological evaluation procedures. (1) **Purpose.**

(a) The simplified terrestrial ecological evaluation process is intended to identify those sites which do not have a substantial potential for posing a threat of significant adverse effects to terrestrial ecological receptors, and thus may be removed from further ecological consideration during the remedial investigation and cleanup process. For remaining sites, the process provides several options, including chemical concentrations that may be used as cleanup levels, and the choice of developing site-specific concentrations using bioassays or conducting a site-specific terrestrial ecological evaluation under WAC 173-340-7493.

(b) The process is structured with an intent to protect terrestrial wildlife at industrial or commercial sites, and terres-

trial plants, soil biota and terrestrial wildlife at other sites, as provided under WAC 173-340-7490 (3)(b).

(c) The simplified terrestrial ecological evaluation procedures in subsection (2) of this section are organized to focus upon the extent of exposure, exposure pathways, and particular contaminants as key factors in evaluating ecological risk. The steps need not be followed in order, and any one step may be used to determine that no further evaluation is necessary to conclude that a site does not pose a substantial threat of significant adverse effects to terrestrial ecological receptors.

(d) If none of the simplified terrestrial ecological evaluation screening step conditions are met, the person conducting the evaluation may use the chemical concentration numbers listed in Table 749-2 as cleanup levels, or shall conduct a site-specific terrestrial ecological evaluation under WAC 173-340-7493.

(2) **Process for conducting a simplified terrestrial ecological evaluation.**

(a) Exposure analysis. The evaluation may be ended at a site where:

(i) The total area of soil contamination at the site is not more than 350 square feet; or

(ii) Land use at the site and surrounding area makes substantial wildlife exposure unlikely. Table 749-1 shall be used to make this evaluation.

(b) Pathways analysis. The evaluation may be ended if there are no potential exposure pathways from soil contamination to soil biota, plants or wildlife. For a commercial or industrial property, only potential exposure pathways to wildlife (e.g., small mammals, birds) need be considered. Only exposure pathways for priority chemicals of ecological concern listed in Table 749-2 at or above the concentrations provided must be considered. Incomplete pathways may be due to the presence of man-made physical barriers, either currently existing or to be placed (within a time frame acceptable to the department) as part of a remedy or land use. To ensure that such man-made barriers are maintained, a restrictive covenant shall be required by the department under WAC 173-340-440 under a consent decree, agreed order or enforcement order, or as a condition to a written opinion regarding the adequacy of an independent remedial action under WAC 173-340-515(3).

(c) Contaminants analysis. The evaluation may be ended if either of the following are true:

(i) No hazardous substance listed in Table 749-2 for which a value is listed is, or will be, present in the soil at a depth not exceeding the point of compliance established under WAC 173-340-7490(4) and at concentrations higher than the values provided in Table 749-2, using the statistical compliance methods described in WAC 173-340-740(7). An institutional control is required if the contamination is within fifteen feet of the ground surface (see WAC 173-340-7490 (4)(b)). If a hazardous substance listed in Table 749-2 does not have a value listed, then the requirements of (c)(ii) of this subsection must be met; or

(ii) No hazardous substance listed in Table 749-2 is, or will be, present in the soil within six feet of the ground surface at concentrations likely to be toxic, or with the potential to bioaccumulate, based on bioassays using methods approved by the department. An institutional control is required if the contaminant is within fifteen feet of the ground surface. If a hazardous substance listed in Table 749-2 does not have a value listed, then this subparagraph applies.

(3) **Institutional controls.** If any of the conditions listed above in subsection (2)(a)(ii) through (c) of this section are used to end the simplified terrestrial ecological evaluation, institutional controls may be needed to ensure that the condition will continue to be met in the future. Cleanup remedies that rely on chemical concentrations for industrial or commercial sites in Table 749-2 shall include appropriate institutional controls to prevent future exposure to plants or soil biota in the event of a change in land use.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7492, filed 2/12/01, effective 8/15/01.]

WAC 173-340-7493 Site-specific terrestrial ecological evaluation procedures. (1) **Purpose.**

(a) This section sets forth the procedures for conducting a site-specific terrestrial ecological evaluation if any of the conditions specified in WAC 173-340-7491 (2)(a) apply to the site, or if the person conducting the evaluation elects to conduct a site-specific terrestrial ecological evaluation under this section, whether or not a simplified terrestrial ecological evaluation has been conducted under WAC 173-340-7492.

(b) In addition to the purposes specified in WAC 173-340-7490 (1)(a), the site-specific terrestrial ecological evaluation is intended to facilitate selection of a cleanup action by developing information necessary to conduct evaluations of cleanup action alternatives in the feasibility study.

(c) There are two elements in planning a site-specific terrestrial ecological evaluation. Both elements shall be done in consultation with the department and must be approved by the department. The two elements are:

(i) Completing the problem formulation step as required under subsection (2) of this section; and

(ii) Selecting one or more methods under subsection (3) of this section for addressing issues identified in the problem formulation step.

(d) After reviewing information developed in the problem formulation step, the department may at its discretion determine that selection of one or more methods for proceeding with the evaluation is not necessary by making either of the following decisions:

(i) No further site-specific terrestrial ecological evaluation is necessary because the cleanup action plans developed for the protection of human health will eliminate exposure pathways of concern to all of the soil contamination.

(ii) A simplified terrestrial ecological evaluation may be conducted under WAC 173-340-7492 because this evaluation will adequately identify and address any existing or potential threats to ecological receptors.

(2) **Problem formulation step.**

(a) To define the focus of the site-specific terrestrial ecological evaluation, identify issues to be addressed in the evaluation, specifying:

(i) **The chemicals of ecological concern.** The person conducting the evaluation may eliminate hazardous substances from further consideration where the maximum or the upper ninety-five percent confidence limit soil concentration found at the site does not exceed ecological indicator concentrations described in Table 749-3. For industrial or commer-

cial land uses, only the wildlife values need to be considered. Any chemical that exceeds the ecological indicator concentrations shall be included as a chemical of ecological concern in the evaluation unless it can be eliminated based on the factors listed in WAC 173-340-708 (2)(b). *(Caution on the use of ecological indicator concentrations: These numbers are not cleanup levels, and concentrations that exceed the number do not necessarily require remediation.)*

(ii) **Exposure pathways.** Identify any complete potential pathways for exposure of plants or animals to the chemicals of concern. If there are no complete exposure pathways then no further evaluation is necessary. Incomplete pathways may be due to the presence of man-made physical barriers, either currently existing or to be placed (within a time frame acceptable to the department) as part of a remedy or land use.

To ensure that such man-made barriers are maintained, a restrictive covenant shall be required by the department under WAC 173-340-440 under a consent decree, agreed order or enforcement order, or as a condition to a written opinion regarding the adequacy of an independent remedial action under WAC 173-340-515(3).

(iii) **Terrestrial ecological receptors of concern.** Identify current or potential future terrestrial species groups reasonably likely to live or feed at the site. Groupings should represent taxonomically related species with similar exposure characteristics. Examples of potential terrestrial species groups include: Vascular plants, ground-feeding birds, ground-feeding small mammal predators, and herbivorous small mammals.

(A) From these terrestrial species groups, select those groups to be included in the evaluation. If appropriate, individual terrestrial receptor species may also be included. In selecting species groups or individual species, the following shall be considered:

(I) Receptors that may be most at risk for significant adverse effects based on the toxicological characteristics of the chemicals of concern, the sensitivity of the receptor, and on the likely degree of exposure.

(II) Public comments.

(III) Species protected under applicable state or federal laws that may potentially be exposed to soil contaminants at the site.

(IV) Receptors to be considered under different land uses, described under WAC 173-340-7490 (3)(b).

(B) Surrogate species for which greater information is available, or that are more suitable for site-specific studies, may be used in the analysis when appropriate for addressing issues raised in the problem formulation step.

(iv) **Toxicological assessment.** Identify significant adverse effects in the receptors of concern that may result from exposure to the chemicals of concern, based on information from the toxicological literature.

(b) The following is an example of a site-specific issue developed in this step: Is dieldrin contamination a potential threat to reproduction in birds feeding on invertebrates and ingesting soil at the site? If so, what measures will eliminate any significant adverse effects?

(c) If there are identified information needs for remedy selection or remedial design, these should also be developed as issues for the problem formulation process.

(d) The use of assessment and measurement endpoints, as defined in USEPA *Ecological Risk Assessment Guidance for Superfund*, 1997, should be considered to clarify the logical structure of the site-specific terrestrial ecological evaluation under this chapter. Assessment endpoints shall be consistent with the policy objectives described in WAC 173-340-7490 (3)(b).

(3) **Selection of appropriate terrestrial ecological evaluation methods.** If it is determined during the problem formulation step that further evaluation is necessary, the soil concentrations listed in Table 749-3 may be used as the cleanup level at the discretion of the person conducting the evaluation. Alternatively, one or more of the following methods listed in (a) through (g) of this subsection that are relevant to the issues identified in the problem formulation step and that meet the requirements of WAC 173-340-7490 (1)(a) shall be conducted. The alternative methods available for conducting a site-specific terrestrial ecological evaluation include the following:

(a) **Literature survey.** An analysis based on a literature survey shall be conducted in accordance with subsection (4) of this section and may be used for purposes including the following:

(i) Developing a soil concentration for chemicals not listed in Table 749-3.

(ii) Identifying a soil concentration for the protection of plants or soil biota more relevant to site-specific conditions than the value listed in Table 749-3.

(iii) Obtaining a value for any of the wildlife exposure model variables listed in Table 749-5 to calculate a soil concentration for the protection of wildlife more relevant to site-specific conditions than the values listed in Table 749-3.

(b) **Soil bioassays.**

(i) Bioassays may use sensitive surrogate organisms not necessarily found at the site provided that the test adequately addresses the issues raised in the problem formulation step. For issues where existing or potential threats to plant life are a concern, the test described in *Early Seedling Growth Protocol for Soil Toxicity Screening*. Ecology Publication No. 96-324 may be used. For sites where risks to soil biota are a concern, the test described in *Earthworm Bioassay Protocol for Soil Toxicity Screening*. Ecology Publication No. 96-327 may be used. Other bioassay tests approved by the department may also be used.

(ii) Soil concentrations protective of soil biota or plants may also be established with soil bioassays that use species ecologically relevant to the site rather than standard test species. Species that do or could occur at the site are considered ecologically relevant.

(c) **Wildlife exposure model.** Equations and exposure parameters to be used in calculating soil concentrations protective of terrestrial wildlife are provided in Tables 749-4 and 749-5. Changes to this model may be approved by the department under the following conditions:

(i) Alternative values for parameters listed in Table 749-5 may be used if they can be demonstrated to be more relevant to site-specific conditions (for example, the value is based on a chemical form of a hazardous substance actually present at the site). An alternative value obtained from the literature shall be supported by a literature survey conducted in accordance with subsection (4) of this section.

(ii) Receptor species of concern or exposure pathways identified in the problem formulation step may be added to the model if appropriate on a site-specific basis.

(iii) A substitution for one or more of the receptor species listed in Table 749-4 may be made under subsection (7) of this section.

(d) **Biomarkers.** Biomarker methods may be used if the measurements have clear relevance to issues raised in the problem formulation and the approach has a high probability of detecting a significant adverse effect if it is occurring at the site. The person conducting the evaluation may elect to use criteria such as biomarker effects that serve as a sensitive surrogate for significant adverse effects.

(e) **Site-specific field studies.** Site-specific empirical studies that involve hypothesis testing should use a conventional "no difference" null hypothesis (e.g., H_0: Earthworm densities are the same in the contaminated area and the reference (control) area. H_A: Earthworm densities are higher in the reference area than in the contaminated area). In preparing a work plan, consideration shall be given to the adequacy of the proposed study to detect an ongoing adverse effect and this issue shall be addressed in reporting results from the study.

(f) **Weight of evidence.** A weight of evidence approach shall include a balance in the application of literature, field, and laboratory data, recognizing that each has particular strengths and weaknesses. Site-specific data shall be given greater weight than default values or assumptions where appropriate.

(g) **Other methods approved by the department.** This may include a qualitative evaluation if relevant toxicological data are not available and cannot be otherwise developed (e.g., through soil bioassay testing).

(4) **Literature surveys.**

(a) Toxicity reference values or soil concentrations established from the literature shall represent the lowest relevant LOAEL found in the literature. Bioaccumulation factor values shall represent a reasonable maximum value from relevant information found in the literature. In assessing relevance, the following principles shall be considered:

(i) Literature benchmark values should be obtained from studies that have test conditions as similar as possible to site conditions.

(ii) The literature benchmark values or toxicity reference values should correspond to the exposure route being assessed.

(iii) The toxicity reference value or bioaccumulation factor value shall be as appropriate as possible for the receptor being assessed. The toxicity reference value should be based on a significant endpoint, as described in subsection (2) of this section.

(iv) The literature benchmark value or toxicity reference value should preferably be based on chronic exposure.

(v) The literature benchmark value, toxicity reference value, or bioaccumulation factor should preferably correspond to the chemical form being assessed. Exceptions may apply for toxicity reference values where documented biological transformations occur following uptake of the chemical or where chemical transformations are known to occur in the environment under conditions appropriate to the site.

(b) A list of relevant journals and other literature consulted in the survey shall be provided to the department. A table summarizing information from all relevant studies shall be provided to the department in a report, and the studies used to select a proposed value shall be identified. Copies of literature cited in the table that are not in the possession of the department shall be provided with the report. The department may identify relevant articles, books or other documents that shall be included in the survey.

(5) **Uncertainty analysis.** If a site-specific terrestrial ecological evaluation includes an uncertainty analysis, the discussion of uncertainty shall identify and differentiate between uncertainties that can and cannot be quantified, and natural variability. The discussion shall describe the range of potential ecological risks from the hazardous substances present at the site, based on the toxicological characteristics of the hazardous substances present, and evaluate the uncertainty regarding these risks. Potential methods for reducing uncertainty shall also be discussed, such as additional studies or post-remedial monitoring. If multiple lines of independent evidence have been developed, a weight of evidence approach may be used in characterizing uncertainty.

(6) **New scientific information.** The department shall consider proposals for modifications to default values provided in this section based on new scientific information in accordance with WAC 173-340-702 (14), (15) and (16).

(7) **Substitute receptor species.** Substitutions of receptor species and the associated values in the wildlife exposure model described in Table 749-4 may be made subject to the following conditions:

(a) There is scientifically supportable evidence that a receptor identified in Table 749-4 is not characteristic or a reasonable surrogate for a receptor that is characteristic of the ecoregion where the site is located. "Ecoregions" are defined using EPA's *Ecoregions of the Pacific Northwest* Document No. 600/3-86/033 July 1986 by Omernik and Gallant.

(b) The proposed substitute receptor is characteristic of the ecoregion where the site is located and will serve as a surrogate for wildlife species that are, or may become exposed to soil contaminants at the site. The selected surrogate shall be a species that is expected to be vulnerable to the effects of soil contamination relative to the current default species because of high exposure or known sensitivity to hazardous substances found in soil at the site.

(c) Scientific studies concerning the proposed substitute receptor species are available in the literature to select reasonable maximum exposure estimates for variables listed in Table 749-4.

(d) In choosing among potential substitute receptor species that meet the criteria in (b) and (c) of this subsection, preference shall be given to the species most ecologically similar to the default receptor being replaced.

(e) Unless there is clear and convincing evidence that they are not characteristic of the ecoregion where the site is located, the following groups shall be included in the wildlife exposure model: A small mammalian predator on soil-associated invertebrates, a small avian predator on soil-associated invertebrates, and a small mammalian herbivore.

(f) To account for uncertainties in the level of protection provided to substitute receptor species and toxicologically

sensitive species, the department may require any of the following:

(i) Use of toxicity reference values based on no observed adverse effects levels.

(ii) Use of uncertainty factors to account for extrapolations between species in toxicity or exposure parameter values; or

(iii) Use of a hazard index approach for multiple contaminants to account for additive toxic effects.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7493, filed 2/12/01, effective 8/15/01.]

WAC 173-340-7494 Priority contaminants of ecological concern. When the department determines that such measures are necessary to protect the environment, the department may revise the hazardous substances and corresponding concentrations included in Table 749-2, subject to the following:

(1) The data indicate a significant tendency of the hazardous substance to persist, bioaccumulate, or be highly toxic to terrestrial ecological receptors;

(2) The concentrations for hazardous substances listed in Table 749-2 shall be based on protection of wildlife for industrial and commercial land uses, and upon protection of plants and animals for other land uses.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-7494, filed 2/12/01, effective 8/15/01.]

WAC 173-340-750 Cleanup standards to protect air quality. (1) General considerations.

(a) This section applies whenever it is necessary to establish air cleanup standards to determine if air emissions at a site pose a threat to human health or the environment. It applies to ambient (outdoor) air and air within any building, utility vault, manhole or other structure large enough for a person to fit into. This section does not apply to concentrations of hazardous substances in the air originating from an industrial or commercial process or operation or to hazardous substances in the air originating from an off-site source. This section does apply to concentrations of hazardous substances in the air originating from other contaminated media or a remedial action at the site. Air cleanup standards shall be established at the following sites:

(i) Where a nonpotable ground water cleanup level is being established for volatile organic compounds using a site-specific risk assessment under WAC 173-340-720(6).

(ii) Where a soil cleanup level that addresses vapors or dust is being established under WAC 173-340-740 or 173-340-745.

(iii) Where it is necessary to establish air emission limits for a remedial action.

(iv) At other sites as determined by the department.

(b) Cleanup levels to protect air quality shall be based on estimates of the reasonable maximum exposure expected to occur under both current and future site use conditions. The department has determined that residential site use will generally require the most protective air cleanup levels and that exposure to hazardous substances under these conditions represents the reasonable maximum exposure. Air cleanup levels shall use this presumed exposure scenario and be established in accordance with subsection (3) of this section unless the site qualifies for a Method C air cleanup level. If a site qualifies for a Method C air cleanup level, subsection (4) of this section shall be used to establish air cleanup levels.

(c) In the event of a release or potential release of hazardous substances into the air at a site at which this section applies under (a) of this subsection, a cleanup action that complies with this chapter shall be conducted to address all areas of the site where the concentration of the hazardous substances in the air exceeds cleanup levels.

(d) Air cleanup levels shall be established at concentrations that do not directly or indirectly cause violations of ground water, surface water, or soil cleanup standards established under this chapter or applicable state and federal laws. A site that qualifies for a Method C air cleanup level under this section does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium.

(e) The department may require more stringent air cleanup standards than required by this section where, based on a site-specific evaluation, the department determines that this is necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(2) Method A air cleanup levels.

This section does not provide procedures for establishing Method A cleanup levels. Method B or C, as appropriate, shall be used to establish air cleanup levels.

(3) Method B air cleanup levels.

(a) Applicability. Method B air cleanup levels consist of standard and modified cleanup levels as described in this subsection. Either standard or modified Method B air cleanup levels may be used at any site.

(b) Standard Method B air cleanup levels. Standard Method B cleanup levels for air shall be at least as stringent as all of the following:

(i) Applicable state and federal laws. Concentrations established under applicable state and federal laws; and

(ii) Human health protection. For hazardous substances for which sufficiently protective health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which protect human health and the environment as determined by the following methods:

(A) Noncarcinogens. Concentrations that are estimated to result in no acute or chronic toxic effects on human health and are determined using the following equation and standard exposure assumptions:

[Equation 750-1]

$$\text{Air cleanup level } (ug/m^3) = \frac{RfD \times ABW \times UCF \times HQ \times AT}{BR \times ABS \times ED \times EF}$$

Where:

RfD	=	Reference dose as specified in WAC 173-340-708(7) (mg/kg-day)
ABW	=	Average body weight over the exposure duration (16 kg)
UCF	=	Unit conversion factor (1,000 ug/mg)
BR	=	Breathing rate (10 m^3/day)
ABS	=	Inhalation absorption fraction (1.0) (unitless)
HQ	=	Hazard quotient (1) (unitless)
AT	=	Averaging time (6 years)

ED = Exposure duration (6 years)
EF = Exposure frequency (1.0) (unitless)

(B) Carcinogens. For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one million (1×10^{-6}) and are determined using the following equation and standard exposure assumptions:

[Equation 750-2]

$$\text{Air cleanup level } (ug/m^3) = \frac{RISK \times ABW \times AT \times UCF}{CPF \times BR \times ABS \times ED \times EF}$$

Where:

RISK = Acceptable cancer risk level (1 in 1,000,000) (unitless)
ABW = Average body weight over the exposure duration (70 kg)
AT = Averaging time (75 years)
UCF = Unit conversion factor (1,000 ug/mg)
CPF = Carcinogenic potency factor as specified in WAC 173-340-708(8) (kg-day/mg)
BR = Breathing rate (20 m^3/day)
ABS = Inhalation absorption fraction (1.0) (unitless)
ED = Exposure duration (30 years)
EF = Exposure frequency (1.0) (unitless)

(C) Petroleum mixtures. For noncarcinogenic effects of petroleum mixtures, a total petroleum hydrocarbon cleanup level shall be calculated using Equation 750-1 and by taking into account the additive effects of the petroleum fractions and volatile organic compounds present in the petroleum mixture. Cleanup levels for other noncarcinogens and known or suspected carcinogens within the petroleum mixture shall be calculated using Equations 750-1 and 750-2. See Table 830-1 for the analyses required for various petroleum products to use this method.

(iii) Lower explosive limit limitation. Standard Method B air cleanup levels shall not exceed ten percent (10%) of the lower explosive limit for any hazardous substance or mixture of hazardous substances.

(c) Modified Method B air cleanup levels. Modified Method B air cleanup levels are standard Method B air cleanup levels modified with chemical-specific or site-specific data. When making these adjustments, the resultant cleanup levels shall meet applicable state and federal laws, health risk levels and explosive limit limitations required for standard Method B air cleanup levels. Changes to exposure assumptions must comply with WAC 173-340-708(10). The following adjustments may be made to the default assumptions in the standard Method B equations to derive modified Method B cleanup levels:

(i) The inhalation absorption percentage may be modified if the requirements of WAC 173-340-702 (14), (15), (16) and WAC 173-340-708(10) are met;

(ii) Adjustments to the reference dose and cancer potency factor may be made if the requirements in WAC 173-340-708 (7) and (8) are met;

(iii) The toxicity equivalency factor procedures described in WAC 173-340-708(8) may be used for assessing the potential carcinogenic risk of mixtures of chlorinated dibenzo-p-dioxins, chlorinated dibenzofurans and polycyclic aromatic hydrocarbons;

(iv) Modifications incorporating new science as provided for in WAC 173-340-702 (14), (15) and (16); and

(d) Using modified Method B to evaluate air remediation levels. In addition to the adjustments allowed under subsection (3)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357 and 173-340-708 (3)(d) and (10)(b).

(4) Method C air cleanup levels.

(a) Applicability. Method C air cleanup levels consist of standard and modified cleanup levels as described in this subsection. Method C air cleanup levels may be approved by the department if the person undertaking the cleanup action can demonstrate that the site qualifies for use of Method C under WAC 173-340-706(1).

(b) Standard Method C air cleanup levels. Standard Method C air cleanup levels for ambient air shall be at least as stringent as all of the following:

(i) Applicable state and federal laws. Concentrations established under applicable state and federal laws;

(ii) Human health protection. For hazardous substances for which sufficiently protective health-based criteria or standards have not been established under applicable state and federal laws, concentrations that protect human health and the environment as determined by the following methods:

(A) Noncarcinogens. Concentrations that are anticipated to result in no significant acute or chronic effects on human health and are estimated in accordance with Equation 750-1 except that the average body weight shall be 70 kg and the estimated breathing rate shall be 20 m^3/day;

(B) Carcinogens. For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand (1×10^{-5}) and are determined in accordance with Equation 750-2.

(C) Petroleum mixtures. Cleanup levels for petroleum mixtures shall be calculated as specified in subsection (3)(b)(ii)(C) of this section, except that the average body weight shall be 70 kg and the estimated breathing rate shall be 20m^3/day.

(iii) Lower explosive limit limitation. Standard Method C air cleanup levels shall not exceed ten percent (10%) of the lower explosive limit for any hazardous substance or mixture of hazardous substances.

(c) Modified Method C air cleanup levels. Modified Method C air cleanup levels are standard Method C air cleanup levels modified with chemical-specific or site-specific data. The same limitations and adjustments specified in subsection (3)(c) of this section apply to modified Method C cleanup levels.

(d) Using modified Method C to evaluate air remediation levels. In addition to the adjustments allowed under subsection (4)(c) of this section, adjustments to the reasonable maximum exposure scenario or default exposure assumptions are allowed when using a quantitative site-specific risk assessment to evaluate the protectiveness of a remedy. See WAC 173-340-355, 173-340-357 and 173-340-708 (3)(d) and (10)(b).

(5) Adjustments to air cleanup levels.

(a) Total site risk adjustments. Air cleanup levels for individual hazardous substances developed in accordance

with subsections (3) and (4) of this section, including cleanup levels based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand (1×10^{-5}). These adjustments shall be made in accordance with the procedures in WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one (1) and the total excess cancer risk shall not exceed one in one hundred thousand (1×10^{-5}).

(b) Adjustments to applicable state and federal laws. Where a cleanup level developed under subsection (3) or (4) of this section is based on an applicable state or federal law and the level of risk upon which the standard is based exceeds an excess cancer risk of one in one hundred thousand (1×10^{-5}) or a hazard index of one (1), the cleanup level must be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand (1×10^{-5}) and the hazard index does not exceed one (1) at the site.

(c) Natural background and PQL considerations. Cleanup levels determined under subsection (3) or (4) of this section, including cleanup levels adjusted under (a) or (b) of this subsection, shall not be set at levels below the practical quantitation limit or natural background, whichever is higher. See WAC 173-340-709 and 173-340-707 for additional requirements pertaining to practical quantitation limits and natural background.

(6) Points of compliance. Cleanup levels established under this section shall be attained in the ambient air throughout the site. For sites determined to be industrial sites under the criteria in WAC 173-340-745, the department may approve a conditional point of compliance not to exceed the property boundary. A conditional point of compliance shall not be approved if use of a conditional point of compliance would pose a threat to human health or the environment.

(7) Compliance monitoring.

(a) Where air cleanup levels have been established at a site, monitoring may be required to be conducted to determine if compliance with the air cleanup levels has been achieved. Sampling and analytical procedures shall be defined in a compliance monitoring plan prepared under WAC 173-340-410. The sample design shall provide data that are representative of the site.

(b) Data analysis and evaluation procedures used to evaluate compliance with air cleanup levels shall be defined in a compliance monitoring plan prepared under WAC 173-340-410.

(c) Averaging times specified in applicable state and federal laws shall be used to demonstrate compliance with those requirements.

(d) When cleanup levels are not based on applicable state and federal laws, the following averaging times shall be used:

(i) Compliance with air cleanup levels for noncarcinogens shall be based on twenty-four-hour time weighted averages except where the cleanup level is based upon an inhalation reference dose which specifies an alternate averaging time;

(ii) Compliance with air cleanup levels for carcinogens shall be based on annual average concentrations.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-750, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-750, filed 1/28/91, effective 2/28/91.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-340-760 Sediment cleanup standards. In addition to complying with the requirements in this chapter, sediment cleanup actions conducted under this chapter must comply with the requirements of chapter 173-204 WAC.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-760, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-760, filed 1/28/91, effective 2/28/91.]

PART VIII—GENERAL PROVISIONS

WAC 173-340-800 Property access. (1) Normal entry procedures. Whenever there is a reasonable basis to believe that a release or threatened release of a hazardous substance may exist, the department's authorized employees, agents or contractors may, after reasonable notice, enter upon any real property, public or private, to conduct investigations or remedial actions. The notice shall briefly describe the reason for requesting access. For the purpose of this subsection, unless earlier access is granted, reasonable notice shall mean:

(a) Written notice to the site owner and operator to the extent known to the department, sent through the United States Postal Service at least three days before entry; or

(b) Notice to the site owner and operator to the extent known to the department, in person or by telephone at least twenty-four hours before entry.

(2) Notification of property owner. The department shall ask a resident, occupant, or other persons in custody of the site to identify the name and address of owners of the property. If an owner is identified who has not been previously notified, the department shall make a prompt and reasonable effort to notify such owners of remedial actions planned or conducted.

(3) Orders and consent decrees. Whenever investigations or remedial actions are conducted under a decree or order, a potentially liable person shall not deny access to the department's authorized employees, agents, or contractors to enter and move freely about the property to oversee and verify investigations and remedial actions being performed.

(4) Ongoing operations. Persons gaining access under this section shall take all reasonable precautions to avoid disrupting the ongoing operations on a site. Such persons shall comply with all state and federal safety and health requirements that the department determines to be applicable.

(5) Access to documents. The department's authorized employees, agents or contractors may, after reasonable notice, enter property for the purpose of inspecting documents relating to a release or threatened release at the facility. Persons maintaining such documents shall:

(a) Provide access during normal business hours and allow the department to copy these documents; or

(b) At the department's request, provide legible copies of the requested documents to the department.

(6) Emergency entry. Notice by the department's authorized employees, agents, or contractors is not required for entry onto property to investigate, mitigate, or abate an emergency posed by the release or threatened release of a hazardous substance. The department will make efforts that are reasonable under the circumstances to promptly notify those owners and operators to the extent known to the department of the actions taken.

(7) Other authorities. Where consent has not been obtained for entry, the department shall secure access in a manner consistent with state and federal law, including compliance with any warrant requirements. Nothing in this chapter shall affect site access authority granted under other state laws and regulations.

(8) Access by potentially liable persons. The department shall make reasonable efforts to facilitate access to real property and documents for persons who are conducting remedial actions under either an order or decree.

(9) Information sharing. The department will provide the documents and factual information on releases or threatened releases obtained through this section to persons who request such in accordance with chapter 42.17 RCW and chapter 173-03 WAC. The department does not intend application of these authorities to limit its sharing of such factual information.

(10) Split samples. Whenever the department intends to perform sampling at a site, it shall indicate in its notification under subsection (1) of this section whether sampling may occur. The person receiving notice may take split samples, provided this does not interfere with the department's sampling.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-800, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-800, filed 4/3/90, effective 5/4/90.]

WAC 173-340-810 Worker safety and health. (1) General provisions. Requirements under the Occupational Safety and Health Act of 1970 (29 U.S.C. Sec. 651 et seq.) and the Washington Industrial Safety and Health Act (chapter 49.17 RCW), and regulations promulgated pursuant thereto shall be applicable to remedial actions taken under this chapter. These requirements are subject to enforcement by the designated federal and state agencies. All governmental agencies and private employers are directly responsible for the safety and health of their own employees and compliance with those requirements. Actions taken by the department under this chapter do not constitute an exercise of statutory authority within the meaning of section (4)(b)(1) of the Occupational Safety and Health Act.

(2) Safety and health plan. Persons responsible for undertaking remedial actions under this chapter shall prepare a health and safety plan when required by chapter 296-62 WAC. Plans prepared under an order or decree shall be submitted for the department's review and comment. The safety and health plan must be consistent with chapter 49.17 RCW and regulations adopted under that authority.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-810, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-810, filed 4/3/90, effective 5/4/90.]

WAC 173-340-820 Sampling and analysis plans. (1) Purpose. A sampling and analysis plan is a document that describes the sample collection, handling, and analysis procedures to be used at a site.

(2) General requirements. A sampling and analysis plan shall be prepared for all sampling activities that are part of an investigation or a remedial action unless otherwise directed by the department and except for emergencies. The level of detail required in the sampling and analysis plan may vary with the scope and purpose of the sampling activity. Sampling and analysis plans prepared under an order or decree shall be submitted to the department for review and approval.

(3) Contents. The sampling and analysis plan shall specify procedures, that ensure sample collection, handling, and analysis will result in data of sufficient quality to plan and evaluate remedial actions at the site. Additionally, information necessary to ensure proper planning and implementation of sampling activities shall be included. References to standard protocols or procedures manuals may be used provided the information referenced is readily available to the department. The sampling and analysis plan shall contain:

(a) A statement on the purpose and objectives of the data collection, including quality assurance and quality control requirements;

(b) Organization and responsibilities for the sampling and analysis activities;

(c) Requirements for sampling activities including:

(i) Project schedule;

(ii) Identification and justification of location and frequency of sampling;

(iii) Identification and justification of parameters to be sampled and analyzed;

(iv) Procedures for installation of sampling devices;

(v) Procedures for sample collection and handling, including procedures for personnel and equipment decontamination;

(vi) Procedures for the management of waste materials generated by sampling activities, including installation of monitoring devices, in a manner that is protective of human health and the environment;

(vii) Description and number of quality assurance and quality control samples, including blanks and spikes;

(viii) Protocols for sample labeling and chain of custody; and

(ix) Provisions for splitting samples, where appropriate.

(d) Procedures for analysis of samples and reporting of results, including:

(i) Detection or quantitation limits;

(ii) Analytical techniques and procedures;

(iii) Quality assurance and quality control procedures; and

(iv) Data reporting procedures, and where appropriate, validation procedures.

The department shall make available guidance for preparation of sampling and analysis plans.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-820, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-820, filed 4/3/90, effective 5/4/90.]

WAC 173-340-830 Analytical procedures. (1) Purpose. This section specifies acceptable analytical methods

and other testing requirements for sites where remedial action is being conducted under this chapter.

(2) General requirements.

(a) All hazardous substance analyses shall be conducted by a laboratory accredited under chapter 173-50 WAC, unless otherwise approved by the department.

(b) All analytical procedures used shall be conducted in accordance with a sampling and analysis plan prepared under WAC 173-340-820.

(c) Tests for which methods have not been specified in this section shall be performed using standard methods or procedures such as those specified by the American Society for Testing of Materials, when available, unless otherwise approved by the department.

(d) Samples shall be analyzed consistent with methods appropriate for the site, the media being analyzed, the hazardous substances being analyzed for, and the anticipated use of the data.

(e) The department may require or approve modifications to the standard analytical methods identified in subsection (3) of this section to provide lower quantitation limits, improved accuracy, greater precision, or to address the factors in (d) of this subsection.

(f) Limits of quantitation. Laboratories shall achieve the lowest practical quantitation limits consistent with the selected method and WAC 173-340-707.

(g) Where there is more than one method specified in subsection (3) of this section with a practical quantitation limit less than the cleanup standard, any of the methods may be selected. In these situations, considerations in selecting a particular method may include confidence in the data, analytical costs, and considerations relating to quality assurance or analysis efficiencies.

(h) The department may require an analysis to be conducted by more than one method in order to provide higher data quality. For example, the department may require that different separation and detection techniques be used to verify the presence of a hazardous substance ("qualification") and determine the concentration of the hazardous substance ("quantitation").

(i) The minimum testing requirements for petroleum contaminated sites are identified in Table 830-1.

(3) Analytical methods.

(a) The methods used for sample collection, sample preservation, transportation, allowable time before analysis, sample preparation, analysis, method detection limits, practical quantitation limits, quality control, quality assurance and other technical requirements and specifications shall comply with the following requirements, as applicable:

(i) Method 1. **Test Methods for Evaluating Solid Waste,** Physical/Chemical Methods, U.S. EPA, SW-846, fourth update (2000);

(ii) Method 2. **Guidelines Establishing Test Procedures for the Analysis of Pollutants,** 40 C.F.R. Chapter 1, Part 136, and Appendices A, B, C, and D, U.S. EPA, July 1, 1999;

(iii) Method 3. **Standard Methods for the Examination of Water and Wastewater,** American Public Health Association, American Water Works Association, and Water Pollution Control Federation, 20th edition, 1998;

(iv) Method 4. **Recommended Protocols for Measuring Selected Environmental Variables in Puget Sound,** Puget Sound Estuary Program/Tetra Tech, 1996 edition;

(v) Method 5. **Quality Assurance Interim Guidelines for Water Quality Sampling and Analysis,** Ground Water Management Areas Program, Washington Department of Ecology, Water Quality Investigations Section, December 1986;

(vi) Method 6. **Analytical Methods for Petroleum Hydrocarbons,** Ecology publication #ECY 97-602, June 1997; or

(vii) Equivalent methods subject to approval by the department.

(b) The methods used for a particular hazardous substance at a site shall be selected in consideration of the factors in subsection (2) of this section.

(c) Ground water. Methods 1, 2, 3 and 4, as described in (a) of this subsection, may be used to determine compliance with WAC 173-340-720.

(d) Surface water. Methods 1, 2, 3, 4 and 5 as described in (a) of this subsection, may be used to determine compliance with WAC 173-340-730.

(e) Soil. Method 1, as described in (a) of this subsection, may be used to determine compliance with WAC 173-340-740 and 173-340-745.

(f) Air. Appropriate methods for determining compliance with WAC 173-340-750 shall be selected on a case-by-case basis, in consideration of the factors in subsection (2) of this section.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-830, filed 2/12/01, effective 8/15/01; 91-04-019, § 173-340-830, filed 1/28/91, effective 2/28/91; 90-08-086, § 173-340-830, filed 4/3/90, effective 5/4/90.]

WAC 173-340-840 General submittal requirements. Unless otherwise specified by the department, all reports, plans, specifications, and similar information submitted under this chapter shall meet the following requirements:

(1) Cover letter. Include a letter describing the submittal and specifying the desired department action or response.

(2) Number of copies. Three copies of the plan or report shall be submitted to the department's office responsible for the facility. The department may require additional copies to meet public participation and interagency coordination needs.

(3) Certification. Except as otherwise provided for in RCW 18.43.130, all engineering work submitted under this chapter shall be under the seal of a professional engineer registered with the state of Washington.

(4) Visuals. Maps, figures, photographs, and tables to clarify information or conclusions shall be legible. All maps, plan sheets, drawings, and cross-sections shall meet the following requirements:

(a) To facilitate filing and handling, be on paper no larger than 24 x 36 inches and no smaller than 8 1/2 x 11 inches. Photo-reduced copies of plan sheets may be submitted provided at least one full-sized copy of the photo-reduced sheets are included in the submittal.

(b) Identify and use appropriate and consistent scales to show all required details in sufficient clarity.

(c) Be numbered, titled, have a legend of all symbols used, and specify drafting or origination dates.

(d) Contain a north arrow.

(e) Use United States Geological Survey datum as a basis for all elevations.

(f) For planimetric views, show a survey grid based on monuments established in the field and referenced to state plane coordinates. This requirement does not apply to conceptual diagrams or sketches when the exact location of items shown is not needed to convey the necessary information.

(g) Where grades are to be changed, show original topography in addition to showing the changed site topography. This requirement does not apply to conceptual diagrams or sketches where before and after topography is not needed to convey the necessary information.

(h) For cross-sections, identify the location and be cross-referenced to the appropriate planimetric view. A reduced diagram of a cross-section location map shall be included on the sheets with the cross-sections.

(5) Sampling data. All sampling data shall be submitted consistent with procedures specified by the department. Unless otherwise specified by the department, all such sampling data shall be submitted in both printed form and an electronic form capable of being transferred into the department's data management system.

(6) Appendix. An appendix providing the principal information relied upon in preparation of the submittal. This should include, for example: A complete citation of references; applicable raw data; a description of, or where readily available, reference to testing and sampling procedures used; relevant calculations; and any other information needed to facilitate review.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-840, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-840, filed 4/3/90, effective 5/4/90.]

WAC 173-340-850 Recordkeeping requirements. (1) Any remedial actions at a facility must be documented with adequate records. Such records may include: Factual information or data; relevant decision documents; and any other relevant, site-specific documents or information.

(2) Unless otherwise required by the department, records shall be retained for at least ten years from the date of completion of compliance monitoring or as long as any institutional controls (including land use restrictions) remain in effect, whichever is longer.

(3) Records shall be retained by the person taking remedial action, unless the department requires that person to submit the records to the department.

(4) The department shall maintain its records in accordance with chapter 42.17 RCW.

[Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-850, filed 2/12/01, effective 8/15/01; 90-08-086, § 173-340-850, filed 4/3/90, effective 5/4/90.]

WAC 173-340-860 Endangerment. In the event that the department determines that any activity being performed at a hazardous waste site is creating or has the potential to create a danger to human health or the environment, the department may direct such activities to cease for such period of time as it deems necessary to abate the danger.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-860, filed 4/3/90, effective 5/4/90.]

WAC 173-340-870 Project coordinator. The potentially liable person shall designate a project coordinator for work performed under an order or decree. The project coordinator shall be the designated representative for the purposes of the order or decree. That person shall coordinate with the department and the public and shall facilitate compliance with requirements of the order or decree.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-870, filed 4/3/90, effective 5/4/90.]

WAC 173-340-880 Emergency actions. Nothing in this chapter shall limit the authority of the department, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-880, filed 4/3/90, effective 5/4/90.]

WAC 173-340-890 Severability. If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of this chapter or the application of the provision to other persons or circumstances shall not be affected.

[Statutory Authority: Chapter 70.105D RCW. 90-08-086, § 173-340-890, filed 4/3/90, effective 5/4/90.]

WAC 173-340-900 Tables.

Table 708-1: Toxicity Equivalency Factors for Chlorinated dibenzo-p-dioxins and Chlorinated Dibenzofurans Congeners

CAS Number	Hazardous Substance	Toxicity Equivalency Factor (unitless)[1]
	Dioxin Congeners	
1746-01-6	2,3,7,8-Tetrachloro dibenzo-p-dioxin	1
40321-76-4	1,2,3,7,8-Pentachloro dibenzo-p-dioxin	1
39227-28-6	1,2,3,4,7,8-Hexachloro dibenzo-p-dioxin	0.1
57653-85-7	1,2,3,6,7,8-Hexachloro dibenzo-p-dioxin	0.1
19408-74-3	1,2,3,7,8,9-Hexachloro dibenzo-p-dioxin	0.1
35822-46-9	1,2,3,4,6,7,8-Heptachloro dibenzo-p-dioxin	0.01
3268-87-9	1,2,3,4,6,7,8,9-Octachloro dibenzo-p-dioxin	0.0003
	Furan Congeners	
51207-31-9	2,3,7,8-Tetrachloro dibenzofuran	0.1
57117-41-6	1,2,3,7,8-Pentachloro dibenzofuran	0.03
57117-31-4	2,3,4,7,8-Pentachloro dibenzofuran	0.3
70648-26-9	1,2,3,4,7,8-Hexachloro dibenzofuran	0.1

Table 708-1: Toxicity Equivalency Factors for Chlorinated dibenzo-p-dioxins and Chlorinated Dibenzofurans Congeners

CAS Number	Hazardous Substance	Toxicity Equivalency Factor (unitless)[1]
57117-44-9	1,2,3,6,7,8-Hexachloro dibenzofuran	0.1
72918-21-9	1,2,3,7,8,9-Hexachloro dibenzofuran	0.1
60851-34-5	2,3,4,6,7,8-Hexachloro dibenzofuran	0.1
67562-39-4	1,2,3,4,6,7,8-Heptachloro dibenzofuran	0.01
55673-89-7	1,2,3,4,7,8,9-Heptachloro dibenzofuran	0.01
39001-02-0	1,2,3,4,6,7,8,9-Octachloro dibenzofuran	0.0003

[1]Source: Van den Berg et al. 2006. The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds.
Toxicological Sciences 2006 93(2):223-241; doi:10.1093/toxsci/kfl055.

Table 708-2: Toxicity Equivalency Factors for Minimum Required Carcinogenic Polyaromatic Hydrocarbons (cPAHs) under WAC 173-340-708(e)

CAS Number	Hazardous Substance	TEF (unitless)[1]
50-32-08	benzo[a]pyrene	1
56-55-3	benzo[a]anthracene	0.1
205-99-2	benzo[b]fluoranthene	0.1
207-08-9	benzo[k]fluoranthene	0.1
218-01-9	chrysene	0.01
53-70-3	dibenz[a, h]anthracene	0.1
193-39-5	indeno[1,2,3-cd]pyrene	0.1

[1]Source: Cal-EPA, 2005. Air Toxics Hot Spots Program Risk Assessment Guidelines, Part II Technical Support Document for Describing Available Cancer Potency Factors. Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. May 2005.

Table 708-3: Toxicity Equivalency Factors for Carcinogenic Polyaromatic Hydrocarbons (cPAHs) that May be Required under WAC 173-340-708 (8)(e)(v)

CAS Number	Hazardous Substance	TEF (unitless)[1]
205-82-3	benzo(j)fluoranthene	0.1
224-42-0	dibenz[a, j]acridine	0.1
226-36-8	dibenz[a, h]acridine	0.1
194-59-2	7H-dibenzo[c, g]carbazole	1
192-65-4	dibenzo[a, e]pyrene	1
189-64-0	dibenzo[a, h]pyrene	10
189-55-9	dibenzo[a, i]pyrene	10
191-30-0	dibenzo[a, l]pyrene	10
3351-31-3	5-methylchrysene	1
5522-43-0	1-nitropyrene	0.1
57835-92-4	4-nitropyrene	0.1
42397-64-8	1,6-dinitropyrene	10
42397-65-9	1,8-dinitropyrene	1
7496-02-8	6-nitrochrysene	10
607-57-8	2-nitrofluorene	0.01
57-97-6	7,12-dimethylbenzanthracene	10
56-49-5	3-methylcholanthrene	1
602-87-9	5-nitroacenaphthene	0.01

[1]Source: Cal-EPA, 2005. Air Toxics Hot Spots Program Risk Assessment Guidelines, Part II Technical Support Document for Describing Available Cancer Potency Factors. Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. May 2005.

Table 708-4: Toxicity Equivalency Factors for Dioxin-Like Polychlorinated Biphenyls (PCBs)

CAS Number	Hazardous Substance	TEF (unitless)[1]
	Dioxin-Like PCBs	
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	0.0001
70362-50-4	3,4,4',5- Tetrachlorobiphenyl (PCB 81)	0.0003
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	0.00003
74472-37-0	2,3,4,4',5-Pentachlorobiphenyl (PCB 114)	0.00003
31508-00-6	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	0.00003
65510-44-3	2',3,4,4',5-Pentachlorobiphenyl (PCB 123)	0.00003
57465-28-8	3,3',4,4',5-Pentachlorobiphenyl (PCB 126)	0.1
38380-08-4	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	0.00003
69782-90-7	2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157)	0.00003
52663-72-6	2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	0.00003
32774-16-6	3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)	0.03
39635-31-9	2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	0.00003

[1]Source: Van den Berg et al. 2006. The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicological Sciences 2006 93(2):223-241; doi:10.1093/toxsci/kfl055.

Table 720-1
Method A Cleanup Levels for Ground Water.[a]

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	5 ug/liter[b]
Benzene	71-43-2	5 ug/liter[c]
Benzo(a)pyrene	50-32-8	0.1 ug/liter[d]
Cadmium	7440-43-9	5 ug/liter[e]
Chromium (Total)	7440-47-3	50 ug/liter[f]
DDT	50-29-3	0.3 ug/liter[g]
1,2 Dichloroethane (EDC)	107-06-2	5 ug/liter[h]
Ethylbenzene	100-41-4	700 ug/liter[i]
Ethylene dibromide (EDB)	106-93-4	0.01 ug/liter[j]
Gross Alpha Particle Activity		15 pCi/liter[k]
Gross Beta Particle Activity		4 mrem/yr[l]
Lead	7439-92-1	15 ug/liter[m]
Lindane	58-89-9	0.2 ug/liter[n]
Methylene chloride	75-09-2	5 ug/liter[o]
Mercury	7439-97-6	2 ug/liter[p]
MTBE	1634-04-4	20 ug/liter[q]
Naphthalenes	91-20-3	160 ug/liter[r]
PAHs (carcinogenic)		See benzo(a)pyrene[d]
PCB mixtures		0.1 ug/liter[s]
Radium 226 and 228		5 pCi/liter[t]
Radium 226		3 pCi/liter[u]
Tetrachloroethylene	127-18-4	5 ug/liter[v]
Toluene	108-88-3	1,000 ug/liter[w]
Total Petroleum Hydrocarbons[x]		

[Note: Must also test for and meet cleanup levels for other petroleum components—see footnotes!]

Hazardous Substance	CAS Number	Cleanup Level
Gasoline Range Organics		
Benzene present in ground water		800 ug/liter
No detectable benzene in ground water		1,000 ug/liter
Diesel Range Organics		500 ug/liter
Heavy Oils		500 ug/liter
Mineral Oil		500 ug/liter
1,1,1 Trichloroethane	71-55-6	200 ug/liter[y]
Trichloroethylene	79-01-6	5 ug/liter[z]
Vinyl chloride	75-01-4	0.2 ug/liter[aa]
Xylenes	1330-20-7	1,000 ug/liter[bb]

Footnotes:

a **Caution on misusing this table.** This table has been developed for specific purposes. It is intended to provide conservative cleanup levels for drinking water beneficial uses at sites undergoing routine cleanup actions or those sites with relatively few hazardous substances. This table may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in this table should not automatically be used to define cleanup levels that must be met for financial, real estate, insurance coverage or placement, or similar transactions or purposes. Exceedances of the values in this table do not necessarily mean the ground water must be restored to those levels at all sites. The level of restoration depends on the remedy selected under WAC 173-340-350 through 173-340-390.

b **Arsenic.** Cleanup level based on background concentrations for state of Washington.

c **Benzene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

d **Benzo(a)pyrene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61), adjusted to a 1×10^{-5} risk. If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).

e **Cadmium.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.62).

f **Chromium (Total).** Cleanup level based on concentration derived using Equation 720-1 for hexavalent chromium. This is a total value for chromium III and chromium VI. If just chromium III is present at the site, a cleanup level of 100 ug/l may be used (based on WAC 246-290-310 and 40 C.F.R. 141.62).

g **DDT (dichlorodiphenyltrichloroethane).** Cleanup levels based on concentration derived using Equation 720-2.

h **1,2 Dichloroethane (ethylene dichloride or EDC).** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

i **Ethylbenzene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

j **Ethylene dibromide (1,2 dibromoethane or EDB).** Cleanup level based on concentration derived using Equation 720-2, adjusted for the practical quantitation limit.

k **Gross Alpha Particle Activity, excluding uranium.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.15).

l **Gross Beta Particle Activity, including gamma activity.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.15).

m **Lead.** Cleanup level based on applicable state and federal law (40 C.F.R. 141.80).

n **Lindane.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

o **Methylene chloride (dichloromethane).** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

p **Mercury.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.62).

q **Methyl tertiary-butyl ether (MTBE).** Cleanup level based on federal drinking water advisory level (EPA-822-F-97-009, December 1997).

r **Naphthalenes.** Cleanup level based on concentration derived using Equation 720-1. This is a total value for naphthalene, 1-methyl naphthalene and 2-methyl naphthalene.

s **PCB mixtures.** Cleanup level based on concentration derived using Equation 720-2, adjusted for the practical quantitation limit. This cleanup level is a total value for all PCBs.

t **Radium 226 and 228.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.15).

u **Radium 226.** Cleanup level based on applicable state law (WAC 246-290-310).

v **Tetrachloroethylene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

w **Toluene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

x **Total Petroleum Hydrocarbons (TPH).** TPH cleanup values have been provided for the most common petroleum products encountered at contaminated sites. Where there is a mixture of products or the product composition is unknown, samples must be tested using both the NWTPH-Gx and NWTPH-Dx methods and the lowest applicable TPH cleanup level must be met.

- **Gasoline range organics** means organic compounds measured using method NWTPH-Gx. Examples are aviation and automotive gasoline. The cleanup level is based on protection of ground water for noncarcinogenic effects during drinking water use. Two cleanup levels are provided. The higher value is based on the assumption that no benzene is present in the ground water sample. If any detectable amount of benzene is present in the ground water sample, then the lower TPH cleanup level must be used. No interpolation between these cleanup levels is allowed. The ground water cleanup level for any carcinogenic components of the petroleum [such as benzene, EDB and EDC] and any noncarcinogenic components [such as ethylbenzene, toluene, xylenes and MTBE], if present at the site, must also be met. See Table 830-1 for the minimum testing requirements for gasoline releases.
- **Diesel range organics** means organic compounds measured using NWTPH-Dx. Examples are diesel, kerosene, and #1 and #2 heating oil. The cleanup level is based on protection from noncarcinogenic effects during drinking water use. The ground water cleanup level for any carcinogenic components of the petroleum [such as benzene and PAHs] and any noncarcinogenic components [such as ethylbenzene, toluene, xylenes and naphthalenes], if present at the site, must also be met. See Table 830-1 for the minimum testing requirements for diesel releases.
- **Heavy oils** means organic compounds measured using NWTPH-Dx. Examples are #6 fuel oil, bunker C oil, hydraulic oil and waste oil. The cleanup level is based on protection from noncarcinogenic effects during drinking water use, assuming a product composition similar to diesel fuel. The ground water cleanup level for any carcinogenic components of the petroleum [such as benzene, PAHs and PCBs] and any noncarcinogenic components [such as ethylbenzene, toluene, xylenes and naphthalenes], if present at the site, must also be met. See Table 830-1 for the minimum testing requirements for heavy oil releases.
- **Mineral oil** means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors measured using NWTPH-Dx. The cleanup level is based on protection from noncarcinogenic effects during drinking water use. Sites using this cleanup level must analyze ground water samples for PCBs and meet the PCB cleanup level in this table unless it can be demonstrated that: (1) The release originated from an electrical device manufactured after July 1, 1979; or (2) oil containing PCBs was never used in the equipment suspected as the source of the release; or (3) it can be documented that the oil released was recently tested and did not contain PCBs. Method B (or Method C, if applicable) must be used for releases of oils containing greater than 50 ppm PCBs. See Table 830-1 for the minimum testing requirements for mineral oil releases.

y **1,1,1 Trichloroethane.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

z **Trichloroethylene.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).

aa **Vinyl chloride.** Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61), adjusted to a 1×10^{-5} risk.

bb **Xylenes.** Cleanup level based on xylene not exceeding the maximum allowed cleanup level in this table for total petroleum hydrocarbons and on prevention of adverse aesthetic characteristics. This is a total value for all xylenes.

Table 740-1
Method A Soil Cleanup Levels for Unrestricted Land Uses.[a]

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	20 mg/kg[b]
Benzene	71-43-2	0.03 mg/kg[c]
Benzo(a)pyrene	50-32-8	0.1 mg/kg[d]
Cadmium	7440-43-9	2 mg/kg[e]
Chromium		

Hazardous Substance	CAS Number	Cleanup Level
Chromium VI	18540-29-9	19 mg/kg[f1]
Chromium III	16065-83-1	2,000 mg/kg[f2]
DDT	50-29-3	3 mg/kg[g]
Ethylbenzene	100-41-4	6 mg/kg[h]
Ethylene dibromide (EDB)	106-93-4	0.005 mg/kg[i]
Lead	7439-92-1	250 mg/kg[j]
Lindane	58-89-9	0.01 mg/kg[k]
Methylene chloride	75-09-2	0.02 mg/kg[l]
Mercury (inorganic)	7439-97-6	2 mg/kg[m]
MTBE	1634-04-4	0.1 mg/kg[n]
Naphthalenes	91-20-3	5 mg/kg[o]
PAHs (carcinogenic)		See benzo(a)pyrene[d]
PCB Mixtures		1 mg/kg[p]
Tetrachloroethylene	127-18-4	0.05 mg/kg[q]
Toluene	108-88-3	7 mg/kg[r]
Total Petroleum Hydrocarbons[s]		
[Note: Must also test for and meet cleanup levels for other petroleum components—see footnotes!]		
Gasoline Range Organics		
Gasoline mixtures without benzene and the total of ethylbenzene, toluene and xylene are less than 1% of the gasoline mixture		100 mg/kg
All other gasoline mixtures		30 mg/kg
Diesel Range Organics		2,000 mg/kg
Heavy Oils		2,000 mg/kg
Mineral Oil		4,000 mg/kg
1,1,1 Trichloroethane	71-55-6	2 mg/kg[t]
Trichloroethylene	79-01-6	0.03 mg/kg[u]
Xylenes	1330-20-7	9 mg/kg[v]

Footnotes:

a **Caution on misusing this table.** This table has been developed for specific purposes. It is intended to provide conservative cleanup levels for sites undergoing routine cleanup actions or for sites with relatively few hazardous substances, and the site qualifies under WAC 173-340-7491 for an exclusion from conducting a simplified or site-specific terrestrial ecological evaluation, or it can be demonstrated using a terrestrial ecological evaluation under WAC 173-340-7492 or 173-340-7493 that the values in this table are ecologically protective for the site. This table may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in this table should not automatically be used to define cleanup levels that must be met for financial, real estate, insurance coverage or placement, or similar transactions or purposes. Exceedances of the values in this table do not necessarily mean the soil must be restored to these levels at a site. The level of restoration depends on the remedy selected under WAC 173-340-350 through 173-340-390.

b **Arsenic.** Cleanup level based on direct contact using Equation 740-2 and protection of ground water for drinking water use using the procedures in WAC 173-340-747(4), adjusted for natural background for soil.

c **Benzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures in WAC 173-340-747 (4) and (6).

d **Benzo(a)pyrene.** Cleanup level based on direct contact using Equation 740-2. If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).

e **Cadmium.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil.

f1 **Chromium VI.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

f2 **Chromium III.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). Chromium VI must also be tested for and the cleanup level met when present at a site.

g **DDT (dichlorodiphenyltrichloroethane).** Cleanup level based on direct contact using Equation 740-2.

h **Ethylbenzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

i **Ethylene dibromide (1,2 dibromoethane or EDB).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil.

j **Lead.** Cleanup level based on preventing unacceptable blood lead levels.

k **Lindane.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit.

l **Methylene chloride (dichloromethane).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

m **Mercury.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

n **Methyl tertiary-butyl ether (MTBE).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

o **Naphthalenes.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). This is a total value for naphthalene, 1-methyl naphthalene and 2-methyl naphthalene.

p **PCB Mixtures.** Cleanup level based on applicable federal law (40 C.F.R. 761.61). This is a total value for all PCBs.

q **Tetrachloroethylene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

r **Toluene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

s **Total Petroleum Hydrocarbons (TPH).** TPH cleanup values have been provided for the most common petroleum products encountered at contaminated sites. Where there is a mixture of products or the product composition is unknown, samples must be tested using both the NWTPH-Gx and NWTPH-Dx methods and the lowest applicable TPH cleanup level must be met.

- **Gasoline range organics** means organic compounds measured using method NWTPH-Gx. Examples are aviation and automotive gasoline. The cleanup level is based on protection of ground water for noncarcinogenic effects during drinking water use using the procedures described in WAC 173-340-747(6). Two cleanup levels are provided. The lower value of 30 mg/kg can be used at any site. When using this lower value, the soil must also be tested for and meet the benzene soil cleanup level. The higher value of 100 mg/kg can only be used if the soil is tested and found to contain no benzene and the total of ethylbenzene, toluene and xylene are less than 1% of the gasoline mixture. No interpolation between these cleanup levels is allowed. In both cases, the soil cleanup level for any other carcinogenic components of the petroleum [such as EDB and EDC], if present at the site, must also be met. Also, in both cases, soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes, naphthalene, and MTBE], also must be met if these substances are found to exceed ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for gasoline releases.
- **Diesel range organics** means organic compounds measured using method NWTPH-Dx. Examples are diesel, kerosene, and #1 and #2 heating oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). The soil cleanup level for any carcinogenic components of the petroleum [such as benzene and PAHs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if these substances are found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for diesel releases.
- **Heavy oils** means organic compounds measured using NWTPH-Dx. Examples are #6 fuel oil, bunker C oil, hydraulic oil and waste oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10) and assuming a product composition similar to diesel fuel. The soil cleanup level for any carcinogenic components of the petroleum [such as benzene, PAHs and PCBs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for heavy oil releases.

- **Mineral oil** means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors, measured using NWTPH-Dx. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). Sites using this cleanup level must also analyze soil samples and meet the soil cleanup level for PCBs, unless it can be demonstrated that: (1) The release originated from an electrical device that was manufactured after July 1, 1979; or (2) oil containing PCBs was never used in the equipment suspected as the source of the release; or (3) it can be documented that the oil released was recently tested and did not contain PCBs. Method B must be used for releases of oils containing greater than 50 ppm PCBs. See Table 830-1 for the minimum testing requirements for mineral oil releases.

t **1,1,1 Trichloroethane.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

u **Trichloroethylene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

v **Xylenes.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). This is a total value for all xylenes.

Table 745-1
Method A Soil Cleanup Levels for Industrial Properties.[a]

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	20 mg/kg[b]
Benzene	71-43-2	0.03 mg/kg[c]
Benzo(a)pyrene	50-32-8	2 mg/kg[d]
Cadmium	7440-43-9	2 mg/kg[e]
Chromium		
Chromium VI	18540-29-9	19 mg/kg[f1]
Chromium III	16065-83-1	2,000 mg/kg[f2]
DDT	50-29-3	4 mg/kg[g]
Ethylbenzene	100-41-4	6 mg/kg[h]
Ethylene dibromide (EDB)	106-93-4	0.005 mg/kg[i]
Lead	7439-92-1	1,000 mg/kg[j]
Lindane	58-89-9	0.01 mg/kg[k]
Methylene chloride	75-09-2	0.02 mg/kg[l]
Mercury (inorganic)	7439-97-6	2 mg/kg[m]
MTBE	1634-04-4	0.1 mg/kg[n]
Naphthalene	91-20-3	5 mg/kg[o]
PAHs (carcinogenic)		See benzo(a)pyrene[d]
PCB Mixtures		10 mg/kg[p]
Tetrachloroethylene	127-18-4	0.05 mg/kg[q]
Toluene	108-88-3	7 mg/kg[r]
Total Petroleum Hydrocarbons[s]		
[Note: Must also test for and meet cleanup levels for other petroleum components—see footnotes!]		
Gasoline Range Organics		
Gasoline mixtures without benzene and the total of ethylbenzene, toluene and xylene are less than 1% of the gasoline mixture		100 mg/kg
All other gasoline mixtures		30 mg/kg
Diesel Range Organics		2,000 mg/kg
Heavy Oils		2,000 mg/kg
Mineral Oil		4,000 mg/kg
1,1,1 Trichloroethane	71-55-6	2 mg/kg[t]
Trichloroethylene	79-01-6	0.03 mg/kg[u]
Xylenes	1330-20-7	9 mg/kg[v]

Footnotes:

a **Caution on misusing this table.** This table has been developed for specific purposes. It is intended to provide conservative cleanup levels for sites undergoing routine cleanup actions or for industrial properties with relatively few hazardous substances, and the site qualifies under WAC 173-340-7491 for an exclusion from conducting a simplified or site-specific terrestrial ecological evaluation, or it can be demonstrated using a terrestrial ecological evaluation under WAC 173-340-7492 or 173-340-7493 that the values in this table are ecologically protective for the site. This table may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in this table should not automatically be used to define cleanup levels that must be met for financial, real estate, insurance coverage or placement, or similar transactions or purposes. Exceedances of the values in this table do not necessarily mean the soil must be restored to these levels at a site. The level of restoration depends on the remedy selected under WAC 173-340-350 through 173-340-390.

b **Arsenic.** Cleanup level based on protection of ground water for drinking water use, using the procedures in WAC 173-340-747(4), adjusted for natural background for soil.

c **Benzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747 (4) and (6).

d **Benzo(a)pyrene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).

e **Cadmium.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil.

f1 **Chromium VI.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

f2 **Chromium III.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). Chromium VI must also be tested for and the cleanup level met when present at a site.

g **DDT (dichlorodiphenyltrichloroethane).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

h **Ethylbenzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

i **Ethylene dibromide (1,2 dibromoethane or EDB).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil.

j **Lead.** Cleanup level based on direct contact.

k **Lindane.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit.

l **Methylene chloride (dichloromethane).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

m **Mercury.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

n **Methyl tertiary-butyl ether (MTBE).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

o **Naphthalenes.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). This is a total value for naphthalene, 1-methyl naphthalene and 2-methyl naphthalene.

p **PCB Mixtures.** Cleanup level based on applicable federal law (40 C.F.R. 761.61). This is a total value for all PCBs. This value may be used only if the PCB contaminated soils are capped and the cap maintained as required by 40 C.F.R. 761.61. If this condition cannot be met, the value in Table 740-1 must be used.

q **Tetrachloroethylene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

r **Toluene.** Cleanup level based on protection of ground water for drinking water use, using the procedure described in WAC 173-340-747(4).

s **Total Petroleum Hydrocarbons (TPH).** TPH cleanup values have been provided for the most common petroleum products encountered at contaminated sites. Where there is a mixture of products or the product composition is unknown, samples must be tested using both the NWTPH-Gx and NWTPH-Dx methods and the lowest applicable TPH cleanup level must be met.

- **Gasoline range organics** means organic compounds measured using method NWTPH-Gx. Examples are aviation and automotive gasoline. The cleanup level is based on protection of ground water for noncarcinogenic effects during drinking water use using the procedures described in WAC 173-340-747(6). Two cleanup levels are provided. The lower value of 30 mg/kg can be used at any site. When using this lower value, the soil must also be tested for and meet the benzene soil cleanup level. The higher

value of 100 mg/kg can only be used if the soil is tested and found to contain no benzene and the total of ethylbenzene, toluene and xylene are less than 1% of the gasoline mixture. No interpolation between these cleanup levels is allowed. In both cases, the soil cleanup level for any other carcinogenic components of the petroleum [such as EDB and EDC], if present at the site, must also be met. Also, in both cases, soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes, naphthalene, and MTBE], also must be met if these substances are found to exceed ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for gasoline releases.

- **Diesel range organics** means organic compounds measured using method NWTPH-Dx. Examples are diesel, kerosene, and #1 and #2 heating oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). The soil cleanup level for any carcinogenic components of the petroleum [such as benzene, and PAHs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if these substances are found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for diesel releases.
- **Heavy oils** means organic compounds measured using NWTPH-Dx. Examples are #6 fuel oil, bunker C oil, hydraulic oil and waste oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10) and assuming a product composition similar to diesel fuel. The soil cleanup level for any carcinogenic components of the petroleum [such as benzene, PAHs and PCBs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for heavy oil releases.
- **Mineral oil** means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors, measured using NWTPH-Dx. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). Sites using this cleanup level must also analyze soil samples and meet the soil cleanup level for PCBs, unless it can be demonstrated that: (1) The release originated from an electrical device that was manufactured after July 1, 1979; or (2) oil containing PCBs was never used in the equipment suspected as the source of the release; or (3) it can be documented that the oil released was recently tested and did not contain PCBs. Method B or C must be used for releases of oils containing greater than 50 ppm PCBs. See Table 830-1 for the minimum testing requirements for mineral oil releases.

t **1,1,1 Trichloroethane.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

u **Trichloroethylene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).

v **Xylenes.** Cleanup level based on protection of ground water for drinking water use, using the procedure in WAC 173-340-747(4). This is a total value for all xylenes.

Table 747-1
Soil Organic Carbon-Water Partitioning Coefficient (K_{oc}) Values: Nonionizing Organics.

Hazardous Substance	K_{oc} (ml/g)
ACENAPHTHENE	4,898
ALDRIN	48,685
ANTHRACENE	23,493
BENZ(a)ANTHRACENE	357,537
BENZENE	62
BENZO(a)PYRENE	968,774
BIS(2-CHLOROETHYL)ETHER	76
BIS(2-ETHYLHEXYL)PHTHALATE	111,123
BROMOFORM	126
BUTYL BENZYL PHTHALATE	13,746
CARBON TETRACHLORIDE	152
CHLORDANE	51,310
CHLOROBENZENE	224
CHLOROFORM	53
DDD	45,800
DDE	86,405
DDT	677,934
DIBENZO(a,h)ANTHRACENE	1,789,101
1,2-DICHLOROBENZENE (o)	379
1,4-DICHLOROBENZENE (p)	616
DICHLOROETHANE-1,1	53
DICHLOROETHANE-1,2	38
DICHLOROETHYLENE-1,1	65
trans-1,2 DICHLOROETHYLENE	38
DICHLOROPROPANE-1,2	47
DICHLOROPROPENE-1,3	27
DIELDRIN	25,546
DIETHYL PHTHALATE	82
DI-N-BUTYLPHTHALATE	1,567
EDB	66
ENDRIN	10,811
ENDOSULFAN	2,040
ETHYL BENZENE	204
FLUORANTHENE	49,096
FLUORENE	7,707
HEPTACHLOR	9,528
HEXACHLOROBENZENE	80,000
α-HCH (α-BHC)	1,762
β-HCH (β-BHC)	2,139
γ-HCH (LINDANE)	1,352
MTBE	11
METHOXYCHLOR	80,000
METHYL BROMIDE	9
METHYL CHLORIDE	6
METHYLENE CHLORIDE	10
NAPHTHALENE	1,191
NITROBENZENE	119
PCB-Arochlor 1016	107,285
PCB-Arochlor 1260	822,422
PENTACHLOROBENZENE	32,148
PYRENE	67,992
STYRENE	912
1,1,2,2,-TETRACHLOROETHANE	79
TETRACHLOROETHYLENE	265
TOLUENE	140
TOXAPHENE	95,816
1,2,4-TRICHLOROBENZENE	1,659
TRICHLOROETHANE -1,1,1	135
TRICHLOROETHANE-1,1,2	75
TRICHLOROETHYLENE	94
o-XYLENE	241
m-XYLENE	196
p-XYLENE	311

Sources: Except as noted below, the source of the K_{oc} values is the 1996 *EPA Soil Screening Guidance: Technical Background Document*. The values obtained from this document represent the geometric mean of a survey of values published in the scientific literature. Sample populations ranged from 1-65. EDB value from *ATSDR Toxicological Profile* (TP 91/13). MTBE value from *USGS Final Draft Report on Fuel Oxygenates* (March 1996). PCB-Arochlor values from 1994 *EPA Draft Soil Screening Guidance.*

Table 747-2
Predicted Soil Organic Carbon-Water Partitioning Coefficient (K_{oc}) as a Function of pH: Ionizing Organics.

Hazardous Substance	K_{oc} Value (ml/g)		
	pH = 4.9	pH = 6.8	pH = 8.0
Benzoic acid	5.5	0.6	0.5
2-Chlorophenol	398	388	286
2-4-Dichlorophenol	159	147	72
2-4-Dinitrophenol	0.03	0.01	0.01
Pentachlorophenol	9,055	592	410
2,3,4,5-Tetrachlorophenol	17,304	4,742	458
2,3,4,6-Tetrachlorophenol	4,454	280	105
2,4,5-Trichlorophenol	2,385	1,597	298
2,4,6-Trichlorophenol	1,040	381	131

Source: 1996 *EPA Soil Screening Guidance: Technical Background Document*. The predicted K_{OC} values in this table were derived using a relationship from thermodynamic equilibrium considerations to predict the total sorption of an ionizable organic compound from the partitioning of its ionized and neutral forms.

Table 747-3
Metals Distribution Coefficients (K_d).

Hazardous Substance	K_d (L/kg)
Arsenic	29
Cadmium	6.7
Total Chromium	1,000
Chromium VI	19
Copper	22
Mercury	52
Nickel	65
Lead	10,000
Selenium	5
Zinc	62

Source: Multiple sources compiled by the department of ecology.

Table 747-4
Petroleum EC Fraction Physical/Chemical Values.

Fuel Fraction	Equivalent Carbon Number[1]	Water Solubility[2] (mg/L)	Mol. Wt.[3] (g/mol)	Henry's Constant[4] (cc/cc)	GFW[5] (mg/mol)	Density[6] (mg/l)	Soil Organic Carbon-Water Partitioning Coefficient K_{oc}[7] (L/kg)
ALIPHATICS							
EC 5 - 6	5.5	36.0	81.0	33.0	81,000	670,000	800
EC > 6 - 8	7.0	5.4	100.0	50.0	100,000	700,000	3,800
EC > 8 - 10	9.0	0.43	130.0	80.0	130,000	730,000	30,200
EC > 10 - 12	11.0	0.034	160.0	120.0	160,000	750,000	234,000
EC > 12 - 16	14.0	7.6E-04	200.0	520.0	200,000	770,000	5.37E+06
EC > 16 - 21	19.0	1.3E-06	270.0	4,900	270,000	780,000	9.55E+09
EC > 21 - 34	28.0	1.5E-11	400.0	100,000	400,000	790,000	1.07E+10
AROMATICS							
EC > 8 - 10	9.0	65.0	120.0	0.48	120,000	870,000	1,580
EC > 10 - 12	11.0	25.0	130.0	0.14	130,000	900,000	2,510
EC > 12 - 16	14.0	5.8	150.0	0.053	150,000	1,000,000	5,010
EC > 16 - 21	19.0	0.51	190.0	0.013	190,000	1,160,000	15,800
EC > 21 - 34	28.0	6.6E-03	240.0	6.7E-04	240,000	1,300,000	126,000
TPH COMPONENTS							
Benzene	6.5	1,750	78.0	0.228	78,000	876,500	62.0
Toluene	7.6	526.0	92.0	0.272	92,000	866,900	140.0
Ethylbenzene	8.5	169.0	106.0	0.323	106,000	867,000	204.0
Total Xylenes[8] (average of 3)	8.67	171.0	106.0	0.279	106,000	875,170	233.0
n-Hexane[9]	6.0	9.5	86.0	74.0	86,000	659,370	3,410
MTBE[10]		50,000	88.0	0.018	88,000	744,000	10.9
Naphthalenes	11.69	31.0	128.0	0.0198	128,000	1,145,000	1,191

Sources:

1 **Equivalent Carbon Number.** Gustafson, J.B. et al., *Selection of Representative TPH Fractions Based on Fate and Transport Considerations. Total Petroleum Hydrocarbon Criteria Working Group Series*, Volume 3 (1997) [hereinafter *Criteria Working Group*].

2 **Water Solubility.** For aliphatics and aromatics EC groups, *Criteria Working Group.* For TPH components except n-hexane and MTBE, *1996 EPA Soil Screening Guidance: Technical Background Document.*

3 **Molecular Weight.** *Criteria Working Group.*

4 **Henry's Constant.** For aliphatics and aromatics EC groups, *Criteria Working Group.* For TPH components except n-hexane and MTBE, *1996 EPA Soil Screening Guidance: Technical Background Document*.

5 **Gram Formula Weight (GFW).** Based on 1000 x Molecular Weight.

6 **Density.** For aliphatics and aromatics EC groups, based on correlation between equivalent carbon number and data on densities of individual hazardous substances provided in *Criteria Working Group.* For TPH components except n-hexane and MTBE, *1996 EPA Soil Screening Guidance: Technical Background Document.*

7 **Soil Organic Carbon-Water Partitioning Coefficient.** For aliphatics and aromatics EC groups, *Criteria Working Group.* For TPH components except n-hexane and MTBE, *1996 EPA Soil Screening Guidance: Technical Background Document.*

8 **Total Xylenes.** Values for total xylenes are a weighted average of m, o and p xylene based on gasoline composition data from the *Criteria Working Group* (m = 51% of total xylene; o = 28% of total xylene; and p = 21% of total xylene).

9 **n-Hexane.** For values other than density, *Criteria Working Group*. For the density value, *Hawley's Condensed Chemical Dictionary*, 11th ed., revised by N. Irving Sax and Richard J. Lewis (1987).

10 **MTBE.** *USGS Final Report on Fuel Oxygenates* (March 1996).

Table 747-5
Residual Saturation Screening Levels for TPH.

Fuel	Screening Level (mg/kg)
Weathered Gasoline	1,000
Middle Distillates (e.g., Diesel No. 2 Fuel Oil)	2,000

Table 747-5
Residual Saturation Screening Levels for TPH.

Fuel	Screening Level (mg/kg)
Heavy Fuel Oils (e.g., No. 6 Fuel Oil)	2,000
Mineral Oil	4,000
Unknown Composition or Type	1,000

Note: The residual saturation screening levels for petroleum hydrocarbons specified in Table 747-5 are based on coarse sand and gravelly soils; however, they may be used for any soil type. Screening levels are based on the presumption that there are no preferential pathways for NAPL to flow downward to ground water. If such pathways exist, more stringent residual saturation screening levels may need to be established.

Table 749-1
Simplified Terrestrial Ecological Evaluation - Exposure Analysis Procedure under WAC 173-340-7492 (2)(a)(ii).[a]

Estimate the area of contiguous (connected) undeveloped land on the site or within 500 feet of any area of the site to the nearest 1/2 acre (1/4 acre if the area is less than 0.5 acre). "Undeveloped land" means land that is not covered by existing buildings, roads, paved areas or other barriers that will prevent wildlife from feeding on plants, earthworms, insects or other food in or on the soil.	
1) From the table below, find the number of points corresponding to the area and enter this number in the box to the right.	
Area (acres) — Points 0.25 or less — 4 0.5 — 5 1.0 — 6 1.5 — 7 2.0 — 8 2.5 — 9 3.0 — 10 3.5 — 11 4.0 or more — 12	
2) Is this an industrial or commercial property? See WAC 173-340-7490 (3)(c). If yes, enter a score of 3 in the box to the right. If no, enter a score of 1.	
3) Enter a score in the box to the right for the habitat quality of the site, using the rating system shown below[b]. (High = 1, Intermediate = 2, Low = 3)	
4) Is the undeveloped land likely to attract wildlife? If yes, enter a score of 1 in the box to the right. If no, enter a score of 2. See footnote c.	
5) Are there any of the following soil contaminants present: Chlorinated dibenzo-p-dioxins/dibenzofurans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, pentachlorobenzene? If yes, enter a score of 1 in the box to the right. If no, enter a score of 4.	
6) Add the numbers in the boxes on lines 2 through 5 and enter this number in the box to the right. If this number is larger than the number in the box on line 1, the simplified terrestrial ecological evaluation may be ended under WAC 173-340-7492 (2)(a)(ii).	

Footnotes:

a It is expected that this habitat evaluation will be undertaken by an experienced field biologist. If this is not the case, enter a conservative score (1) for questions 3 and 4.

b Habitat rating system. Rate the quality of the habitat as high, intermediate or low based on your professional judgment as a field biologist. The following are suggested factors to consider in making this evaluation:
Low: Early successional vegetative stands; vegetation predominantly noxious, nonnative, exotic plant species or weeds. Areas severely disturbed by human activity, including intensively cultivated croplands. Areas isolated from other habitat used by wildlife.
High: Area is ecologically significant for one or more of the following reasons: Late-successional native plant communities present; relatively high species diversity; used by an uncommon or rare species; priority habitat (as defined by the Washington department of fish and wildlife); part of a larger area of habitat where size or fragmentation may be important for the retention of some species.
Intermediate: Area does not rate as either high or low.

c Indicate "yes" if the area attracts wildlife or is likely to do so. Examples: Birds frequently visit the area to feed; evidence of high use by mammals (tracks, scat, etc.); habitat "island" in an industrial area; unusual features of an area that make it important for feeding animals; heavy use during seasonal migrations.

Table 749-2
Priority Contaminants of Ecological Concern for Sites that Qualify for the Simplified Terrestrial Ecological Evaluation Procedure.[a]

Priority contaminant	Soil concentration (mg/kg)	
	Unrestricted land use[b]	Industrial or commercial site
METALS[c]		
Antimony	See note d	See note d
Arsenic III	20 mg/kg	20 mg/kg
Arsenic V	95 mg/kg	260 mg/kg
Barium	1,250 mg/kg	1,320 mg/kg
Beryllium	25 mg/kg	See note d
Cadmium	25 mg/kg	36 mg/kg
Chromium (total)	42 mg/kg	135 mg/kg
Cobalt	See note d	See note d
Copper	100 mg/kg	550 mg/kg
Lead	220 mg/kg	220 mg/kg
Magnesium	See note d	See note d
Manganese	See note d	23,500 mg/kg
Mercury, inorganic	9 mg/kg	9 mg/kg
Mercury, organic	0.7 mg/kg	0.7 mg/kg
Molybdenum	See note d	71 mg/kg
Nickel	100 mg/kg	1,850 mg/kg
Selenium	0.8 mg/kg	0.8 mg/kg
Silver	See note d	See note d
Tin	275 mg/kg	See note d
Vanadium	26 mg/kg	See note d
Zinc	270 mg/kg	570 mg/kg
PESTICIDES		
Aldicarb/aldicarb sulfone (total)	See note d	See note d
Aldrin	0.17 mg/kg	0.17 mg/kg
Benzene hexachloride (including lindane)	10 mg/kg	10 mg/kg
Carbofuran	See note d	See note d
Chlordane	1 mg/kg	7 mg/kg
Chlorpyrifos/chlorpyrifos-methyl (total)	See note d	See note d
DDT/DDD/DDE (total)	1 mg/kg	1 mg/kg

Priority contaminant	Soil concentration (mg/kg)	
	Unrestricted land use[b]	Industrial or commercial site
Dieldrin	0.17 mg/kg	0.17 mg/kg
Endosulfan	See note d	See note d
Endrin	0.4 mg/kg	0.4 mg/kg
Heptachlor/heptachlor epoxide (total)	0.6 mg/kg	0.6 mg/kg
Hexachlorobenzene	31 mg/kg	31 mg/kg
Parathion/methyl parathion (total)	See note d	See note d
Pentachlorophenol	11 mg/kg	11 mg/kg
Toxaphene	See note d	See note d
OTHER CHLORINATED ORGANICS		
Chlorinated dibenzofurans (total)	3E-06 mg/kg	3E-06 mg/kg
Chlorinated dibenzo-p-dioxins (total)	5E-06 mg/kg	5E-06 mg/kg
Hexachlorophene	See note d	See note d
PCB mixtures (total)	2 mg/kg	2 mg/kg
Pentachlorobenzene	168 mg/kg	See note d
OTHER NONCHLORINATED ORGANICS		
Acenaphthene	See note d	See note d
Benzo(a)pyrene	30 mg/kg	300 mg/kg
Bis (2-ethylhexyl) phthalate	See note d	See note d
Di-n-butyl phthalate	200 mg/kg	See note d
PETROLEUM		
Gasoline Range Organics	200 mg/kg	12,000 mg/kg except that the concentration shall not exceed residual saturation at the soil surface.
Diesel Range Organics	460 mg/kg	15,000 mg/kg except that the concentration shall not exceed residual saturation at the soil surface.

Footnotes:

a Caution on misusing these chemical concentration numbers. These values have been developed for use at sites where a site-specific terrestrial ecological evaluation is not required. They are not intended to be protective of terrestrial ecological receptors at every site. Exceedances of the values in this table do not necessarily trigger requirements for cleanup action under this chapter. The table is not intended for purposes such as evaluating sludges or wastes.

This list does not imply that sampling must be conducted for each of these chemicals at every site. Sampling should be conducted for those chemicals that might be present based on available information, such as current and past uses of chemicals at the site.

b Applies to any site that does not meet the definition of industrial or commercial.

c For arsenic, use the valence state most likely to be appropriate for site conditions, unless laboratory information is available. Where soil conditions alternate between saturated, anaerobic and unsaturated, aerobic states, resulting in the alternating presence of arsenic III and arsenic V, the arsenic III concentrations shall apply.

d Safe concentration has not yet been established. See WAC 173-340-7492 (2)(c).

Table 749-3

Ecological Indicator Soil Concentrations (mg/kg) for Protection of Terrestrial Plants and Animals[a]. For chemicals where a value is not provided, see footnote b.

Note: These values represent soil concentrations that are expected to be protective at any MTCA site and are provided for use in eliminating hazardous substances from further consideration under WAC 173-340-7493 (2)(a)(i). Where these values are exceeded, various options are provided for demonstrating that the hazardous substance does not pose a threat to ecological receptors at a site, or for developing site-specific remedial standards for eliminating threats to ecological receptors. See WAC 173-340-7493 (1)(b)(i), 173-340-7493 (2)(a)(ii) and 173-340-7493(3).

Hazardous Substance[b]	Plants[c]	Soil biota[d]	Wildlife[e]
METALS[f]:			
Aluminum (soluble salts)	50		
Antimony	5		
Arsenic III			7
Arsenic V	10	60	132
Barium	500		102
Beryllium	10		
Boron	0.5		
Bromine	10		
Cadmium	4	20	14
Chromium (total)	42[g]	42[g]	67
Cobalt	20		
Copper	100	50	217
Fluorine	200		
Iodine	4		
Lead	50	500	118
Lithium	35[g]		
Manganese	1,100[g]		1,500
Mercury, inorganic	0.3	0.1	5.5
Mercury, organic			0.4
Molybdenum	2		7
Nickel	30	200	980
Selenium	1	70	0.3
Silver	2		
Technetium	0.2		
Thallium	1		
Tin	50		
Uranium	5		
Vanadium	2		
Zinc	86[g]	200	360
PESTICIDES:			
Aldrin			0.1
Benzene hexachloride (including lindane)			6
Chlordane		1	2.7
DDT/DDD/DDE (total)			0.75
Dieldrin			0.07
Endrin			0.2
Hexachlorobenzene			17
Heptachlor/heptachlor epoxide (total)			0.4
Pentachlorophenol	3	6	4.5
OTHER CHLORINATED ORGANICS:			
1,2,3,4-Tetrachlorobenzene		10	
1,2,3-Trichlorobenzene		20	
1,2,4-Trichlorobenzene		20	
1,2-Dichloropropane		700	
1,4-Dichlorobenzene		20	
2,3,4,5-Tetrachlorophenol		20	
2,3,5,6-Tetrachloroaniline	20	20	
2,4,5-Trichloroaniline	20	20	
2,4,5-Trichlorophenol	4	9	
2,4,6-Trichlorophenol		10	
2,4-Dichloroaniline		100	
3,4-Dichloroaniline		20	
3,4-Dichlorophenol	20	20	
3-Chloroaniline	20	30	
3-Chlorophenol	7	10	
Chlorinated dibenzofurans (total)			2E-06
Chloroacetamide		2	
Chlorobenzene		40	
Chlorinated dibenzo-p-dioxins (total)			2E-06
Hexachlorocyclopentadiene	10		
PCB mixtures (total)	40		0.65
Pentachloroaniline		100	
Pentachlorobenzene		20	
OTHER NONCHLORINATED ORGANICS:			
2,4-Dinitrophenol	20		
4-Nitrophenol		7	

Hazardous Substance[b]	Plants[c]	Soil biota[d]	Wildlife[e]
Acenaphthene	20		
Benzo(a)pyrene			12
Biphenyl	60		
Diethylphthalate	100		
Dimethylphthalate		200	
Di-n-butyl phthalate	200		
Fluorene		30	
Furan	600		
Nitrobenzene		40	
N-nitrosodiphenylamine		20	
Phenol	70	30	
Styrene	300		
Toluene	200		
PETROLEUM:			
Gasoline Range Organics		100	5,000 mg/kg except that the concentration shall not exceed residual saturation at the soil surface.
Diesel Range Organics		200	6,000 mg/kg except that the concentration shall not exceed residual saturation at the soil surface.

Footnotes:

a Caution on misusing ecological indicator concentrations. Exceedances of the values in this table do not necessarily trigger requirements for cleanup action under this chapter. Natural background concentrations may be substituted for ecological indicator concentrations provided in this table. The table is not intended for purposes such as evaluating sludges or wastes.

This list does not imply that sampling must be conducted for each of these chemicals at every site. Sampling should be conducted for those chemicals that might be present based on available information, such as current and past uses of chemicals at the site.

b For hazardous substances where a value is not provided, plant and soil biota indicator concentrations shall be based on a literature survey conducted in accordance with WAC 173-340-7493(4) and calculated using methods described in the publications listed below in footnotes c and d. Methods to be used for developing wildlife indicator concentrations are described in Tables 749-4 and 749-5.

c Based on benchmarks published in *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Terrestrial Plants: 1997 Revision*, Oak Ridge National Laboratory, 1997.

d Based on benchmarks published in *Toxicological Benchmarks for Potential Contaminants of Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process*, Oak Ridge National Laboratory, 1997.

e Calculated using the exposure model provided in Table 749-4 and chemical-specific values provided in Table 749-5. Where both avian and mammalian values are available, the wildlife value is the lower of the two.

f For arsenic, use the valence state most likely to be appropriate for site conditions, unless laboratory information is available. Where soil conditions alternate between saturated, anaerobic and unsaturated, aerobic states, resulting in the alternating presence of arsenic III and arsenic V, the arsenic III concentrations shall apply.

g Benchmark replaced by Washington state natural background concentration.

Table 749-4
Wildlife Exposure Model for Site-specific Evaluations.[a]

Plant	
K_{Plant}	Plant uptake coefficient (dry weight basis)
	Units: mg/kg plant/mg/kg soil
	Value: chemical-specific (see Table 749-5)
Soil biota Surrogate receptor: Earthworm	
BAF_{Worm}	Earthworm bioaccumulation factor (dry weight basis)
	Units: mg/kg worm/mg/kg soil
	Value: chemical-specific (see Table 749-5)
Mammalian predator Surrogate receptor: Shrew (*Sorex*)	
$P_{SB\ (shrew)}$	Proportion of contaminated food (earthworms) in shrew diet
	Units: unitless
	Value: 0.50
$FIR_{Shrew,\ DW}$	Food ingestion rate (dry weight basis)
	Units: kg dry food/kg body weight - day
	Value: 0.45
$SIR_{Shrew,\ DW}$	Soil ingestion rate (dry weight basis)
	Units: kg dry soil/kg body weight - day
	Value: 0.0045
$RGAF_{Soil,\ shrew}$	Gut absorption factor for a hazardous substance in soil expressed relative to the gut absorption factor for the hazardous substance in food.
	Units: unitless
	Value: chemical-specific (see Table 749-5)
T_{Shrew}	Toxicity reference value for shrew
	Units: mg/kg - day
	Value: chemical-specific (see Table 749-5)
Home range	0.1 Acres

Avian predator Surrogate receptor: American robin (*Turdus migratorius*)	
$P_{SB\ (Robin)}$	Proportion of contaminated food (soil biota) in robin diet
	Unit: unitless
	Value: 0.52
$FIR_{Robin,\ DW}$	Food ingestion rate (dry weight basis)
	Units: kg dry food/kg body weight - day
	Value: 0.207
$SIR_{Robin,\ DW}$	Soil ingestion rate (dry weight basis)
	Units: kg dry soil/kg body weight - day
	Value: 0.0215
$RGAF_{Soil,\ robin}$	Gut absorption factor for a hazardous substance in soil expressed relative to the gut absorption factor for the hazardous substance in food.
	Units: unitless
	Value: chemical-specific (see Table 749-5)
T_{Robin}	Toxicity reference value for robin
	Units: mg/kg - day
	Value: chemical-specific (see Table 749-5)
Home range	0.6 Acres
Mammalian herbivore Surrogate receptor: Vole (*Microtus*)	
$P_{Plant,\ vole}$	Proportion of contaminated food (plants) in vole diet
	Units: unitless
	Value: 1.0
$FIR_{Vole,\ DW}$	Food ingestion rate (dry weight basis)
	Units: kg dry food/kg body weight - day
	Value: 0.315
$SIR_{Vole,\ DW}$	Soil ingestion rate (dry weight basis)
	Units: kg dry soil/kg body weight - day
	Value: 0.0079
$RGAF_{Soil,\ vole}$	Gut absorption factor for a hazardous substance in soil expressed relative to the gut absorption factor for the hazardous substance in food.
	Units: unitless
	Value: chemical-specific (see Table 749-5)
T_{Vole}	Toxicity reference value for vole
	Units: mg/kg - day
	Value: chemical-specific (see Table 749-5)
Home range	0.08 Acres
Soil concentrations for wildlife protection[b]	
(1) Mammalian predator: $SC_{MP} = (T_{Shrew})/[(FIR_{Shrew,\ DW} \times P_{SB\ (shrew)} \times BAF_{Worm}) + (SIR_{Shrew,\ DW} \times RGAF_{Soil,\ shrew})]$	
(2) Avian predator: $SC_{AP} = (T_{Robin})/[(FIR_{Robin,\ DW} \times P_{SB\ (Robin)} \times BAF_{Worm}) + (SIR_{Robin,\ DW} \times RGAF_{Soil,\ robin})]$	
(3) Mammalian herbivore: $SC_{MH} = (T_{Vole})/[(FIR_{Vole,\ DW} \times P_{Plant,\ vole} \times K_{Plant}) + (SIR_{Vole,\ DW} \times RGAF_{Soil,\ vole})]$	

Footnotes:

a Substitutions for default receptors may be made as provided for in WAC 173-340-7493(7). If a substitute species is used, the values for food and soil ingestion rates, and proportion of contaminated food in the diet, may be modified to reasonable maximum exposure estimates for the substitute species based on a literature search conducted in accordance with WAC 173-340-7493(4). Additional species may be added on a site-specific basis as provided in WAC 173-340-7493 (2)(a).

The department shall consider proposals for modifications to default values provided in this table based on new scientific information in accordance with WAC 173-340-702(14).

b Use the lowest of the three concentrations calculated as the wildlife value.

Table 749-5
Default Values for Selected Hazardous Substances for use with the Wildlife Exposure Model in Table 749-4.[a]

	Toxicity reference value (mg/kg - d)				
Hazardous Substance	**BAF_{Worm}**	**K_{Plant}**	**Shrew**	**Vole**	**Robin**
METALS:					
Arsenic III	1.16	0.06	1.89	1.15	
Arsenic V	1.16	0.06	35	35	22

	Toxicity reference value (mg/kg - d)				
Hazardous Substance	**BAF_{Worm}**	**K_{Plant}**	**Shrew**	**Vole**	**Robin**
Barium	0.36		43.5	33.3	
Cadmium	4.6	0.14	15	15	20
Chromium	0.49		35.2	29.6	5
Copper	0.88	0.020	44	33.6	61.7
Lead	0.69	0.0047	20	20	11.3
Manganese	0.29		624	477	
Mercury, inorganic	1.32	0.0854	2.86	2.18	0.9
Mercury, organic	1.32		0.352	0.27	0.064
Molybdenum	0.48	1.01	3.09	2.36	35.3
Nickel	0.78	0.047	175.8	134.4	107
Selenium	10.5	0.0065	0.725	0.55	1
Zinc	3.19	0.095	703.3	537.4	131
PESTICIDES:					
Aldrine	4.77	0.007[b]	2.198	1.68	0.06
Benzene hexachloride (including lindane)	10.1				7
Chlordane	17.8	0.011[b]	10.9	8.36	10.7
DDT/DDD/DDE	10.6	0.004[b]	8.79	6.72	0.87
Dieldrin	28.8	0.029[b]	0.44	0.34	4.37
Endrin	3.6	0.038[b]	1.094	0.836	0.1
Heptachlor/heptachlor epoxide	10.9	0.027[b]	2.857	2.18	0.48
Hexachlorobenzene	1.08				2.4
Pentachlorophenol	5.18	0.043[b]	5.275	4.03	
OTHER CHLORINATED ORGANICS:					
Chlorinated dibenzofurans	48				1.0E-05
Chlorinated dibenzo-p-dioxins	48	0.005[b]	2.2E-05	1.7E-05	1.4E-04
PCB mixtures	4.58	0.087[b]	0.668	0.51	1.8
OTHER NONCHLORINATED ORGANICS:					
Benzo(a)pyrene	0.43	0.011	1.19	0.91	

Footnotes:

a For hazardous substances not shown in this table, use the following default values. Alternatively, use values established from a literature survey conducted in accordance with WAC 173-340-7493(4) and approved by the department.

K_{Plant}: Metals (including metalloid elements): 1.01
Organic chemicals: $K_{Plant} = 10^{(1.588-(0.578 \log Kow))}$,
where $\log K_{ow}$ is the logarithm of the octanol-water partition coefficient.

BAF_{Worm}: Metals (including metalloid elements): 4.6
Nonchlorinated organic chemicals:
$\log K_{ow} < 5$: 0.7
$\log K_{ow} > 5$: 0.9
Chlorinated organic chemicals:
$\log K_{ow} < 5$: 4.7
$\log K_{ow} > 5$: 11.8

$RGAF_{Soil}$ (all receptors): 1.0

Toxicity reference values (all receptors): Values established from a literature survey conducted in accordance with WAC 173-340-7493(4).
Site-specific values may be substituted for default values, as described below:

K_{Plant} Value from a literature survey conducted in accordance with WAC 173-340-7493(4) or from empirical studies at the site.

BAF_{Worm} Value from a literature survey conducted in accordance with WAC 173-340-7493(4) or from empirical studies at the site.

$RGAF_{Soil}$ (all receptors): Value established from a literature survey conducted in accordance with WAC 173-340-7493(4).

Toxicity reference values (all receptors): Default toxicity reference values provided in this table may be replaced by a value established from a literature survey conducted in accordance with WAC 173-340-7493(4).

b Calculated from $\log K_{ow}$ using formula in footnote a.

Table 830-1
Required Testing for Petroleum Releases.

	Gasoline Range Organics (GRO) (1)	Diesel Range Organics (DRO) (2)	Heavy Oils (DRO) (3)	Mineral Oils (4)	Waste Oils and Unknown Oils (5)
Volatile Petroleum Compounds					
Benzene	X (6)	X (7)			X (8)
Toluene	X (6)	X (7)			X (8)
Ethyl benzene	X (6)	X (7)			X (8)
Xylenes	X (6)	X (7)			X (8)
n-Hexane	X (9)				

Table 830-1
Required Testing for Petroleum Releases.

	Gasoline Range Organics (GRO) (1)	Diesel Range Organics (DRO) (2)	Heavy Oils (DRO) (3)	Mineral Oils (4)	Waste Oils and Unknown Oils (5)
Fuel Additives and Blending Compounds					
Dibromoethane, 1-2 (EDB); and Dichloroethane, 1-2 (EDC)	X (10)				X (8)
Methyl tertiary-butyl ether (MTBE)	X (11)				X (8)
Total lead & other additives	X (12)				X (8)
Other Petroleum Components					
Carcinogenic PAHs		X (13)	X (13)		X (8)
Naphthalenes	X (14)	X (14)	X (14)		X (14)
Other Compounds					
Polychlorinated Biphenyls (PCBs)			X (15)	X (15)	X (8)
Halogenated Volatile Organic Compounds (VOCs)					X (8)
Other	X (16)	X (16)	X (16)	X (16)	X (16)
Total Petroleum Hydrocarbons Methods					
TPH Analytical Method for Total TPH (Method A Cleanup Levels) (17)	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx	NWTPH-Dx	NWTPH-Gx & NWTPH-Dx
TPH Analytical Methods for TPH fractions (Methods B or C) (17)	VPH	EPH	EPH	EPH	VPH and EPH

Use of Table 830-1: An "X" in the box means that the testing requirement applies to ground water and soil if a release is known or suspected to have occurred to that medium, unless otherwise specified in the footnotes. A box with no "X" indicates (except in the last two rows) that, for the type of petroleum product release indicated in the top row, analyses for the hazardous substance(s) named in the far-left column corresponding to the empty box are not typically required as part of the testing for petroleum releases. However, such analyses may be required based on other site-specific information. Note that testing for Total Petroleum Hydrocarbons (TPH) is required for every type of petroleum release, as indicated in the bottom two rows of the table. The testing method for TPH depends on the type of petroleum product released and whether Method A or Method B or C is being used to determine TPH cleanup levels. See WAC 173-340-830 for analytical procedures. **The footnotes to this table are important for understanding the specific analytical requirements for petroleum releases.**

Footnotes:

(1) The following petroleum products are common examples of GRO: automotive and aviation gasolines, mineral spirits, stoddard solvents, and naphtha. To be in this range, 90 percent of the petroleum components need to be quantifiable using the NWTPH-Gx; if NWTPH-HCID results are used for this determination, then 90 percent of the "area under the TPH curve" must be quantifiable using NWTPH-Gx. Products such as jet fuel, diesel No. 1, kerosene, and heating oil may require analysis as both GRO and DRO depending on the range of petroleum components present (range can be measured by NWTPH-HCID). (See footnote 17 on analytical methods.)

(2) The following petroleum products are common examples of DRO: Diesel No. 2, fuel oil No. 2, light oil (including some bunker oils). To be in this range, 90 percent of the petroleum components need to be quantifiable using the NWTPH-Dx quantified against a diesel standard. Products such as jet fuel, diesel No. 1, kerosene, and heating oil may require analysis as both GRO and DRO depending on the range of petroleum components present as measured in NWTPH-HCID.

(3) The following petroleum products are common examples of the heavy oil group: Motor oils, lube oils, hydraulic fluids, etc. Heavier oils may require the addition of an appropriate oil range standard for quantification.

(4) Mineral oil means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors.

(5) The waste oil category applies to waste oil, oily wastes, and unknown petroleum products and mixtures of petroleum and nonpetroleum substances. Analysis of other chemical components (such as solvents) than those listed may be required based on site-specific information. Mixtures of identifiable petroleum products (such as gasoline and diesel, or diesel and motor oil) may be analyzed based on the presence of the individual products, and need not be treated as waste and unknown oils.

(6) When using Method A, testing soil for benzene is required. Furthermore, testing ground water for BTEX is necessary when a petroleum release to ground water is known or suspected. If the ground water is tested and toluene, ethyl benzene or xylene is in the ground water above its respective Method A cleanup level, the soil must also be tested for that chemical. When using Method B or C, testing the soil for BTEX is required and testing for BTEX in ground

water is required when a release to ground water is known or suspected.

(7)(a) For DRO releases from other than home heating oil systems, follow the instructions for GRO releases in Footnote (6).

(b) For DRO releases from typical home heating oil systems (systems of 1,100 gallons or less storing heating oil for residential consumptive use on the premises where stored), testing for BTEX is not usually required for either ground water or soil. Testing of the ground water is also not usually required for these systems; however, if the ground water is tested and benzene is found in the ground water, the soil must be tested for benzene.

(8) Testing is required in a sufficient number of samples to determine whether this chemical is present at concentrations of concern. If the chemical is found to be at levels below the applicable cleanup level, then no further analysis is required.

(9) Testing for n-hexane is required when VPH analysis is performed for Method B or C. In this case, the concentration of n-hexane should be deleted from its respective fraction to avoid double-counting its concentration. n-Hexane's contribution to overall toxicity is then evaluated using its own reference dose.

(10) Volatile fuel additives (such as dibromoethane, 1 - 2 (EDB) (CAS# 106-93-4) and dichloroethane, 1 - 2 (EDC) (CAS# 107-06-2)) must be part of a volatile organics analysis (VOA) of GRO contaminated ground water. If any is found in ground water, then the contaminated soil must also be tested for these chemicals.

(11) Methyl tertiary-butyl ether (MTBE) (CAS# 1634-04-4) must be analyzed in GRO contaminated ground water. If any is found in ground water, then the contaminated soil must also be tested for MTBE.

(12)(a) For automotive gasoline where the release occurred prior to 1996 (when "leaded gasoline" was used), testing for lead is required unless it can be demonstrated that lead was not part of the release. If this demonstration cannot be made, testing is required in a sufficient number of samples to determine whether lead is present at concentrations of concern. Other additives and blending compounds of potential environmental significance may need to be considered for testing, including: tertiary-butyl alcohol (TBA); tertiary-amyl methyl ether (TAME); ethyl tertiary-butyl ether (ETBE); ethanol; and methanol. Contact the department for additional testing recommendations regarding these and other additives and blending compounds.

(b) For aviation gasoline, racing fuels and similar products, testing is required for likely fuel additives (especially lead) and likely blending compounds, no matter when the release occurred.

(13) Testing for carcinogenic PAHs is required for DRO and heavy oils, except for the following products for which adequate information exists to indicate their absence: Diesel No. 1 and 2, home heating oil, kerosene, jet fuels, and electrical insulating mineral oils. The carcinogenic PAHs include benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, benzo(k)fluoranthene, benzo (a)anthracene, and benzo(b)fluoranthene.

(14)(a) Except as noted in (b) and (c), testing for the noncarcinogenic PAHs, including the "naphthalenes" (naphthalene, 1-methyl-naphthalene, and 2-methyl-naphthalene) is not required when using Method A cleanup levels, because they are included in the TPH cleanup level.

(b) Testing of soil for naphthalenes is required under Methods B and C when the inhalation exposure pathway is evaluated.

(c) If naphthalenes are found in ground water, then the soil must also be tested for naphthalenes.

(15) Testing for PCBs is required unless it can be demonstrated that: (1) The release originated from an electrical device manufactured for use in the United States after July 1, 1979; (2) oil containing PCBs was never used in the equipment suspected as the source of the release (examples of equipment where PCBs are likely to be found include transformers, electric motors, hydraulic systems, heat transfer systems, electromagnets, compressors, capacitors, switches and miscellaneous other electrical devices); or, (3) the oil released was recently tested and did not contain PCBs.

(16) Testing for other possible chemical contaminants may be required based on site-specific information.

(17) The analytical methods NWTPH-Gx, NWTPH-Dx, NWTPH-HCID, VPH, and EPH are methods published by the department of ecology and available on the department's internet web site: http://www.ecy.wa.gov/programs/tcp/cleanup.html.

[Statutory Authority: RCW 70.105D.030(2). 07-21-065 (Order 06-10), § 173-340-900, filed 10/12/07, effective 11/12/07. Statutory Authority: Chapter 70.105D RCW. 01-05-024 (Order 97-09A), § 173-340-900, filed 2/12/01, effective 8/15/01.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

Chapter 173-342 WAC

ADDITIONAL TAXABLE HAZARDOUS SUBSTANCE LIST

WAC

173-342-010 Purpose and authority.
173-342-020 Definitions.
173-342-030 Basis to determine what is a taxable hazardous substance.
173-342-040 Listing.
173-342-050 List.

WAC 173-342-010 Purpose and authority. The purposes of this chapter are to establish requirements for the addition or deletion of materials to the list of hazardous substances which are subject to the state hazardous substance tax pursuant to chapter 2, Laws of 1989, and to list or delete those substances.

It is the intent of this rule to add only materials which are similar to those previously defined by the Model Toxics Control Act as taxable hazardous substances. Those are, in general terms, petroleum products, pesticide products, and chemicals. Manufactured products which may be environmentally detrimental, but not of special hazard, such as plastic containers, solid metals, and wood products or wood fibers are not of this type.

The authority to add or delete additional substances is granted under section 9, chapter 2, Laws of 1989.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-010, filed 1/9/90, effective 2/9/90.]

WAC 173-342-020 Definitions. For the purpose of this chapter, the following terms have the meanings given below:

(1) "Director" means the director of the department of ecology or the director's designee.

(2) "Hazardous substance" means anything designated as such by the provisions of this rule, as adopted and thereafter amended. In addition, this term includes:

(a) Any substance that, on March 1, 1989, is a hazardous substance under section 101(14) of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by P.L. 99-499. These substances consist of chemicals and elements in their purest form. (Reportable quantities associated with these chemicals under CERCLA are not considered for the purposes of this tax, but are duly noted here to avoid any confusion regarding the intent of the federal regulation. See CERCLA, 42 USCA, Sec. 9601.) A CERCLA substance which contains water, a stabilizer, or a preservative is still considered pure. Combinations of CERCLA substances as ingredients together with nonhazardous substances will not be taxable unless the end product is specifically designated as a hazardous substance by the department of ecology under the provisions of this rule;

(b) Petroleum products;

(c) Pesticide products required to be registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

(3) "Material" means substance, chemicals, category of chemicals, or mixtures of chemicals including products.

(4) "Persistence" means the tendency of a substance to resist degradation and remain in the atmosphere, soil, and/or water.

(5) "Toxicity" means a measure of the propensity of a chemical to produce injury once it reaches a susceptible receptor in or on a living organism.

(6) Except for terms defined in this section, the definitions in section 9, chapter 2, Laws of 1989 and WAC 458-20-252 apply to this chapter.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-020, filed 1/9/90, effective 2/9/90.]

WAC 173-342-030 Basis to determine what is a taxable hazardous substance. Additional materials may be defined as taxable hazardous substances on the basis of a departmental determination of:

(1) Negative environmental factors such as substantial toxicity and persistence of materials being considered for listing or delisting; and

(2) Substantial adverse impact on waste management operations such as the management of hazardous waste, solid waste, wastewater treatment facilities, wastewater from ground or marine septic systems, and contaminated sites.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-030, filed 1/9/90, effective 2/9/90.]

WAC 173-342-040 Listing. The director may propose to add (or delete from those materials previously added) materials to the definition of hazardous substance.

(1) Additions or deletions to the list shall be made by amendment of this rule pursuant to the Administrative Procedure Act (chapter 34.05 RCW).

(2) The director of ecology shall add or delete materials no more than twice during each calendar year.

(3) For tax purposes, changes in this definition shall take effect on the first day of the next month that is at least thirty days after the effective date of the rule.

(4) For each material proposed for additional listing, the department shall prepare a "basis for listing" which shall include those factors and data which led the director to propose the listing.

(5) The director shall prepare a "basis for deletion" which shall include those factors and data which led the director to propose deletions from materials previously added.

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-040, filed 1/9/90, effective 2/9/90.]

WAC 173-342-050 List. (Reserved.)

[Statutory Authority: 1989 c 2. 90-03-020, § 173-342-050, filed 1/9/90, effective 2/9/90.]

Chapter 173-350 WAC
SOLID WASTE HANDLING STANDARDS

WAC

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WAC 173-350-010 Purpose. This chapter is adopted under the authority of chapter 70.95 RCW, Solid waste management—Reduction and recycling, to protect public health, to prevent land, air, and water pollution, and conserve the state's natural, economic, and energy resources by:

(1) Setting minimum functional performance standards for the proper handling and disposal of solid waste originating from residences, commercial, agricultural and industrial operations and other sources;

(2) Identifying those functions necessary to assure effective solid waste handling programs at both the state and local level;

(3) Following the priorities for the management of solid waste as set by the legislature in chapter 70.95 RCW, Solid waste management—Reduction and recycling.

(4) Describing the responsibility of persons, municipalities, regional agencies, state and local government related to solid waste;

(5) Requiring solid waste handling facilities to be located, designed, constructed, operated and closed in accordance with this chapter;

(6) Promoting regulatory consistency by establishing statewide minimum standards for solid waste handling; and

(7) Encouraging the development and operation of waste recycling facilities and activities needed to accomplish the management priority of waste recycling.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-010, filed 1/10/03, effective 2/10/03.]

WAC 173-350-020 Applicability. This chapter applies to facilities and activities that manage solid wastes as that term is defined in WAC 173-350-100. This chapter does not apply to the following:

(1) Overburden from mining operations intended for return to the mine;

(2) Wood waste used for ornamental, animal bedding, mulch and plant bedding, or road building purposes;

(3) Wood waste directly resulting from the harvesting of timber left at the point of generation and subject to chapter 76.09 RCW, Forest practices;

(4) Land application of manures and crop residues at agronomic rates;

(5) Home composting as defined in WAC 173-350-100;

(6) Single-family residences and single-family farms whose year round occupants engage in solid waste disposal regulated under WAC 173-351-700(4);

(7) Clean soils and clean dredged material as defined in WAC 173-350-100;

(8) Dredged material as defined in 40 CFR 232.2 that is subject to:

(a) The requirements of a permit issued by the U.S. Army Corps of Engineers or an approved state under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(b) The requirements of a permit issued by the U.S. Army Corps of Engineers under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or

(c) In the case of U.S. Army Corps of Engineers civil works projects, the administrative equivalent of the permits referred to in (a) and (b) of this subsection, as provided for in U.S. Army Corps of Engineers regulations, including, for example, 33 CFR 336.1, 336.2, and 337.6;

(9) Biosolids that are managed under chapter 173-308 WAC, Biosolids management;

(10) Domestic septage taken to a sewage treatment plant permitted under chapter 90.48 RCW, Water pollution control;

(11) Liquid wastes, the discharge or potential discharge of which, is regulated under federal, state or local water pollution permits;

(12) Domestic wastewater facilities and industrial wastewater facilities otherwise regulated by federal, state, or local water pollution permits;

(13) Dangerous wastes fully regulated under chapter 70.105 RCW, Hazardous waste management, and chapter 173-303 WAC, Dangerous waste regulations;

(14) Special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards;

(15) PCB wastes regulated under 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, except for:

(a) PCB household waste; and

(b) PCB bulk product wastes identified in 40 CFR Part 761.62 (b)(1) that are disposed of in limited purpose landfills;

(16) Radioactive wastes, defined by chapter 246-220 WAC, Radiation protection—General provisions, and chapter 246-232 WAC, Radioactive protection—Licensing applicability;

(17) Landfilling of municipal solid waste regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills;

(18) Drop boxes used solely for collecting recyclable materials;

(19) Intermodal facilities as defined in WAC 173-350-100; and

(20) Solid waste handling facilities that have engaged in closure and closed before the effective date of this chapter.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-020, filed 1/10/03, effective 2/10/03.]

WAC 173-350-025 Owner responsibilities for solid waste. The owner, operator, or occupant of any premise, business establishment, or industry shall be responsible for the satisfactory and legal arrangement for the solid waste handling of all solid waste generated or accumulated by them on the property.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-025, filed 1/10/03, effective 2/10/03.]

WAC 173-350-030 Effective dates. (1) *Effective dates.* These standards apply to all facilities, except existing facilities, upon the effective date of this chapter.

(2) *Effective dates - Existing facilities.*

(a) The owner or operator of existing facilities shall:

(i) Meet all applicable operating, environmental monitoring, closure and post-closure planning, and financial assurance requirements of this chapter within twenty-four months of the effective date of this chapter; and

(ii) Meet all applicable performance and design requirements, other than location or setback requirements, within thirty-six months of the effective date of this chapter.

(b) These standards apply to all new solid waste handling units at existing facilities upon the effective date of this chapter.

(c) The owner or operator of existing facilities shall initiate the permit modification process outlined in WAC 173-350-710(4) within eighteen months after the effective date of this chapter. If a permit modification is necessary, every application for a permit modification shall describe the date and methods for altering an existing facility to meet (a)(i) through (iii) of this subsection.

(d) The jurisdictional health department shall determine if a new permit application is required based on the extent of the changes needed to bring the facility into compliance.

(e) An existing facility completing closure within twelve months of the effective date of this chapter may close in compliance with the requirements of chapter 173-304 WAC, Minimum functional standards for solid waste handling. Any facility that does not complete closure within twelve months of the effective date of this chapter shall close in compliance with applicable requirements of this chapter.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-030, filed 1/10/03, effective 2/10/03.]

WAC 173-350-040 Performance standards. The owner or operator of all solid waste facilities subject to this chapter shall:

(1) Design, construct, operate, and close all facilities in a manner that does not pose a threat to human health or the environment;

(2) Comply with chapter 90.48 RCW, Water pollution control and implementing regulations, including chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington;

(3) Conform to the approved local comprehensive solid waste management plan prepared in accordance with chapter 70.95 RCW, Solid waste management—Reduction and recycling, and/or the local hazardous waste management plan pre-

pared in accordance with chapter 70.105 RCW, Hazardous waste management;

(4) Not cause any violation of emission standards or ambient air quality standards at the property boundary of any facility and comply with chapter 70.94 RCW, Washington Clean Air Act; and

(5) Comply with all other applicable local, state, and federal laws and regulations.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-040, filed 1/10/03, effective 2/10/03.]

WAC 173-350-100 Definitions. When used in this chapter, the following terms have the meanings given below.

"Active area" means that portion of a facility where solid waste recycling, reuse, treatment, storage, or disposal operations are being, are proposed to be, or have been conducted. Setbacks shall not be considered part of the active area of a facility.

"Agricultural composting" means composting of agricultural waste as an integral component of a system designed to improve soil health and recycle agricultural wastes. Agricultural composting is conducted on lands used for farming.

"Agricultural wastes" means wastes on farms resulting from the raising or growing of plants and animals including, but not limited to, crop residue, manure and animal bedding, and carcasses of dead animals weighing each or collectively in excess of fifteen pounds.

"Agronomic rates" means the application rate (dry weight basis) that will provide the amount of nitrogen or other critical nutrient required for optimum growth of vegetation, and that will not result in the violation of applicable standards or requirements for the protection of ground or surface water as established under chapter 90.48 RCW, Water pollution control and related rules including chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington, and chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington.

"Air quality standard" means a standard set for maximum allowable contamination in ambient air as set forth in chapter 173-400 WAC, General regulations for air pollution sources.

"Below ground tank" means a device meeting the definition of "tank" in this chapter where a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface of the tank that is in the ground.

"Beneficial use" means the use of solid waste as an ingredient in a manufacturing process, or as an effective substitute for natural or commercial products, in a manner that does not pose a threat to human health or the environment. Avoidance of processing or disposal cost alone does not constitute beneficial use.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all applicable requirements under chapter 173-308 WAC, Biosolids management. Biosolids includes a material derived from biosolids and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under chapter 173-308 WAC, Biosolids management.

"Buffer" means a permanently vegetated strip adjacent to an application area, the purpose of which is to filter runoff or overspray from the application area and protect an adjacent area.

"Cab cards" means a license carried in a vehicle that authorizes that vehicle to legally pick up waste tires and haul to a permitted, licensed facility or an exempt facility for deposit.

"Captive insurance companies" means companies that are wholly owned subsidiaries controlled by the parent company and established to insure the parent company or its other subsidiaries.

"Channel migration zone" means the lateral extent of likely movement of a stream or river channel along a stream reach.

"Clean soils and clean dredged material" means soils and dredged material which are not dangerous wastes, contaminated soils, or contaminated dredged material as defined in this section.

"Closure" means those actions taken by the owner or operator of a solid waste handling facility to cease disposal operations or other solid waste handling activities, to ensure that all such facilities are closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period.

"Closure plan" means a written plan developed by an owner or operator of a facility detailing how a facility is to close at the end of its active life.

"Composted material" means organic solid waste that has undergone biological degradation and transformation under controlled conditions designed to promote aerobic decomposition at a solid waste facility in compliance with the requirements of this chapter. Natural decay of organic solid waste under uncontrolled conditions does not result in composted material.

"Composting" means the biological degradation and transformation of organic solid waste under controlled conditions designed to promote aerobic decomposition. Natural decay of organic solid waste under uncontrolled conditions is not composting.

"Conditionally exempt small quantity generator (CESQG)" means a dangerous waste generator whose dangerous wastes are not subject to regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated or accumulated in quantities below the threshold for regulation and meets the conditions prescribed in WAC 173-303-070 (8)(b).

"Conditionally exempt small quantity generator (CESQG) waste" means dangerous waste generated by a conditionally exempt small quantity generator.

"Container" means a portable device used for the collection, storage, and/or transportation of solid waste including, but not limited to, reusable containers, disposable containers, and detachable containers.

"Contaminant" means any chemical, physical, biological, or radiological substance that does not occur naturally in the environment or that occurs at concentrations greater than natural background levels.

"Contaminate" means the release of solid waste, leachate, or gases emitted by solid waste, such that contaminants enter the environment at concentrations that pose a

threat to human health or the environment, or cause a violation of any applicable environmental regulation.

"Contaminated dredged material" means dredged material resulting from the dredging of surface waters of the state where contaminants are present in the dredged material at concentrations not suitable for open water disposal and the dredged material is not dangerous waste and is not regulated by section 404 of the Federal Clean Water Act (P.L. 95-217).

"Contaminated soils" means soils removed during the cleanup of a hazardous waste site, or a dangerous waste facility closure, corrective actions or other clean-up activities and which contain harmful substances but are not designated dangerous wastes.

"Corrosion expert" means a person certified by the National Association of Corrosion Engineers (NACE) or a registered professional engineer who has certification or licensing that includes education and experience in corrosion control.

"Crop residues" means vegetative material leftover from the harvesting of crops, including leftover pieces or whole fruits or vegetables, crop leaves and stems. Crop residue does not include food processing waste.

"Dangerous wastes" means any solid waste designated as dangerous waste by the department under chapter 173-303 WAC, Dangerous waste regulations.

"Department" means the Washington state department of ecology.

"Detachable containers" means reusable containers that are mechanically loaded or handled, such as a dumpster or drop box.

"Disposable containers" means containers that are used once to handle solid waste, such as plastic bags, cardboard boxes and paper bags.

"Disposal" or **"deposition"** means the discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water.

"Domestic septage" means Class I, II or III domestic septage as defined in chapter 173-308 WAC, Biosolids management.

"Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater together with such industrial waste as may be present.

"Drop box facility" means a facility used for the placement of a detachable container including the area adjacent for necessary entrance and exit roads, unloading and turn-around areas. Drop box facilities normally serve the general public with loose loads and receive waste from off-site.

"Energy recovery" means the recovery of energy in a useable form from mass burning or refuse-derived fuel incineration, pyrolysis or any other means of using the heat of combustion of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

"Existing facility" means a facility which is owned or leased, and in operation, or for which facility construction has begun, on or before the effective date of this chapter and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances.

"Facility" means all contiguous land (including buffers and setbacks) and structures, other appurtenances, and improvements on the land used for solid waste handling.

"Facility construction" means the continuous on-site physical act of constructing solid waste handling unit(s) or when the owner or operator of a facility has entered into contractual obligations for physical construction of the facility that cannot be canceled or modified without substantial financial loss.

"Facility structures" means constructed infrastructure such as buildings, sheds, utility lines, and piping on the facility.

"Garbage" means animal and vegetable waste resulting from the handling, storage, sale, preparation, cooking, and serving of foods.

"Ground water" means that part of the subsurface water that is in the zone of saturation.

"Holocene fault" means a plane along which earthen material on one side has been displaced with respect to that on the other side and has occurred in the most recent epoch of the Quaternary period extending from the end of the Pleistocene to the present.

"Home composting" means composting of on-site generated wastes, and incidental materials beneficial to the composting process, by the owner or person in control of a single-family residence, or for a dwelling that houses two to five families, such as a duplex or clustered dwellings.

"Household hazardous wastes" means any waste which exhibits any of the properties of dangerous wastes that is exempt from regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated by households. Household hazardous waste can also include other solid waste identified in the local hazardous waste management plan prepared pursuant to chapter 70.105 RCW, Hazardous waste management.

"Hydrostratigraphic unit" means any water-bearing geologic unit or units hydraulically connected or grouped together on the basis of similar hydraulic conductivity which can be reasonably monitored; several geologic formations or part of a geologic formation may be grouped into a single hydrostratigraphic unit; perched sand lenses may be considered a hydrostratigraphic unit or part of a hydrostratigraphic unit, for example.

"Incineration" means reducing the volume of solid wastes by use of an enclosed device using controlled flame combustion.

"Incompatible waste" means a waste that is unsuitable for mixing with another waste or material because the mixture might produce excessive heat or pressure, fire or explosion, violent reaction, toxic dust, fumes, mists, or gases, or flammable fumes or gases.

"Industrial solid wastes" means solid waste generated from manufacturing operations, food processing, or other industrial processes.

"Industrial wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of industrial wastewater.

"Inert waste" means solid wastes that meet the criteria for inert waste in WAC 173-350-990.

"Inert waste landfill" means a landfill that receives only inert wastes.

"Intermediate solid waste handling facility" means any intermediate use or processing site engaged in solid waste handling which is not the final site of disposal. This includes material recovery facilities, transfer stations, drop boxes, baling and compaction sites.

"Intermodal facility" means any facility operated for the purpose of transporting closed containers of waste and the containers are not opened for further treatment, processing or consolidation of the waste.

"Jurisdictional health department" means city, county, city-county or district public health department.

"Land application site" means a contiguous area of land under the same ownership or operational control on which solid wastes are beneficially utilized for their agronomic or soil-amending capability.

"Land reclamation" means using solid waste to restore drastically disturbed lands including, but not limited to, construction sites and surface mines. Using solid waste as a component of fill is not land reclamation.

"Landfill" means a disposal facility or part of a facility at which solid waste is permanently placed in or on land including facilities that use solid waste as a component of fill.

"Leachate" means water or other liquid within a solid waste handling unit that has been contaminated by dissolved or suspended materials due to contact with solid waste or gases.

"Limited moderate risk waste" means waste batteries, waste oil, and waste antifreeze generated from households.

"Limited moderate risk waste facility" means a facility that collects, stores, and consolidates only limited moderate risk waste.

"Limited purpose landfill" means a landfill which is not regulated or permitted by other state or federal environmental regulations that receives solid wastes limited by type or source. Limited purpose landfills include, but are not limited to, landfills that receive segregated industrial solid waste, construction, demolition and landclearing debris, wood waste, ash (other than special incinerator ash), and dredged material. Limited purpose landfills do not include inert waste landfills, municipal solid waste landfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills, landfills disposing of special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards, landfills regulated under chapter 173-303 WAC, Dangerous waste regulations, or chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

"Liquid" means a substance that flows readily and assumes the form of its container but retains its independent volume.

"Liquid waste" means any solid waste which is deemed to contain free liquids as determined by the Paint Filter Liquids Test, Method 9095, in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," EPA Publication SW-846.

"Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete or asphalt, or unconsolidated earth materials, soil or regolith lying at or near the earth's surface.

"Local fire control agency" means a public or private agency or corporation providing fire protection such as a local fire department, the department of natural resources or the United States Forest Service.

"Lower explosive limits" means the lowest percentage by volume of a mixture of explosive gases that will propagate a flame in air at twenty-five degrees centigrade and atmospheric pressure.

"Material recovery facility" means any facility that collects, compacts, repackages, sorts, or processes for transport source separated solid waste for the purpose of recycling.

"Mobile systems and collection events" means activities conducted at a temporary location to collect moderate risk waste.

"Moderate risk waste (MRW)" means solid waste that is limited to conditionally exempt small quantity generator (CESQG) waste and household hazardous waste (HHW) as defined in this chapter.

"MRW facility" means a solid waste handling unit that is used to collect, treat, recycle, exchange, store, consolidate, and/or transfer moderate risk waste. This does not include mobile systems and collection events or limited MRW facilities that meet the applicable terms and conditions of WAC 173-350-360 (2) or (3).

"Municipal solid waste (MSW)" means a subset of solid waste which includes unsegregated garbage, refuse and similar solid waste material discarded from residential, commercial, institutional and industrial sources and community activities, including residue after recyclables have been separated. Solid waste that has been segregated by source and characteristic may qualify for management as a non-MSW solid waste, at a facility designed and operated to address the waste's characteristics and potential environmental impacts. The term MSW does not include:

■ Dangerous wastes other than wastes excluded from the requirements of chapter 173-303 WAC, Dangerous waste regulations, in WAC 173-303-071 such as household hazardous wastes;

■ Any solid waste, including contaminated soil and debris, resulting from response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601), chapter 70.105D RCW, Hazardous waste cleanup—Model Toxics Control Act, chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation or a remedial action taken under those rules; nor

■ Mixed or segregated recyclable material that has been source-separated from garbage, refuse and similar solid waste. The residual from source separated recyclables is MSW.

"Natural background" means the concentration of chemical, physical, biological, or radiological substances consistently present in the environment that has not been influenced by regional or localized human activities. Metals at concentrations naturally occurring in bedrock, sediments and soils due solely to the geologic processes that formed the materials are natural background. In addition, low concentra-

tions of other persistent substances due solely to the global use or formation of these substances are natural background.

"New solid waste handling unit" means a solid waste handling unit that begins operation or facility construction, and significant modifications to existing solid waste handling units, after the effective date of this chapter.

"Nuisance odor" means any odor which is found offensive or may unreasonably interfere with any person's health, comfort, or enjoyment beyond the property boundary of a facility.

"One hundred-year flood plain" means any land area that is subject to one percent or greater chance of flooding in any given year from any source.

"Open burning" means the burning of solid waste materials in an open fire or an outdoor container without providing for the control of combustion or the control of emissions from the combustion.

"Overburden" means the earth, rock, soil, and topsoil that lie above mineral deposits.

"Permeability" means the ease with which a porous material allows liquid or gaseous fluids to flow through it. For water, this is usually expressed in units of centimeters per second and termed hydraulic conductivity.

"Permit" means an authorization issued by the jurisdictional health department which allows a person to perform solid waste activities at a specific location and which includes specific conditions for such facility operations.

"Person" means an individual, firm, association, copartnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatever.

"Pile" means any noncontainerized accumulation of solid waste that is used for treatment or storage.

"Plan of operation" means the written plan developed by an owner or operator of a facility detailing how a facility is to be operated during its active life.

"Point of compliance" means a point established in the ground water by the jurisdictional health department as near a possible source of release as technically, hydrogeologically and geographically feasible.

"Post-closure" means the requirements placed upon disposal facilities after closure to ensure their environmental safety for at least a twenty-year period or until the site becomes stabilized (i.e., little or no settlement, gas production, or leachate generation).

"Post-closure plan" means a written plan developed by an owner or operator of a facility detailing how a facility is to meet the post-closure requirements for the facility.

"Premises" means a tract or parcel of land with or without habitable buildings.

"Private facility" means a privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.

"Processing" means an operation to convert a material into a useful product or to prepare it for reuse, recycling, or disposal.

"Product take-back center" means a retail outlet or distributor that accepts household hazardous waste of comparable types as the products offered for sale or distributed at that outlet.

"Public facility" means a publicly or privately owned facility that accepts solid waste generated by other persons;

"Putrescible waste" means solid waste which contains material capable of being readily decomposed by microorganisms and which is likely to produce offensive odors.

"Pyrolysis" means the process in which solid wastes are heated in an enclosed device in the absence of oxygen to vaporization, producing a hydrocarbon-rich gas capable of being burned for recovery of energy.

"Recyclable materials" means those solid wastes that are separated for recycling or reuse, including, but not limited to, papers, metals, and glass, that are identified as recyclable material pursuant to a local comprehensive solid waste plan.

"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport.

"Representative sample" means a sample that can be expected to exhibit the average properties of the sample source.

"Reserved" means a section having no requirements and which is set aside for future possible rule making as a note to the regulated community.

"Reusable containers" means containers that are used more than once to handle solid waste, such as garbage cans.

"Runoff" means any rainwater, leachate or other liquid that drains over land from any part of the facility.

"Run-on" means any rainwater or other liquid that drains over land onto any part of a facility.

"Scavenging" means the removal of materials at a disposal facility, or intermediate solid waste-handling facility, without the approval of the owner or operator and the jurisdictional health department.

"Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in two hundred fifty years.

"Setback" means that part of a facility that lies between the active area and the property boundary.

"Sewage sludge" means solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated.

"Soil amendment" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department, such as biosolids as defined in chapter 70.95J RCW, Municipal sewage sludge—Biosolids and wastewater, as regulated in chapter 90.48 RCW, Water pollution control.

"Solid waste" or **"wastes"** means all putrescible and nonputrescible solid and semisolid wastes including, but not

limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

"Solid waste handling" means the management, storage, collection, transportation, treatment, use, processing or final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery of energy resources from such wastes or the conversion of the energy in such wastes to more useful forms or combinations thereof.

"Solid waste handling unit" means discrete areas of land, sealed surfaces, liner systems, excavations, facility structures, or other appurtenances within a facility used for solid waste handling.

"Source separation" means the separation of different kinds of solid waste at the place where the waste originates.

"Storage" means the holding of solid waste materials for a temporary period.

"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"Surface water" means all lakes, rivers, ponds, wetlands, streams, inland waters, salt waters and all other surface water and surface water courses within the jurisdiction of the state of Washington.

"Tank" means a stationary device designed to contain an accumulation of liquid or semisolid materials meeting the definition of solid waste or leachate, and which is constructed primarily of nonearthen materials to provide structural support.

"Transfer station" means a permanent, fixed, supplemental collection and transportation facility, used by persons and route collection vehicles to deposit collected solid waste from off-site into a larger transfer vehicle for transport to a solid waste handling facility.

"Treatment" means the physical, chemical, or biological processing of solid waste to make such solid wastes safer for storage or disposal, amenable for recycling or energy recovery, or reduced in volume.

"Twenty-five-year storm" means a storm of twenty-four hours duration and of such intensity that it has a four percent probability of being equaled or exceeded each year.

"Type 1 feedstocks" means source-separated yard and garden wastes, wood wastes, agricultural crop residues, wax-coated cardboard, preconsumer vegetative food wastes, other similar source-separated materials that the jurisdictional health department determines to have a comparable low level of risk in hazardous substances, human pathogens, and physical contaminants.

"Type 2 feedstocks" means manure and bedding from herbivorous animals that the jurisdictional health department determines to have a comparable low level of risk in hazardous substances and physical contaminants when compared to a type 1 feedstock.

"Type 3 feedstocks" means meat and postconsumer source-separated food wastes or other similar source-separated materials that the jurisdictional health department determines to have a comparable low level of risk in hazardous substances and physical contaminants, but are likely to have high levels of human pathogens.

"Type 4 feedstocks" means mixed municipal solid wastes, postcollection separated or processed solid wastes, industrial solid wastes, industrial biological treatment sludges, or other similar compostable materials that the jurisdictional health department determines to have a comparable high level of risk in hazardous substances, human pathogens and physical contaminants.

"Universal wastes" means universal wastes as defined in chapter 173-303 WAC, Dangerous waste regulations. Universal wastes include, but may not be limited to, dangerous waste batteries, mercury-containing thermostats, and universal waste lamps generated by fully regulated dangerous waste generators or CESQGs.

"Unstable area" means a location that is susceptible to forces capable of impairing the integrity of the facility's liners, monitoring system or structural components. Unstable areas can include poor foundation conditions and areas susceptible to mass movements.

"Vadose zone" means that portion of a geologic formation in which soil pores contain some water, the pressure of that water is less than atmospheric pressure, and the formation occurs above the zone of saturation.

"Vector" means a living animal, including, but not limited to, insects, rodents, and birds, which is capable of transmitting an infectious disease from one organism to another.

"Vermicomposting" means the controlled and managed process by which live worms convert organic residues into dark, fertile, granular excrement.

"Waste tires" means any tires that are no longer suitable for their original intended purpose because of wear, damage or defect. Used tires, which were originally intended for use on public highways that are considered unsafe in accordance with RCW 46.37.425, are waste tires. Waste tires also include quantities of used tires that may be suitable for their original intended purpose when mixed with tires considered unsafe per RCW 46.37.425.

"Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

"Wood derived fuel" means wood pieces or particles used as a fuel for energy recovery, which contain paint, bonding agents, or creosote. Wood derived fuel does not include wood pieces or particles coated with paint that contains lead or mercury, or wood treated with other chemical preservatives such as pentachlorophenol, copper naphthanate, or copper-chrome-arsenate.

"Wood waste" means solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, construction, demolition, handling and storage of raw materials, trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hogged fuel, and log sort yard waste, but does not include wood pieces or particles containing paint, laminates,

bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

"Yard debris" means plant material commonly created in the course of maintaining yards and gardens and through horticulture, gardening, landscaping or similar activities. Yard debris includes, but is not limited to, grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, and vegetable garden debris.

"Zone of saturation" means that part of a geologic formation in which soil pores are filled with water and the pressure of that water is equal to or greater than atmospheric pressure.

[Statutory Authority: Chapter 70.95 RCW. 05-11-033 (Order 04-12), § 173-350-100, filed 5/10/05, effective 6/10/05; 03-03-043 (Order 99-24), § 173-350-100, filed 1/10/03, effective 2/10/03.]

WAC 173-350-200 Beneficial use permit exemptions. (1) *Beneficial use permit exemption - Applicability*. Any person may apply to the department for exemption from the permitting requirements of this chapter for beneficial use of solid waste. Applications for permit exemptions shall be prepared and submitted in accordance with the requirements of subsections (3) and (4) of this section. Upon the department's approval of an application for permit exemption, all approved beneficial use of solid waste shall be conducted in accordance with the terms and conditions for approval, as well as those general terms and conditions prescribed in subsection (2) of this section.

(2) *Beneficial use permit exemption - General terms and conditions*.

(a) The following general terms and conditions apply to all permit exempt beneficial uses of solid waste. All persons beneficially using solid waste approved for permit exemption in accordance with this section shall:

(i) Conduct the beneficial use in a manner that does not present a threat to human health or the environment;

(ii) Ensure that the material is not a dangerous waste regulated under chapter 173-303 WAC, Dangerous waste regulations;

(iii) Not dilute a waste, or the residual from treatment of a waste, as a substitute for treatment or disposal;

(iv) Comply with all applicable federal, state, and local rules, regulations, requirements and codes, and local land use requirements;

(v) Immediately notify the department and the jurisdictional health department of any accidental release(s) of contaminants to the environment;

(vi) Separate wastes intended for beneficial use from wastes that are destined for disposal, prior to entering the location where the beneficial use will occur;

(vii) Manage the waste in a manner that controls vector attraction;

(viii) Ensure that solid waste being stored prior to being beneficially used is managed in accordance with the requirements of all applicable sections of this chapter;

(ix) Allow the department or the jurisdictional health department, at any reasonable time, to inspect the location where a permit exempt solid waste is stored or used to ensure compliance with applicable terms and conditions of this section; and

(x) Prepare and submit a copy of an annual report to the department by April 1st on forms supplied by the department. The annual report shall detail the activities of the exemption holder during the previous calendar year and shall include the following information:

(A) The permit exemption number applicable to the beneficial use activity;

(B) The name, address, and telephone number of the exemption holder;

(C) The amount of solid waste beneficially used;

(D) A certification that the nature of the waste and the operating practices have been in compliance with the terms and conditions of this section and the beneficial use permit exemption during the calendar year; and

(E) Any additional information that may be specified by the department under the beneficial use permit exemption.

(b) In addition to the general terms and conditions established in (a) of this subsection, solid wastes applied to the land for agronomic value or soil amending capability under a beneficial use permit exemption shall:

(i) Meet the metals standards required by the Washington state department of agriculture (WSDA) for registered commercial fertilizers by following the procedures of WAC 16-200-7062 through 16-200-7064, Feeds, fertilizers, and livestock remedies;

(ii) Be applied at an application rate and in a manner that ensures protection of ground water and surface water. At a minimum, the application rate shall take into account the concentration of available nutrients and micronutrients in the soil amendment, other solid waste applied to the land, residual nutrients at the application site(s), additional sources of nutrients, pollutant loading rates, soil and waste pH, soil type, crop type and vertical separation from ground water; and

(iii) Not be stored at an application site during periods when precipitation or wind will cause migration from the storage area, unless the site is specifically designed to accommodate storage during these periods. The quantity stored at an application site shall not exceed the maximum needed to meet the annual needs of the site based on the approved application rate. When a soil amendment is stored at an application site it shall not contain liquid waste unless the requirements of WAC 173-350-330 are met.

(c) The department may require a person operating under any exemption issued under this section to meet additional or more stringent requirements for protection of human health and the environment, or to ensure compliance with other applicable regulations:

(i) At the time the department approves an application for a beneficial use permit exemption; or

(ii) When new information becomes available that warrants additional protections, but in the opinion of the department does not necessitate revocation of the beneficial use permit exemption.

(d) The department shall notify in writing the exempted party and all jurisdictional health departments of any additional or more stringent requirements.

(3) *Beneficial use permit exemption - Initial application procedure*. Any person(s) interested in obtaining a statewide exemption from solid waste permitting requirements for the beneficial use of a solid waste must demonstrate to the satisfaction of the department that the proposed use does not

present a threat to human health and the environment. Applications shall be submitted to the department on a form supplied by the department. All application attachments and other submittals must be on paper no larger than 11 inch x 17 inch. The application shall at a minimum contain the following:

(a) The name(s), address(es) and phone number(s) of the waste generator(s);

(b) The name(s), address(es) and phone number(s) of the applicant. If the applicant is a broker or other third party the uniform business identifier number shall also be included;

(c) A list of all product(s) made by the waste generator(s);

(d) A list of all feedstocks used to manufacture the product(s);

(e) A description of the solid waste and the proposed beneficial use;

(f) A description of how the waste will be transported or distributed for the proposed beneficial use;

(g) A description of other materials that contribute or potentially contribute contaminants/pollutants to the waste to be beneficially used;

(h) A schematic and text summary of the waste generator(s) operations, including all points where wastes are generated, treated or stored;

(i) A description of how terms and conditions of subsection (2)(a) of this section will be met;

(j) A State Environmental Policy Act checklist;

(k) If the beneficial use is proposed as a soil amendment, or for other solid wastes beneficially applied to the land, a description of how the terms and conditions of subsection (2)(b) of this section will be met; and

(l) Any additional information deemed necessary by the department.

(4) *Beneficial use permit exemption - Secondary application procedure*. Beneficial use permit exemptions, approved by the department in accordance with the procedures of subsection (5) of this section, are granted solely to the original applicant(s). Any person, other than the original applicant(s), interested in beneficially using solid waste pursuant to the terms and conditions of an existing permit exemption shall apply to the department by following the procedures described in subsection (3) of this section.

(5) *Beneficial use permit exemption - Determination, revocation, and appeals*.

(a) The department shall review every application for completeness. Once an application is determined to be complete, the department shall:

(i) Notify the applicant that the application has been determined to be complete.

(ii) Forward a copy of the complete application and supporting documentation to all jurisdictional health departments for review and comment. Within forty-five calendar days, the jurisdictional health departments shall forward their comments and any other information that they deem relevant to the department.

(iii) The department shall develop and maintain a register of all complete applications it receives for beneficial use exemptions. The register shall include information regarding the proposed beneficial use and process for submitting comments. The department shall maintain a list of interested parties and forward the register to those parties. The department may provide the register and application information in an electronic form upon request by an interested party.

(b) Once a determination is made by the department that an application is complete and the public review process has begun, any changes to the application or submittal of additional information by the applicant shall result in a withdrawal of the completeness determination by the department and termination of the public review process. The department shall resume review of the amended application in accordance with the procedures of (a) of this subsection.

(c) After completion of the comment period, the department shall review comments, technical information from agency and other publications, standards published in regulations, and other information deemed relevant by the department to render a decision.

(d) Every complete application shall be approved or disapproved by the department in writing within ninety days after receipt. Exemptions shall be granted by the department only to those beneficial uses of solid waste that the department determines do not present a threat to human health or the environment.

(e) Upon approval of the application by the department, the beneficial use of the solid waste by the original applicant is exempt from solid waste handling permitting for use anywhere in the state consistent with the terms and conditions of the approval.

(f) The department may require a person operating under any exemption covered by this section to apply to the jurisdictional health department for a solid waste handling permit under the applicable section of this chapter if:

(i) The exemption holder fails to comply with the terms and conditions of this section and the approval; or

(ii) The department determines that the exemption was obtained by misrepresenting or omitting any information that potentially could have affected the issuance or terms and conditions of an exemption; or

(iii) New information not previously considered or available as part of the application demonstrates to the department that management of the waste under a beneficial use permit exemption may present a threat to human health or the environment.

(g) The department shall provide written notification to the exempted party and all jurisdictional health departments of any requirement to apply for a permit under this chapter. A person that is required by the department to apply for permit coverage shall immediately cease beneficial use activities until all necessary solid waste handling permits are issued.

(h) The terms and conditions of subsection (2)(a)(viii) of this section shall remain in effect until the solid waste handling permit process has been completed.

(i) Any person that violates the terms and conditions of a beneficial use permit exemption issued under this section may be subject to the civil penalty provisions of RCW 70.95.315.

(j) Appeals of the department's decision to issue or deny or revoke a beneficial use permit exemption shall be made to the pollution control hearings board by filing with the hearings board a notice of appeal within thirty days of the decision of the department. The board's review of the decision shall be made in accordance with chapter 43.21B RCW,

Environmental hearing office—Pollution control hearings board, and any subsequent appeal of a decision of the board shall be made in accordance with RCW 43.21B.180.

Persons that may appeal are:

(i) For waste derived soil amendments any aggrieved party may appeal.

(ii) For all other beneficial uses of solid waste any jurisdictional health department or the applicant may appeal.

(6) *Beneficial use permit exemption - Solid waste exempt from permitting by rule*. Reserved.

Note: RCW 70.95.300 contains provisions that **allow** the department to exempt from permitting certain beneficial uses of solid waste by rule. The statute also requires the department to develop an application and approval process by which a person could apply for a beneficial use permit exemption. At this time the department has chosen to limit rule making to development of the required application and approval process, and hold a section in reserve for future development of a list of approved beneficial uses.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-200, filed 1/10/03, effective 2/10/03.]

WAC 173-350-210 Recycling. (1) *Recycling - Applicability*. These standards apply to recycling solid waste. These standards do not apply to:

(a) Storage, treatment or recycling of solid waste in piles which are subject to WAC 173-350-320;

(b) Storage or recycling of solid waste in surface impoundments which are subject to WAC 173-350-330;

(c) Composting facilities subject to WAC 173-350-220;

(d) Solid waste that is beneficially used on the land that is subject to WAC 173-350-230;

(e) Storage of waste tires prior to recycling which is subject to WAC 173-350-350;

(f) Storage of moderate risk waste prior to recycling which is subject to WAC 173-350-360;

(g) Energy recovery or incineration of solid waste which is subject to WAC 173-350-240;

(h) Intermediate solid waste handling facilities subject to WAC 173-350-310.

(2) *Recycling - Permit exemption and notification*.

(a) In accordance with RCW 70.95.305, recycling of solid waste is subject solely to the requirements of (b) of this subsection and is exempt from solid waste handling permitting. Any person engaged in recycling that does not comply with the terms and conditions of (b) of this subsection is required to obtain a permit from the jurisdictional health department in accordance with the requirements of WAC 173-350-490. In addition, violations of the terms and conditions of (b) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(b) Recycling shall be conducted in conformance with the following terms and conditions in order to maintain permit exempt status:

(i) Meet the performance standards of WAC 173-350-040;

(ii) Accept only source separated solid waste for the purpose of recycling;

(iii) Allow inspections by the department or jurisdictional health department at reasonable times;

(iv) Notify the department and jurisdictional health department, thirty days prior to operation, or ninety days from the effective date of the rule for existing recycling operations, of the intent to conduct recycling in accordance with this section. Notification shall be in writing, and shall include:

(A) Contact information for the person conducting the recycling activity;

(B) A general description of the recycling activity;

(C) A description of the types of solid waste being recycled; and

(D) An explanation of the recycling processes and methods;

(v) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail recycling activities during the previous calendar year and shall include the following information:

(A) Name and address of the recycling operation;

(B) Calendar year covered by the report;

(C) Annual quantities and types of waste received, recycled and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4); and

(D) Any additional information required by written notification of the department.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-210, filed 1/10/03, effective 2/10/03.]

WAC 173-350-220 Composting facilities. (1) *Composting facilities - Applicability*.

(a) This section is applicable to all facilities or sites that treat solid waste by composting. This section is not applicable to:

(i) Composting used as a treatment for dangerous wastes regulated under chapter 173-303 WAC, Dangerous waste regulation;

(ii) Composting used as a treatment for petroleum contaminated soils regulated under WAC 173-350-320;

(iii) Treatment of liquid sewage sludge or biosolids in digesters at wastewater treatment facilities regulated under chapter 90.48 RCW, Water pollution control and chapter 70.95J RCW, Municipal sewage sludge—Biosolids;

(iv) Treatment of other liquid solid wastes in digesters regulated under WAC 173-350-330; and

(v) Composting biosolids when permitted under chapter 173-308 WAC, Biosolids management.

(b) In accordance with RCW 70.95.305, the operation of the following activities in this subsection are subject solely to the requirements of (c) of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (c) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (c) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(i) Production of substrate used solely on-site to grow mushrooms;

(ii) Vermicomposting, when used to process Type 1, Type 2, or Type 3 feedstocks generated on-site;

(iii) Composting of Type 1 or Type 2 feedstocks with a volume limit of forty cubic yards of material on-site at any

time. Material on-site includes feedstocks, partially composted feedstocks, and finished compost;

(iv) Composting of food waste generated on-site and composted in containers designed to prohibit vector attraction and prevent nuisance odor generation. Total volume of the containers shall be limited to ten cubic yards or less;

(v) Agricultural composting when all the agricultural wastes are generated on-site and all finished compost is used on-site;

(vi) Agricultural composting when any agricultural wastes are generated off-site, and all finished compost is used on-site, and total volume of material is limited to one thousand cubic yards on-site at any time. Material on-site includes feedstocks, partially composted feedstocks, and finished compost; and

(vii) Agricultural composting at registered dairies when the composting is a component of a fully certified dairy nutrient management plan as required by chapter 90.64 RCW, Dairy Nutrient Management Act.

(viii) Composting of Type 1 or Type 2 feedstocks when more than forty cubic yards and less than two hundred fifty cubic yards of material is on-site at any one time.

(ix) Agricultural composting, when any of the finished compost is distributed off-site and when it meets the following requirements:

(A) More than forty cubic yards, but less than one thousand cubic yards of agricultural waste is on-site at any time; and

(B) Agricultural composting is managed according to a farm management plan written in conjunction with a conservation district, a qualified engineer, or other agricultural professional able to certify that the plan meets applicable conservation practice standards in the *Washington Field Office Technical Guide* produced by the Natural Resources Conservation Service.

(x) Vermicomposting when used to process Type 1 or Type 2 feedstocks generated off-site. Total volume of materials is limited to one thousand cubic yards on-site at any one time.

(c) Composting operations identified in subsection (b) shall be managed according to the following terms and conditions to maintain their exempt status:

(i) Comply with the performance standards of WAC 173-350-040;

(ii) Protect surface water and ground water through the use of best management practices and all known available and reasonable methods of prevention, control, and treatment as appropriate. This includes, but is not limited to, setbacks from wells, surface waters, property lines, roads, public access areas, and site-specific setbacks when appropriate;

(iii) Control nuisance odors to prevent migration beyond property boundaries;

(iv) Manage the operation to prevent attraction of flies, rodents, and other vectors;

(v) Conduct an annual analysis, prepared in accordance with the requirements of subsection (4)(a)(viii) of this section, for composted material that is distributed off-site from categorically exempt facilities described in subsection (1)(b)(vii) through (ix) of this section.

(vi) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st for categorically exempt facilities described in subsection (1)(b)(vii) through (ix) of this section. Annual reports are not required for facilities operating under the permit exemption provided in (b)(vii) of this subsection if the composted material is not distributed off-site. The annual report shall be on forms supplied by the department and shall detail facility activities during the previous calendar year and shall include the following information:

(A) Name and address of the facility;

(B) Calendar year covered by the report;

(C) Annual quantity and type of feedstocks received and compost produced, in tons;

(D) Annual quantity of composted material sold or distributed, in tons;

(E) Results of the annual analysis of composted material required by subsection (1)(c)(v) of this section; and

(F) Any additional information required by written notification of the department.

(vii) Allow the department or the jurisdictional health department to inspect the site at reasonable times;

(viii) For activities under (b)(viii) through (x) of this subsection, and registered dairies where compost is distributed off-site, the department and jurisdictional health department shall be notified in writing thirty days prior to beginning any composting activity. Notification shall include name of owner or operator, location of composting operation and identification of feedstocks.

(2) *Composting facilities - Location standards*. There are no specific location standards for composting facilities subject to this chapter; however, composting facilities must meet the requirements provided under WAC 173-350-040(5).

(3) *Composting facilities - Design standards*. The owner or operator of a composting facility shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. Scale drawings of the facility including the location and size of feedstock and finished product storage areas, compost processing areas, fixed equipment, buildings, leachate collection devices, access roads and other appurtenant facilities; and design specifications for compost pads, storm water run-on prevention system, and leachate collection and conveyance systems shall be provided. All composting facilities shall be designed and constructed to meet the following requirements:

(a) When necessary to provide public access, all-weather roads shall be provided from the public highway or roads to and within the compost facility and shall be designed and maintained to prevent traffic congestion, traffic hazards, dust and noise pollution;

(b) Composting facilities shall separate storm water from leachate by designing storm water run-on prevention systems, which may include covered areas (roofs), diversion swales, ditches or other designs to divert storm water from areas of feedstock preparation, active composting and curing;

(c) Composting facilities shall collect any leachate generated from areas of feedstock preparation, active composting and curing. The leachate shall be conveyed to a leachate holding pond, tank or other containment structure. The leachate holding structure shall be of adequate capacity to collect the amount of leachate generated, and the volume calculations shall be based on the facility design, monthly water

balance, and precipitation data. Leachate holding ponds and tanks shall be designed according to the following:

(i) For leachate ponds at registered dairies, the design and installation shall meet Natural Resources Conservation Service standards for a waste storage facility in the *Washington Field Office Technical Guide*.

(ii) For leachate ponds at composting facilities other than registered dairies, the pond shall be designed to meet the following requirements:

(A) Have a liner consisting of a minimum 30-mil thickness geomembrane overlying a structurally stable foundation to support the liners and the contents of the impoundment. High density polyethylene geomembranes used as primary liners or leak detection liners shall be at least 60-mil thick to allow for proper welding. The jurisdictional health department may approve the use of alternative designs if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection;

(B) Have dikes and slopes designed to maintain their structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation;

(C) Have freeboard equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation. The jurisdictional health department may reduce the freeboard requirement provided that other engineering controls are in place which prevent overtopping. These engineering controls shall be specified during the permitting process;

(D) Leachate ponds that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the dike and which would be released by a failure of the containment dike shall be reviewed and approved by the dam safety section of the department.

(iii) Tanks used to store leachate shall meet design standards in WAC 173-350-330 (3)(b).

(d) Composting facilities shall be designed with process parameters and management procedures that promote an aerobic composting process. This requirement is not intended to mandate forced aeration or any other specific composting technology. This requirement is meant to ensure that compost facility designers take into account porosity, nutrient balance, pile oxygen, pile moisture, pile temperature, and retention time of composting when designing a facility.

(e) Incoming feedstocks, active composting, and curing materials shall be placed on compost pads that meet the following requirements:

(i) All compost pads shall be curbed or graded in a manner to prevent ponding, run-on and runoff, and direct all leachate to collection devices. Design calculations shall be based upon the volume of water resulting from a twenty-five-year storm event as defined in WAC 173-350-100;

(ii) All compost pads shall be constructed over soils that are competent to support the weight of the pad and the proposed composting materials;

(iii) The entire surface area of the compost pad shall maintain its integrity under any machinery used for composting activities at the facility; and

(iv) The compost pad shall be constructed of materials such as concrete (with sealed joints), asphaltic concrete, or soil cement to prevent subsurface soil and ground water contamination;

(v) The jurisdictional health department may approve other materials for compost pad construction if the permit applicant is able to demonstrate that the compost pad will meet the requirements of this subsection.

(4) *Composting facilities - Operating standards.* The owner or operator of a composting facility shall:

(a) Operate the facility to:

(i) Control dust, nuisance odors, and other contaminants to prevent migration of air contaminants beyond property boundaries;

(ii) Prevent the attraction of vectors;

(iii) Ensure that only feedstocks identified in the approved plan of operation are accepted at the facility;

(iv) Ensure the facility operates under the supervision and control of a properly trained individual during all hours of operation, and access to the facility is restricted when the facility is closed;

(v) Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to an approved plan of operation;

(vi) Implement and document pathogen reduction activities when Type 2, 3 or 4 feedstocks are composted. Documentation shall include compost pile temperature and notation of turning as appropriate, based on the composting method used. Pathogen reduction activities shall at a minimum include the following:

(A) In vessel composting - the temperature of the active compost pile shall be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three days; or

(B) Aerated static pile - the temperature of the active compost pile shall be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three days; or

(C) Windrow composting - the temperature of the active compost pile shall be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for fifteen days or longer. During the period when the compost is maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher, there shall be a minimum of five turnings of the windrow; or

(D) An alternative method that can be demonstrated by the owner or operator to achieve an equivalent reduction of human pathogens;

(vii) Monitor the composting process according to the plan of operation submitted during the permitting process. Monitoring shall include inspection of incoming loads of feedstocks and pathogen reduction requirements of (a)(vi) of this subsection; and

(viii) Analyze composted material for:

(A) Metals in Table A at the minimum frequency listed in Table C. Compost facilities composting only Type 1 and Type 2 feedstocks are not required to test for molybdenum and selenium. Testing frequency is based on the feedstock type and the volume of feedstocks processed per year;

(B) Parameters in Table B at the minimum frequency listed in Table C. Testing frequency is based on the feedstock type and the volume of feedstocks processed per year;

(C) Nitrogen content at the minimum frequency listed in Table C; and

(D) Biological stability as outlined in United States Composting Council Test Methods for the Examination of Composting and Compost at the minimum frequency listed in Table C;

(E) The jurisdictional health department may require testing of additional metal or contaminants, and/or modify the frequency of testing based on historical data for a particular facility, to appropriately evaluate the composted material.

Table A - Metals

Metal	Limit (mg/kg dry weight)
Arsenic	< = 20 ppm
Cadmium	< = 10 ppm
Copper	< = 750 ppm
Lead	< = 150 ppm
Mercury	< = 8 ppm
Molybdenum[1]	< = 9 ppm
Nickel	< = 210 ppm
Selenium[1]	< = 18 ppm
Zinc	< = 1400 ppm

[1] Not required for composted material made from Type 1, Type 2 or a mixture of Type 1 and Type 2 feedstocks.

Table B - Other Testing Parameters

Parameter	Limit
Manufactured Inerts	< 1 percent
Sharps	0
pH	5 - 10 (range)
Fecal Coliform	< 1,000 Most Probable Number per gram of total solids (dry weight).
Salmonella	< 3 Most Probable Number per 4 grams of total solids (dry weight).

Table C - Frequency of Testing Based on Feedstocks Received

Feedstock Type	< 5,000 cubic yards	= or > 5,000 cubic yards
Type 1 or Type 2	Once per year	Every 10,000 cubic yards or every six months whichever is more frequent
Type 3	Once per quarter (four times per year)	Every 5,000 cubic yards or every other month whichever is more frequent
Type 4	Every 1,000 cubic yards	Every 1,000 cubic yards or once per month whichever is more frequent

(b) Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges, which may cause or lead to the release of waste to the environment or a threat to human health. Inspections shall be conducted at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. For compost facilities with leachate holding ponds, conduct regular liner inspections at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The frequency of inspections shall be specified in the operations plan and shall be based on the type of liner, expected service life of the material, and the site-specific service conditions. The jurisdictional health department shall be given sufficient notice and have the opportunity to be present during liner inspections. An inspection log or summary shall be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least five years from the date of inspection. Inspection records shall be available to the jurisdictional health department upon request.

(c) Maintain daily operating records of the following:

(i) Temperatures and compost pile turnings for Type 2, Type 3 and Type 4 feedstocks;

(ii) Additional process monitoring data as prescribed in the plan of operation; and

(iii) Results of laboratory analyses for composted materials as required in (a)(viii) of this subsection. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of feedstocks received and compost produced, in tons;

(iv) Annual quantity of composted material sold or distributed, in tons;

(v) Annual summary of laboratory analyses of composted material; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan of operation shall convey to site personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) List of feedstocks to be composted, including a general description of the source of feedstocks;

(ii) A description of how wastes are to be handled on-site during the facility's active life including:

(A) Acceptance criteria that will be applied to the feedstocks;

(B) Procedures for ensuring that only the waste described will be accepted;

(C) Procedures for handling unacceptable wastes;

(D) Mass balance calculations for feedstocks and amendments to determine an acceptable mix of materials for efficient decomposition;

(E) Material flow plan describing general procedures to manage all materials on-site from incoming feedstock to finished product;

(F) A description of equipment, including equipment to add water to compost as necessary;

(G) Process monitoring plan, including temperature, moisture, and porosity;

(H) Pathogen reduction plan for facilities that accept Type 2, Type 3, and Type 4 feedstocks;

(I) Sampling and analysis plan for the final product;

(J) Nuisance odor management plan (air quality control plan);

(K) Leachate management plan, including monthly water balance; and

(L) Storm water management plan;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspections and inspection logs;

(iv) A neighbor relations plan describing how the owner or operator will manage complaints;

(v) Safety, fire and emergency plans;

(vi) Forms for recordkeeping of daily weights or volumes of incoming feedstocks by type and finished compost product, and process monitoring results; and

(xvii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Composting facilities - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for composting facilities subject to this chapter; however, composting facilities must meet the requirements provided under WAC 173-350-040(5).

(6) *Composting facilities - Closure requirements*. The owner or operator of a composting facility shall:

(a) Notify the jurisdictional health department sixty days in advance of closure. At closure, all solid waste, including but not limited to, raw or partially composted feedstocks, and leachate from the facility shall be removed to another facility that conforms with the applicable regulations for handling the waste.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include methods of removing solid waste materials from the facility.

(7) *Composting facilities - Financial assurance requirements*. There are no specific financial assurance requirements for composting facilities subject to this chapter; however, composting facilities must meet the requirements provided under WAC 173-350-040(5).

(8) *Composting facilities - Permit application contents*. The owner or operator of a composting facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(b) A plan of operation meeting the requirements of subsection (4) of this section; and

(c) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Composting facilities - Construction records*. The owner or operator of a composting facility shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

(10) *Composting facilities - Designation of composted materials.* Composted materials meeting the limits for metals in Table A and the parameters of Table B of this section, and having a stability rating of very stable, stable, or moderately unstable as determined by the analysis required in subsection (4)(a)(viii)(D) of this section, shall no longer be considered a solid waste and shall no longer be subject to this chapter. Composted materials that do not meet these limits are still considered solid waste and are subject to management under chapter 70.95 RCW, Solid waste management—Reduction and recycling.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-220, filed 1/10/03, effective 2/10/03.]

WAC 173-350-230 Land application. (1) *Land application - Applicability*. This section applies to solid waste that is beneficially used on the land for its agronomic value, or soil-amending capability, including land reclamation. This section does not apply to:

(a) The application of commercial fertilizers registered with the Washington state department of agriculture as provided in RCW 15.54.325, and which are applied in accordance with the standards established in RCW 15.54.800(3);

(b) Biosolids regulated under chapter 173-308 WAC, Biosolids management;

(c) Composted materials no longer considered solid waste under WAC 173-350-220(10);

(d) Dangerous waste regulated under chapter 173-303 WAC Dangerous waste regulations;

(e) Waste derived soil amendments exempted from permitting under WAC 173-350-200; and

(f) Solid waste used to improve the engineering characteristics of soil.

(2) *Land application - Location standards*. There are no specific location standards for land application of solid waste subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(3) *Land application - Design standards*. There are no specific design standards for land application of solid waste subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(4) *Land application - Operating standards.* The owner or operator of a land application site shall operate the site in compliance with the performance standards of WAC 173-350-040. The jurisdictional health department shall determine the need for environmental monitoring to ensure compliance with the performance standards. In addition the owner or operator shall:

(a) Operate the site to ensure that:

(i) For waste stored in piles on the site:

(A) Contamination of ground water, surface water, air and land during storage and in case of fire or flood is prevented;

(B) The potential for combustion within the pile and the potential for combustion from other sources is minimized;

(C) The duration of on-site waste storage is limited to one year, or less if the jurisdictional health department believes it is necessary to prevent the contamination of ground water, surface water, air and land; and

(D) The amount of material on site does not exceed the amount that could potentially be applied to the site during a one-year period in accordance with the plan of operations;

(ii) For storage of liquid waste or semisolid waste in surface impoundments or tanks, the requirements of WAC 173-350-330 are met;

(iii) Land application occurs at a predictable application rate determined as follows:

(A) For agricultural applications, solid waste shall be applied to the land at a rate that does not exceed the agronomic rate. The agronomic rate should be based on Washington State University cooperative extension service fertilizer guidelines or other appropriate guidance accepted by the jurisdictional health department;

(B) For the purposes of land reclamation or other soil amending activities, the application rate may be designed to achieve a soil organic matter content or other soil physical characteristic and promote long-term soil productivity, with consideration of the carbon-to-nitrogen ratio to control nutrient leaching; and

(C) For liquid wastes, the application rate shall also be based on soil permeability and infiltration rate.

(b) Maintain daily operating records of the amount and type of waste applied to the land, the crop and any additional nutrient inputs. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(c) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the activities during the previous calendar year and shall include the following information:

(i) Site address or legal description;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of waste received from each source;

(iv) For each crop grown: The acreage used, the amount, type and source of each waste applied, the crop, and any additional nutrient inputs to the land, such as manure, biosolids, or commercial fertilizer;

(v) Quantity and type of any waste remaining in storage as of December 31st of the reporting year;

(vi) Any additional waste characterization information required to be obtained as a condition of the permit, and a summary report of that data;

(vii) Any environmental monitoring data required to be obtained as a condition of the permit, and a summary report of that data; and

(viii) Any additional information required by the jurisdictional health department as a condition of the permit;

(d) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid wastes to be handled at the site;

(ii) A description of how wastes are to be handled on-site during the life of the site including:

(A) How wastes will be delivered to the site and meet any local agency notification requirements;

(B) A description of the process, system and equipment that will be used to apply the waste to the land that explains:

(I) How the equipment and system will be calibrated to deliver waste at the agronomic rate;

(II) Whether the waste will be allowed to remain on the surface of the land, will be tilled into the soil, or will be injected into the soil at the time of application;

(III) When the waste will be applied to the land relative to crop and livestock management practices; and

(IV) Any proposed restrictions on application related to climatic factors including typical precipitation, twenty-five-year storm events as defined in WAC 173-350-100, temperature, and wind, or site conditions including frozen soils and seasonal high ground water;

(C) A description of how the waste will be managed at all points during storage and application to control attraction to disease vectors and to mitigate nuisance odor impacts;

(iii) A spill response plan including the names and phone numbers of all contacts to be notified in the event of a spill and how the spill will be cleaned up;

(iv) If the seasonal high ground water is three feet or less below the surface, a management plan describing how ground water will be protected;

(v) A waste monitoring plan providing analytical results representative of the waste being applied to the land, over time, taking into account the rate of production of the waste, timing of delivery, and storage;

(vi) The forms used to record volumes, weights and waste application data;

(vii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Land application - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for land application sites subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(6) *Land application - Closure requirements*. The owner or operator of all land application sites shall notify the juris-

dictional health department sixty days in advance of closure. All land application sites shall be closed by applying all materials in storage in accordance with the permit, or by removing those materials to a facility that conforms to the applicable regulations for handling the waste.

(7) *Land application - Financial assurance requirements*. There are no specific financial assurance requirements for land application sites subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(8) *Land application - Permit application contents*.

(a) The owner or operator of land application sites subject to this section shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(i) Contact information, including name, contact person, mailing address, phone, fax, e-mail for:

(A) Any person who generates waste that will be applied to the site;

(B) The person who is applying for a permit (the permit holder);

(C) The person who prepares the permit application; and

(D) The person who owns the site where the waste will be applied.

(ii) Statement of intended use. The permit application shall contain a clear explanation of the benefit to be obtained from land application of the material. Avoidance of disposal is not adequate justification for land application of solid waste.

(iii) An analysis of the waste which includes:

(A) A description of the material to be applied to the land;

(B) A description of the processes by which the material is generated and treated including all processed feedstocks;

(C) Any pseudonyms or trade names for the material;

(D) A discussion of the potential for the material to generate nuisance odors or to attract disease vectors, including any complaints regarding nuisance odors associated with this material;

(E) An analysis of pollutant concentrations of the following reported on a dry weight basis:

(I) Total arsenic;

(II) Total barium;

(III) Total cadmium;

(IV) Total chromium;

(V) Total copper;

(VI) Total lead;

(VII) Total mercury;

(VIII) Total molybdenum;

(IX) Total nickel;

(X) Total selenium;

(XI) Total zinc.

(F) An analysis of nutrients at a minimum to include total Kjeldahl nitrogen, total nitrate-nitrogen, total ammonia- and ammonium-nitrogen, total phosphorus, and extractable potassium, reported on a dry weight basis;

(G) An analysis of physical/chemical parameters to include at a minimum: Total solids, total volatile solids, pH, electrical conductivity, total organic carbon;

(H) A discussion of any pathogens known or suspected to be associated with this material, including those which can cause disease in plants, animals, or humans;

(I) The concentration of fecal coliform bacteria expressed as CFU or MPN per gram of dry solid material; and

(J) Any additional analysis required by the jurisdictional health department. The jurisdictional health department may reduce the analytical requirements of this section. Methods of analysis are to be determined by the jurisdictional health department.

(iv) A comprehensive site characterization including:

(A) A description of current practices and a brief description of past practices on the application site, including application of wastes, soil amendments, manures, biosolids, liming agents, and other fertilization practices, livestock usage, irrigation practices, and crop history. Also indicate whether any management plan has been prepared for the site such as a farm, forest, or nutrient management plan. Discuss any potential changes to management practices at the site;

(B) A description of the climate at the application site including typical precipitation, precipitation of a twenty-five-year storm, as defined in WAC 173-350-100, temperatures, and seasonal variations;

(C) A brief discussion of the potential for run-on and runoff, and typical depths to seasonal high ground water;

(D) An analysis of soil nutrients including residual nitrate in the upper two feet of soil in one foot increments;

(E) A site map showing property boundaries and ownership of adjacent properties with the application areas clearly shown, and with the latitude and longitude of the approximate center of each land application site;

(F) A topographic relief map of the site extending one quarter beyond the site boundaries at a scale of 1:24,000 or other scale if specified by the jurisdictional health department;

(G) Show the following information on either of the maps provided or on additional maps if needed:

(I) Location of the site by street address, if applicable;

(II) The zoning classification of the site;

(III) The means of access to the site;

(IV) The size of the site in acres, and if applicable, the size of individual fields, units, and application areas;

(V) The location and size of any areas which will be used to store the waste;

(VI) Adjacent properties, uses, and their zoning classifications;

(VII) Delineation of wetlands on the site;

(VIII) Any portion of the site that falls within a wellhead protection area;

(IX) Any seasonal surface water bodies located on the site or perennial surface water bodies within one-quarter mile of the site;

(X) The location of all wells within one-quarter mile of the boundary of the application area which are listed in public records or otherwise known, whether for domestic, irrigation, or other purposes;

(XI) Any setback or buffer to surface water, property boundaries, or other feature, if proposed;

(XII) The location of any critical areas or habitat identified under the Endangered Species Act, local growth management plans, habitat conservation plans, conservation reserve program, or local shoreline master program;

(XIII) A copy of the Natural Resources Conservation Service soil survey map from the most recent edition of the soil survey that includes the distribution of soil types with an overlay of the site boundaries; and

(XIV) A description of the soil type(s), textural classes, and soil depths present on the site as determined by the most recent edition of the Natural Resources Conservation Service soil survey or from actual field measurements.

(v) A plan of operation meeting the requirements of subsection (4) of this section.

(b) Two or more areas of land under the same ownership or operational control which are not contiguous may be considered as one site for the purposes of permitting, if in the opinion of the jurisdictional health department the areas are sufficiently proximate and management practices are sufficiently similar that viewing them as one proposal would expedite the permit process without compromising the public interest. A jurisdictional health department may also require separate permits for a contiguous area of land if it finds that the character of a proposed site or management practices across the site are sufficiently different that the permit process and public interest would be best served by a more focused approach.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-230, filed 1/10/03, effective 2/10/03.]

WAC 173-350-240 Energy recovery and incineration facilities. (1) *Energy recovery and incineration facilities - Applicability*.

(a) These standards apply to all facilities designed to burn more than twelve tons of solid waste or refuse-derived fuel per day.

(b) These standards do not apply to facilities that burn gases recovered at a landfill or solid waste digesters.

(c) In accordance with RCW 70.95.305, the combustion of wood waste, wood derived fuel, and wastewater treatment sludge generated from the manufacturing of wood pulp or paper, for the purpose of energy recovery is subject solely to the requirements of (d)(i) through (iv) of this subsection and is exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (d)(i) through (iv) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (d)(i) through (iv) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(d) Owners and operators of all categorically exempt energy recovery facilities shall:

(i) Comply with the performance standards of WAC 173-350-040;

(ii) Ensure that only fuels approved in writing by the agency with jurisdiction over the facility for air quality regulation are combusted;

(iii) Allow department and jurisdictional health department representatives to inspect the facility at reasonable times for the purpose of determining compliance with this chapter; and

(iv) Ensure that wastewater treatment sludge generated from the manufacturing of wood pulp or paper is combusted only in energy recovery units at the facility from which it originates.

(2) *Energy recovery and incineration facilities - Location standards*. There are no specific location standards for energy recovery or incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(3) *Energy recovery and incineration facilities - Design standards*. There are no specific design standards for energy recovery or incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(4) *Energy recovery and incineration facilities - Operating standards*. The owner or operator of an energy recovery or incineration facility shall:

(a) Operate the facility to:

(i) Confine solid wastes prior to and after processing to specifically designed piles, surface impoundments, tanks or containers meeting the applicable standards of this chapter. Storage of wastes other than in the specifically designed storage compartments is prohibited. Equipment and space shall be provided in the storage and charging areas, and elsewhere as needed, to allow periodic cleaning as required to maintain the plant in a sanitary and clean condition;

(ii) Handle solid wastes, including combustion residues, in a manner that complies with this chapter;

(iii) Provide recyclable material collection at all facilities that accept municipal solid waste from the general public, self-haul residential, or commercial waste generators; and

(iv) Ensure that dangerous waste is not disposed, treated, stored or otherwise handled, unless the requirements of chapter 173-303 WAC, Dangerous waste regulations, are met.

(b) Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges that may lead to the release of wastes to the environment or cause a threat to human health. The owner or operator shall conduct these inspections as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process.

(c) Maintain daily operating records on the weights and types of wastes received, and number of vehicles delivering waste to the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall also be noted on the operating record. Records shall be maintained for a minimum of five years and shall be available upon request by the jurisdictional health department.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity of each type of solid waste received and incinerated, in tons if available;

(iv) Annual quantity, type and destination of solid waste bypassed, in tons;

(v) Annual quantity of ash disposed and disposal location, in tons; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid wastes to be handled at the facility;

(ii) How solid wastes are to be handled on-site during the facility's active life, including alternative storage, and/or disposal plans for all situations that would result in overfilling of the storage facility;

(iii) A description of how equipment, structures and other systems, including leachate collection and gas collection equipment, are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety, fire and emergency plans including:

(A) Actions to take if there is a fire or explosion;

(B) Actions to take if leaks are detected;

(C) Remedial action programs to be implemented in case of a release of hazardous substances to the environment;

(D) Actions to take for other releases (e.g., failure of runoff containment system);

(v) Forms used to record volumes or weights;

(vi) Other such details to demonstrate that the facility will be operated in accordance with this chapter and as required by the jurisdictional health department.

(5) *Energy recovery and incineration facilities - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for energy recovery and incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(6) *Energy recovery and incineration facilities - Closure requirements*. The owner or operator of an energy recovery or incineration facility shall:

(a) Notify the jurisdictional health department one hundred eighty days in advance of closure. At the time of closure all solid waste shall be removed to a facility that conforms with the applicable regulations for handling the waste.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.

(7) *Energy recovery and incineration facilities - Environmental impact statement required*. In accordance with RCW 70.95.700, no solid waste energy recovery or incineration facility shall be operated prior to the completion of an environmental impact statement containing the considerations required under RCW 43.21C.030 (2)(c) and prepared pursuant to the procedures of chapter 43.21C RCW, State Environmental Policy Act.

(8) *Energy recovery and incineration facilities - Financial assurance requirements*. There are no specific financial assurance requirements for energy recovery facilities and incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(9) *Energy recovery and incineration facilities - Permit application contents*. The owner or operator of an energy recovery or incineration facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each permit application shall contain:

(a) Preliminary engineering reports/plans and specifications that address:

(i) The design of the storage and handling facilities on-site for incoming waste as well as fly ash, bottom ash and any other wastes produced by air or water pollution controls; and

(ii) The design of the incinerator or thermal treater, including charging or feeding systems, combustion air systems, combustion or reaction chambers, including heat recovery systems, ash handling systems, and air pollution and water pollution control systems. Instrumentation and monitoring systems design shall also be included.

(b) A plan of operation that addresses the requirements of subsection (4) of this section; and

(c) A closure plan meeting the requirements of subsection (6) of this section.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-240, filed 1/10/03, effective 2/10/03.]

WAC 173-350-300 On-site storage, collection and transportation standards. (1) *On-site storage, collection and transportation standards - Applicability*. This section is applicable to the temporary storage of solid waste in a container at a premises, business establishment, or industry and the collecting and transporting of the solid waste.

(2) *On-site storage*.

(a) The owner or occupant of any premises, business establishment, or industry shall be responsible for the safe and sanitary storage of all containerized solid wastes accumulated at those premises.

(b) The owner, operator, or occupant of any premises, business establishment, or industry shall store solid wastes in containers that meet the following requirements:

(i) Disposable containers shall be sufficiently strong to allow lifting without breakage and shall be thirty-two gallons in capacity or less where manual handling is practiced;

(ii) Reusable containers, except for detachable containers, shall be:

(A) Rigid and durable;

(B) Corrosion resistant;

(C) Nonabsorbent and water tight;

(D) Rodent-proof and easily cleanable;

(E) Equipped with a close-fitting cover;

(F) Suitable for handling with no sharp edges or other hazardous conditions; and

(G) Equal to or less than thirty-two gallons in volume where manual handling is practiced;

(iii) Detachable containers shall be durable, corrosion-resistant, nonabsorbent, nonleaking and have either a solid cover or screen cover to prevent littering.

(3) *Collection and transportation standards*.

(a) All persons collecting or transporting solid waste shall avoid littering at the loading point, during transport and during proper unloading of the solid waste.

(b) Vehicles or containers used for the collection and transportation of solid waste shall be tightly covered or screened where littering may occur, durable and of easily cleanable construction. Where garbage is being collected or transported, containers shall be cleaned as necessary to prevent nuisance odors and insect breeding and shall be maintained in good repair.

(c) Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such manner that the containers will not fail, and the contents will not spill or leak. Where such spillage or leakage does occur the waste shall be picked up immediately by the collector or transporter and returned to the vehicle or container and the area properly cleaned.

(d) All persons commercially collecting or transporting solid waste shall inspect collection and transportation vehicles at least monthly. Inspection records shall be maintained at the facility normally used to park such vehicles or such other location that maintenance records are kept. Such records shall be kept for a period of at least two years, and be made available upon the request of the jurisdictional health department.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-300, filed 1/10/03, effective 2/10/03.]

WAC 173-350-310 Intermediate solid waste handling facilities. (1) *Intermediate solid waste handling facilities - Applicability*. This section is applicable to any facility engaged in solid waste handling that provides intermediate storage and/or processing prior to transport for final disposal. This includes, but is not limited to, material recovery facilities, transfer stations, baling and compaction sites, and drop box facilities. This section is not applicable to:

(a) Storage, treatment or recycling of solid waste in piles which are subject to WAC 173-350-320;

(b) Storage or recycling of solid waste in surface impoundments which are subject to WAC 173-350-330;

(c) Composting facilities subject to WAC 173-350-220;

(d) Recycling which is subject to WAC 173-350-210;

(e) Storage of waste tires which is subject to WAC 173-350-350;

(f) Storage of moderate risk waste prior to recycling which is subject to WAC 173-350-360;

(g) Energy recovery or incineration of solid waste which is subject to WAC 173-350-240; and

(h) Drop boxes placed at the point of waste generation which is subject to WAC 173-350-300.

(2) *Materials recovery facilities - Permit exemption and notification.*

(a) In accordance with RCW 70.95.305, material recovery facilities managed in accordance with the terms and conditions of (b) of this subsection are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (b) of this subsection is required to obtain a permit from the jurisdictional health department as an intermediate solid waste handling facility and shall comply with the requirements of WAC 173-350-310. In addition, violations of the terms and conditions of (b) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(b) Material recovery facilities shall be managed according to the following terms and conditions to maintain their exempt status:

(i) Meet the performance standards of WAC 173-350-040;

(ii) Accept only source separated recyclable materials and dispose of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, or ten percent by weight per load;

(iii) Allow inspections by the department or jurisdictional health department at reasonable times;

(iv) Notify the department and jurisdictional health department, thirty days prior to operation, or ninety days from the effective date of the rule for existing facilities, of the intent to operate a material recovery facility in accordance with this section. Notification shall be in writing, and shall include:

(A) Contact information for facility owner or operator;

(B) A general description of the facility; and

(C) A description of the types of recyclable materials managed at the facility;

(v) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail facility activities during the previous calendar year and shall include the following information:

(A) Name and address of the facility;

(B) Calendar year covered by the report;

(C) Annual quantities and types of waste received, recycled and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4); and

(D) Any additional information required by written notification of the department.

(3) *Intermediate solid waste handling facilities - Location standards*. There are no specific location standards for intermediate solid waste handling facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided under WAC 173-350-040(5).

(4) *Intermediate solid waste handling facilities - Design standards*. The owner or operator of all intermediate solid waste handling facilities shall prepare engineering reports/plans and specifications to address the following design standards:

(a) Material recovery facilities, transfer stations, baling and compaction sites shall:

(i) Control public access, and prevent unauthorized vehicular traffic and illegal dumping of waste;

(ii) Be sturdy and constructed of easily cleanable materials;

(iii) Provide effective means to control rodents, insects, birds and other vectors;

(iv) Provide effective means to control litter;

(v) Provide protection of the tipping floor from wind, rain or snow;

(vi) Provide pollution control measures to protect surface and ground waters, including runoff collection and discharge designed to handle a twenty-five-year storm as defined in WAC 173-350-100, and equipment cleaning and washdown water;

(vii) Provide pollution control measures to protect air quality; and

(viii) Provide all-weather surfaces for vehicular traffic.

(b) Drop boxes shall be constructed of durable watertight materials with a lid or screen on top that prevents the loss of materials during transport and access by rats and other vectors, and control litter.

(5) *Intermediate solid waste handling facilities - Operating standards*. The owner or operator of an intermediate solid waste handling facility shall:

(a) Operate the facility to:

(i) For material recovery facilities transfer stations, bailing and compaction sites:

(A) Be protective of human health and the environment;

(B) Prohibit the disposal of dangerous waste and other unacceptable waste;

(C) Control rodents, insects, and other vectors;

(D) Control litter;

(E) Prohibit scavenging;

(F) Prohibit open burning;

(G) Control dust;

(H) For putrescible waste, control nuisance odors;

(I) Provide attendant(s) on-site during hours of operation;

(J) Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what materials the facility does not accept and other necessary information posted at the site entrance; and

(K) Have communication capabilities to immediately summon fire, police, or emergency service personnel in the event of an emergency.

(ii) For drop box facilities:

(A) Be serviced as often as necessary to ensure adequate dumping capacity at all times. Storage of waste outside the drop boxes is prohibited;

(B) Be protective of human health and the environment;

(C) Control rodents, insects, and other vectors;

(D) Control litter;

(E) Prohibit scavenging;

(F) Control dust;

(G) For putrescible waste, control nuisance odors; and

(H) Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what materials the facility does not accept and other necessary information posted at the site entrance;

(b) Inspect and maintain the facility to prevent deterioration or the release of wastes to the environment that could pose a threat to human health. Inspection shall be as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records on the weights and types of wastes received or removed from the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity of each type of solid waste handled by the facility, in tons;

(iv) Destination of waste transported from the facility for processing or disposal; and

(v) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid wastes to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during the facility's life, including maximum facility capacity, methods of adding or removing waste from the facility and equipment used;

(iii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility;

(iv) Safety and emergency plans;

(v) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(vi) For putrescible wastes, an odor management plan describing the actions to be taken to control nuisance odors;

(vii) The forms used to record volumes or weights; and

(viii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(6) *Intermediate solid waste handling facilities - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for intermediate solid waste handling facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided under WAC 173-350-040(5).

(7) *Intermediate solid waste handling facilities - Closure requirements*. The owner or operator of an intermediate solid waste handling facility shall:

(a) Notify the jurisdictional health department one hundred eighty days in advance of closure. All waste shall be

removed to a facility that conforms with the applicable regulations for handling the waste.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.

(8) *Intermediate solid waste handling facilities - Financial assurance*. There are no specific financial assurance requirements for intermediate solid waste handling facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided under WAC 173-350-040(5).

(9) *Intermediate solid waste handling facilities - Permit application contents*. The owner or operator of an intermediate solid waste handling facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) For material recovery facilities, transfer stations, baling and compaction sites:

(i) Engineering reports/plans and specifications that address the design standards of subsection (4)(a) of this section;

(ii) A plan of operation meeting the applicable requirements of subsection (5) of this section;

(iii) A closure plan meeting the requirements of subsection (7) of this section;

(b) For drop boxes:

(i) Engineering reports/plans and specifications that address the design standards of subsection (4)(b) of this section;

(ii) A plan of operation meeting the applicable requirements of subsection (5) of this section; and

(iii) A closure plan meeting the requirements of subsection (7) of this section.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-310, filed 1/10/03, effective 2/10/03.]

WAC 173-350-320 Piles used for storage or treatment. (1) *Piles used for storage or treatment - Applicability*.

(a) This section is applicable to solid waste stored or treated in piles where putrescible waste piles that do not contain municipal solid waste are in place for more than three weeks, nonputrescible waste and contaminated soils and dredged material piles are in place for more than three months and municipal solid waste piles are in place for more than three days. This section is not applicable to:

(i) Waste piles located at composting facilities subject to WAC 173-350-220 that are an integral part of the facility's operation;

(ii) Piles of nonputrescible waste stored in enclosed buildings provided that no liquids or liquid waste are added to the pile; and

(iii) Piles of waste tires or used tires subject to WAC 173-350-350.

(b) In accordance with RCW 70.95.305, storage piles of wood waste used for fuel or as a raw material, wood derived fuel, and agricultural wastes on farms, are subject solely to the requirements of (c)(i) through (iii) of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (c)(i) through (iii) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (c)(i) through (iii) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(c) Owners and operators of all storage piles that are categorically exempt from solid waste handling permitting in accordance with (b) of this subsection shall:

(i) Ensure that at least fifty percent of the material stored in the pile is used within one year and all material is used within three years;

(ii) Comply with the performance standards of WAC 173-350-040; and

(iii) Allow department and jurisdictional health department representatives to inspect the waste pile at reasonable times for the purpose of determining compliance with this chapter.

(d) In accordance with RCW 70.95.305, the storage of inert waste in piles is subject solely to the requirements of (e)(i) through (vi) of this subsection and are exempt from solid waste handling permitting. The storage of inert waste in piles at a facility with a total volume of two hundred fifty cubic yards or less is subject solely to the requirements of (e)(iv) of this subsection. An owner or operator that does not comply with the terms and conditions of (e)(i) through (vi) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (e)(i) through (vi) may be subject to the penalty provisions of RCW 70.95.315.

(e) Owners and operators of all storage piles that are categorically exempt from solid waste handling permitting in accordance with (d) of this subsection shall:

(i) Implement and abide by a procedure that is capable of detecting and preventing noninert wastes from being accepted or mixed with inert waste;

(ii) Ensure that at least fifty percent of the material stored in the pile is used within one year and all the material is used within three years;

(iii) Control public access and unauthorized vehicular traffic to prevent illegal dumping of wastes;

(iv) Comply with the performance standards of WAC 173-350-040;

(v) Allow department and jurisdictional health department representatives to inspect the waste pile at reasonable times for the purpose of determining compliance with this chapter; and

(vi) Notify the department and jurisdictional health department thirty days prior to commencing operations of the intent to store inert waste in accordance with this section. Notification shall be in writing, and shall include:

(A) Contact information for the owner or operator;

(B) A general description and location of the facility; and

(C) A description of the inert waste handled at the facility.

(2) *Piles used for storage or treatment - Location standards*. There are no specific location standards for piles sub-

ject to this chapter; however, waste piles must meet the requirements provided under WAC 173-350-040(5).

(3) *Piles used for storage or treatment - Design standards*.

(a) The owner or operator of piles used for storage or treatment shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. The maximum waste capacity, elevation and boundaries of the waste pile shall be provided. Piles shall be designed and constructed to:

(i) Control public access;

(ii) Comply with the uniform fire code as implemented through the local fire control agency;

(iii) Minimize vector harborage to the extent practicable; and

(iv) Provide all-weather approach roads and exits.

(b) In addition to the requirements of (a) of this subsection, the owner or operator of piles of putrescible waste, contaminated soils or dredged material or waste determined by the jurisdictional health department to be likely to produce leachate posing a threat to human health or the environment shall prepare engineering reports/plans and specifications of the surface on which the pile(s) will be placed including an analysis of the surface under the stresses expected during operations, and the design of the surface water management systems including run-on prevention and runoff conveyance, storage, and treatment. The piles shall be designed and constructed to:

(i) Place waste on a sealed surface, such as concrete or asphaltic concrete, to prevent soil and ground water contamination. The surface shall be durable enough to withstand material handling practices. The jurisdictional health department may approve other types of surfaces, such as engineered soil, if the applicant can demonstrate that the proposed surface will prevent soil and ground water contamination; and

(ii) Control run-on and runoff from a twenty-five-year storm, as defined in WAC 173-350-100.

(4) *Piles used for storage or treatment - Operating standards*. The owner or operator of piles used for storage or treatment shall:

(a) Operate the facility to:

(i) Control fugitive dust;

(ii) Control access to the pile;

(iii) Ensure that nonpermitted waste is not accepted at the facility;

(iv) Control vector harborage and implement vector control as necessary;

(v) Ensure that waste piles capable of attracting birds do not pose an aircraft safety hazard; and

(vi) For piles of putrescible waste and contaminated soils or dredged material, control nuisance odors.

(b) Inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may cause or lead to the release of wastes to the environment or a threat to human health. Inspections shall include the engineered surface on which the piles are placed, and the leachate and stormwater control systems. Inspections shall be as needed, but at least weekly, to ensure it is meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records on the weights and the types of waste received or removed from the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of solid waste handled by the facility, including amounts received, amounts removed and the amount of waste remaining at the facility at year's end, in tons; and

(iv) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to the site operating personnel that concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during the facility's life including:

(A) The maximum amount of waste to be stored or treated in pile(s) at the facility;

(B) Methods of adding and removing waste from the pile and equipment used;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans;

(v) Forms to record weights or volumes; and

(vi) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(f) Operate the facility in conformance with the following operating standards when storing or treating contaminated soils or dredged material:

(i) Ensure that all soils and dredged material are sufficiently characterized:

(A) Prior to storage or treatment so that contaminants not identified, or at concentrations greater than those provided in the approved plan of operation are not accepted or handled at the facility; and

(B) Prior to removal to an off-site location so that all soils and dredged material that are not clean soils or dredged material are delivered to a facility that meets the requirements of chapter 70.95 RCW, Solid waste management—Reduction and recycling;

(ii) In addition to the daily operating records in (c) of this subsection, a record of the source of contaminated soils and dredged material received at the facility, contaminants and concentrations contained, and any documentation used to characterize soils and dredged material. Records shall be maintained of end uses, including the location of final placement, for any soils or dredged material removed from the facility that contain residual contaminants;

(iii) In addition to the elements in (e) of this subsection, the plan of operation shall include:

(A) A description of contaminants and concentrations in soils and dredged material that will be handled at the facility;

(B) A sampling and analysis plan and other procedures used to characterize soils and dredged material; and

(C) Forms used to record the source of contaminated soils or dredged material, contaminant concentrations and other documentation used to characterize soils and dredged material, and end uses and the location of final placement for any soils or dredged material removed from the facility that contain residual contaminants;

(iv) Treatment of contaminated soils and dredged materials shall be performed using a process that reduces or eliminates contaminants and harmful characteristics. Contaminated soils and dredged materials shall not be diluted to meet treatment goals or as a substitute for disposal, except for incidental dilution of minor contaminants.

(5) *Piles used for storage or treatment - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for piles used for storage and treatment subject to this chapter; however, waste piles must meet the requirements provided under WAC 173-350-040(5).

(6) *Piles used for storage or treatment - Closure requirements*. The owner or operator of piles used for storage or treatment shall:

(a) Notify the jurisdictional health department sixty days in advance of closure. All waste shall be removed from the pile at closure to a facility that conforms with the applicable regulations for handling the waste.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. As a minimum, the closure plan shall include the methods of removing waste.

(7) *Piles used for storage or treatment - Financial assurance requirements*. There are no specific financial assurance requirements for piles used for storage or treatment subject to this regulation chapter; however, waste piles must meet the requirements provided under WAC 173-350-040(5).

(8) *Piles used for storage or treatment - Permit application contents*. The owner or operator of piles used for storage or treatment shall obtain a permit from the jurisdictional health department.

All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) The design of fire control features;

(b) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(c) A plan of operation meeting the requirements of subsection (4) of this section; and

(d) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Piles used for storage or treatment - Construction records*. The owner or operator of piles used for storage or treatment shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-320, filed 1/10/03, effective 2/10/03.]

WAC 173-350-330 Surface impoundments and tanks. (1) *Surface impoundments and tanks - Applicability*.

(a) These standards are applicable to:

(i) Surface impoundments holding solid waste associated with solid waste facilities including, but not limited to, leachate lagoons associated with landfills permitted under this chapter and chapter 173-351 WAC, Criteria for municipal solid waste landfills, and surface impoundments associated with recycling, and piles used for storage or treatment;

(ii) Above or below ground tanks with a capacity greater than one thousand gallons holding solid waste associated with solid waste handling facilities used to store or treat liquid or semisolid wastes or leachate associated with solid waste handling facilities.

(b) These standards are not applicable to:

(i) Surface impoundments or tanks whose facilities are regulated under local, state or federal water pollution control permits;

(ii) Leachate holding ponds at compost facilities regulated under WAC 173-350-220;

(iii) Septic tanks receiving only domestic sewage from facilities at the site;

(iv) Agricultural waste managed according to a farm management plan written in conjunction with the local conservation district;

(v) Underground storage tanks subject to chapter 173-360 WAC, Underground storage tanks; and

(vi) Tanks used to store moderate risk waste subject to WAC 173-350-360.

(2) *Surface impoundments and tanks - Location standards*.

Surface impoundments and tanks shall not be located in unstable areas unless the owner or operator demonstrates that engineering measures have been incorporated in the facility's design to ensure that the integrity of the liners, monitoring system and structural components will not be disrupted. The owner or operator shall place the demonstration in the application for a permit.

(3) *Surface impoundments and tanks - Design standards*.

(a) The owner or operator of a surface impoundment shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. In determining pond capacity, volume calculations shall be based on the facility

design, monthly water balance, and precipitation data. All surface impoundments shall be designed and constructed to meet the following requirements:

(i) Have a liner consisting of a minimum 30-mil thickness geomembrane overlying a structurally stable foundation to support the liners and the contents of the impoundment. (HDPE geomembranes used as primary liners or leak detection liners shall be at least 60-mil thick to allow for proper welding.) The jurisdictional health department may approve the use of alternative designs if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection.

(ii) Have a ground water monitoring system which complies with the requirements of WAC 173-350-500 or a leak detection layer. If a leak detection layer is used, it shall consist of an appropriate drainage layer underlain by a geomembrane of at least 30-mil thickness.

(iii) Have embankments and slopes designed to maintain structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation.

(iv) Have freeboard equal to or greater than eighteen inches to provide protection against wave action, overfilling, or precipitation. During the permitting process the jurisdictional health department may reduce the freeboard requirement provided that other specified engineering controls are in place which prevent overtopping.

(v) When constructed with a single geomembrane liner, the liner shall be tested using an electrical leak location evaluation capable of detecting a hole 3 millimeters in its longest dimension or other equivalent postconstruction test method prior to being placed in service. Results of the test shall be submitted with the construction record drawings.

(vi) Surface impoundments that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the embankment and which would be released by a failure of the containment embankment shall be reviewed and approved by the dam safety section of the department.

(vii) No surface impoundment liner shall be constructed such that the bottom of the lowest component is less than five feet (one and one-half meters) above the seasonal high level of ground water unless the owner or operator can demonstrate during the permitting procedure that the proposed design will not be affected by contact with ground water. All surface impoundment liners shall be constructed such that the bottom of the lowest component is above the seasonal high level of ground water. For the purpose of this section, ground water includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant.

(b) The owner or operator of a tank used to store or treat liquid or semisolid wastes meeting the definition of solid waste or leachate, shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards:

(i) Tanks and ancillary equipment shall be tested for tightness using a method acceptable to the jurisdictional health department prior to being covered, enclosed or placed in use. If a tank is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed and verified to the satisfaction of the jurisdictional health department prior to the tank being covered or placed in use.

(ii) Below ground tanks and other tanks where all or portions of the tank are not readily visible shall be designed to resist buoyant forces in areas of high ground water and shall either be:

(A) Retested for tightness at a minimum of once every two years; or

(B) Equipped with a leak detection system capable of detecting a release from the tank;

(iii) For tanks or components in which the external shell of a metal tank or any metal component will be in contact with the soil or water, a determination shall be made by a corrosion expert of the type and degree of external corrosion protection that is needed to ensure the integrity of the tank during its operating life. This determination shall be included with design information submitted with the permit application;

(iv) Above ground tanks shall be equipped with secondary containment constructed of, or lined with, materials compatible with the waste being stored and capable of containing the volume of the largest tank within its boundary plus the precipitation from the twenty-five-year storm event as defined in WAC 173-350-100;

(v) Areas used to load or unload tanks shall be designed to contain spills, drippage and accidental releases during loading and unloading of vessels;

(vi) Tanks and piping shall be protected from impact by vehicles or equipment through use of curbing, grade separation, bollards or other appropriate means;

(vii) Tanks shall be structurally suited for the proposed use; and

(viii) Tanks, valves, fittings and ancillary piping shall be protected from failure caused by freezing.

(4) *Surface impoundments and tanks - Operating standards.* The owner or operator of a surface impoundment or tank shall:

(a) Operate the facility to:

(i) Prevent overfilling of surface impoundments or tanks and maintain required freeboard;

(ii) Control access to the site;

(iii) Control nuisance odors for wastes or liquids with the potential to create nuisance odors; and

(iv) Control birds at impoundments storing wastes capable of attracting birds.

(b) Inspect surface impoundments, tanks and associated piping, pumps and hoses as needed, but at least weekly, to ensure they are meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. In addition, surface impoundments shall have regular liner inspections. Their frequency and methods of inspection shall be specified in the plan of operation and shall be based on the type of liner, expected service life of the material, and the site-specific service conditions. The inspections shall be conducted at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The jurisdictional health department

shall be given sufficient notice and have the opportunity to be present during liner inspections.

(c) Maintain daily operating records on the quantity and the types of waste removed from the surface impoundment or tank. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available for inspection upon request by the jurisdictional health department.

(d) Shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Results of ground water monitoring in accordance with WAC 173-350-500;

(iv) Results of leak detection system monitoring, if applicable; and

(v) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how wastes are handled on-site during the facility's active life;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs. This description shall include:

(A) The ground water monitoring system, if required;

(B) The overfilling prevention equipment, including details of filling and emptying techniques;

(C) The liners and embankments, tank piping and secondary containment;

(D) Safety and emergency plans;

(E) The forms used to record weights and volumes; and

(F) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Surface impoundments and tanks - Ground water monitoring requirements*.

(a) Surface impoundments not equipped with a leak detection layer are subject to the ground water monitoring requirements of WAC 173-350-500.

(b) Surface impoundments equipped with a leak detection layer and tanks are not subject to the ground water monitoring requirements of this chapter; however, surface impoundments must meet the requirements provided under WAC 173-350-040(5).

(6) *Surface impoundments and tanks - Closure requirements*. The owner or operator of a surface impoundment or tank shall:

(a) Notify the jurisdictional health department sixty days in advance of closure. All waste from the surface impoundment or tank shall be removed to a facility that conforms with the applicable regulations for handling the waste.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.

(7) *Surface impoundments and tanks - Financial assurance requirements*. There are no specific financial assurance requirements for surface impoundments or tanks subject to this chapter; however, surface impoundments and tanks must meet the requirements provided under WAC 173-350-040(5).

(8) *Surface impoundments and tanks - Permit application contents*.

(a) The owner or operator of a surface impoundment or tank shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(i) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(ii) A plan of operation meeting the requirements of subsection (4) of this section;

(iii) For surface impoundments not equipped with a leak detection layer, hydrogeologic reports and plans that address the requirements of subsection (5) of this section;

(iv) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Surface impoundments and tanks - Construction records*. The owner or operator of a surface impoundment or tank shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-330, filed 1/10/03, effective 2/10/03.]

WAC 173-350-350 Waste tire storage and transportation. (1) *Waste tire storage and transportation - Applicability*. This section is applicable to all:

(a) Facilities that store waste tires in quantities of greater than eight hundred automobile tires or the combined weight equivalent of sixteen thousand pounds of all types of waste tires. This section is not applicable to the storage of waste tires in an enclosed building or in mobile containers used to transport waste tires.

(b) Persons engaged in the business of transporting waste tires except for:

(i) Any person transporting five tires or less;

(ii) Any person transporting used tires back to a retail outlet for repair or exchange;

(iii) Any waste hauler regulated by chapter 81.77 RCW, Solid waste collection companies;

(iv) The United States, the state of Washington or any local government, or contractors hired by these entities, when involved in the cleanup of illegal waste tire piles; and

(v) Tire retailers associated with retreading facilities who use company-owned vehicles to transport waste tires for the purposes of retreading or recycling.

(2) *Waste tire storage and transportation - Transportation prohibitions and enforcement.*

(a) No person shall enter into a contract for transportation of waste tires with an unlicensed waste tire transporter.

(b) Waste tires shall only be delivered to a facility that has obtained the required permits or licenses for storage, processing, or disposal of waste tires.

(c) Any person subject to this section who transports or stores waste tires without a valid waste tire carrier license or waste tire storage license issued by the Washington state department of licensing shall be subject to the penalty provisions of RCW 70.95.560.

(3) *Waste tire storage and transportation - Carrier license requirements*.

(a) All persons subject to this section engaged in the business of transporting waste tires are required to obtain a waste tire carrier license from the Washington state department of licensing.

(b) Application forms for a waste tire carrier license will be available at unified business identifier service centers located throughout the state. Unified business identifier service locations include:

(i) The field offices of the department of revenue and the department of labor and industries;

(ii) The tax offices of employment security;

(iii) The Olympia office of the secretary of state; and

(iv) The business license service office of the Washington state department of licensing.

(c) An application for a waste tire carrier license and a cab card for one vehicle shall include a two hundred fifty dollar application fee, fifty dollars of which shall be nonrefundable. Each additional vehicle cab card to be used by the licensee requires an additional fifty dollar fee. The application shall include:

(i) A performance bond in the sum of ten thousand dollars in favor of the state of Washington; or

(ii) In lieu of the bond, an applicant may submit other financial assurance acceptable to the department.

(d) The refundable portion of application fees may be returned to the applicant if the application is withdrawn before the department has approved or denied the application.

(e) A waste tire carrier license shall be valid for one year from the date of approval.

(4) *Waste tire storage and transportation - Location standards*. There are no specific location standards for waste tire storage sites subject to this chapter; however, waste tire storage sites must meet the requirements provided under WAC 173-350-040(5).

(5) *Waste tire storage and transportation - Design standards*. The owner or operator of a waste tire storage area shall prepare engineering reports/plans and specifications to address the design standards of this subsection. The maximum number of tires to be stored on site and the individual pile locations and sized shall be provided. The facility shall be designed so that:

(a) The size of any individual pile of waste tires shall be limited to:

(i) A maximum area of five thousand square feet;

(ii) A maximum volume of fifty thousand cubic feet; and

(iii) A maximum height of ten feet;

(b) A clear space of at least forty feet between each pile of waste tires shall be provided. The clear space shall not contain flammable or combustible material or vegetation;

(c) Tire storage shall not be located within ten feet of any property line or building and shall not exceed six feet in height within twenty feet of any property line or building; and

(d) Public access shall be limited.

(6) *Waste tire storage and transportation - Operating standards*. The owner or operator of a waste tire storage facility shall:

(a) Operate the facility to:

(i) Have communication capabilities to immediately summon fire, police, or other emergency service personnel in the event of an emergency;

(ii) Control public access in a manner sufficient to prevent arson, unauthorized vehicular traffic and illegal dumping of wastes;

(iii) Manage waste tires in such a way that it is protected from any material or conditions which may cause them to ignite;

(iv) Limit the total quantity of waste tires stored on-site at any time to the amount permitted by the jurisdictional health department;

(v) Provide on-site fire control equipment sufficient to extinguish any fire reasonably possible from one individual pile of waste tires. Fire control equipment may include, but is not limited to:

(A) Automatic sprinkler protection;

(B) Fire hydrants, hoses and ancillary equipment;

(C) Portable fire extinguishers; and

(D) Material-handling equipment capable of moving tires during fire fighting operations;

(vi) Provide vector control; and

(vii) Issue written receipts upon receiving loads of waste tires;

(b) Inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may lead to the release of wastes to the environment or cause a threat to human health. Inspections shall be as needed, but at least weekly, to ensure it is meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records including:

(i) The numbers of tires received and removed from the site. Quantities may be measured by:

(A) Actual number of tires; or

(B) Weight, provided the operator documents the approximate number of tires included in each load; or

(C) Volume in cubic yards, provided the operator documents the approximate number of tires included in each load;

(ii) Facility inspection reports;

(iii) Significant deviations from the plan of operation;

(iv) Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity of tires, in tons;

(iv) Annual quantity of tires removed from the facility and end use, in tons;

(v) Total tons of tires remaining at the facility at year's end;

(vi) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and

(vii) Any additional information required by the jurisdictional health department as a condition of the permit;

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of how waste tires are to be handled onsite during the active life including:

(A) Transportation and routine storage; and

(B) Procedures for ensuring that all waste tires received by the facility have been transported in accordance with this section;

(ii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iii) Safety, fire and emergency plans addressing the following:

(A) Procedures for the use of communications equipment to immediately report emergencies to the fire department, police, or emergency service personnel;

(B) A list of all emergency equipment at the facility including the location and a brief description of its capabilities;

(C) Procedures for fire fighting and the operation of fire control equipment;

(D) Employee training and emergency duty assignments;

(E) Procedures for and frequency of fire drills;

(iv) The forms used to record weights and volumes; and

(v) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(7) *Waste tire storage and transportation - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for waste tire storage sites; however, waste tire storage sites must meet the requirements provided under WAC 173-350-040(5).

(8) *Waste tire storage and transportation - Closure requirements*. The owner or operator of a facility that stores waste tires shall:

(a) Notify the jurisdictional health department, and where applicable the financial assurance instrument provider, one hundred eighty days in advance of closure;

(b) Commence implementation of the closure plan, in part or whole, within thirty days after receipt of the final waste tires;

(c) Provide certification that the site has been closed in accordance with the approved closure plan to the jurisdictional health department; and

(d) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum the closure plan shall include:

(i) Projected time intervals that identify when partial closure is to be implemented, and identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument; and

(ii) Methods of waste tire removal.

(e) The jurisdictional health department shall notify the owner or operator, the department and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has been closed in accordance with the specifications of the approved closure plan.

(9) *Waste tire storage and transportation - Financial assurance requirements*.

(a) The owner or operator shall establish a financial assurance mechanism in accordance with WAC 173-350-600 for closure in accordance with the approved closure plan. The funds shall be sufficient for hiring a third party to remove the maximum number of tires permitted to be stored at the facility and deliver the tires to a facility permitted to accept the tires.

(b) Nothing in this section shall prohibit the application of funds from an existing bond as required under RCW 70.95.555, to the total amount required for financial assurance, provided the bond can be used for the activities described in (a) of this subsection.

(c) No owner or operator shall commence or continue operations at the site until a financial assurance instrument has been provided for closure activities in conformance with WAC 173-350-600.

(10) *Waste tire storage and transportation - Solid waste permit requirements*. The owner or operator shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (5) of this section;

(b) A plan of operation addressing the requirements of subsection (6) of this section;

(c) A closure plan meeting the requirements of subsection (8) of this section; and

(d) Documentation as needed to meet the financial assurance requirements of subsection (9) of this section.

(11) *Waste tire storage and transportation - Storage site license requirements*.

(a) In order to obtain a waste tire storage license, the facility owner or operator shall first obtain a solid waste han-

dling permit for the storage of waste tires from the jurisdictional health department.

(b) Application forms for a waste tire storage site owner license are available at unified business identifier service locations located throughout the state. Unified business identifier service locations include:

(i) The field offices of the department of revenue and the department of labor and industries;

(ii) The tax offices of employment security;

(iii) The Olympia office of the secretary of state; and

(iv) The business license service office of the Washington state department of licensing.

(c) An application for a waste tire storage site owner license shall include a two hundred fifty dollar application fee for each facility, fifty dollars of which shall be nonrefundable. The refundable portion of application fees may be returned to the applicant under the following conditions:

(i) The department determines that a solid waste permit would meet the substantive requirements of RCW 70.95.555 and determines that a license is not required; or

(ii) The applicant withdraws the application before the department has approved or denied the application.

(d) A waste tire storage site license shall be valid for one year from the date of approval.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-350, filed 1/10/03, effective 2/10/03.]

WAC 173-350-360 Moderate risk waste handling. (1) *Moderate risk waste handling - Applicability.*

(a) This section is applicable to:

(i) Any facility that accepts segregated solid waste categorized as moderate risk waste (MRW), as defined in WAC 173-350-100;

(ii) Persons transporting MRW using only a bill of lading (MRW that is not shipped using a uniform hazardous waste manifest) who store MRW for more than ten days at a single location; and

(iii) Mobile systems and collection events.

(b) This section is not applicable to:

(i) Persons transporting MRW managed in accordance with the requirements for shipments of manifested dangerous waste under WAC 173-303-240;

(ii) Universal waste regulated under chapter 173-303 WAC; and

(iii) Conditionally exempt small quantity generators managing their own wastes in compliance with the performance standards of WAC 173-350-040 and 173-303-070 (8)(b).

(2) *Mobile systems and collection events.* In accordance with RCW 70.95.305, the operation of mobile systems and collection events are subject solely to the requirements of (a) through (n) of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for a moderate risk waste handling facility. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315. Owners and operators of mobile systems and collection events shall:

(a) Notify the department and the jurisdictional health department of the intent to operate a mobile system or collection event at least thirty days prior to commencing operations. The notification shall include a description of the types and quantities of MRW to be handled;

(b) Manage mobile systems or collection events in compliance with the performance standards of WAC 173-350-040;

(c) Record the weights or gallons of each type of MRW collected, number of households and conditionally exempt small quantity generators served, and type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal). Records shall be maintained for a period of five years and will be made available to the department or jurisdictional health department on request;

(d) Ensure that the MRW at a mobile system or collection event is handled in a manner that:

(i) Prevents a spill or release of hazardous substances to the environment;

(ii) Prevents exposure of the public to hazardous substances; and

(iii) Results in delivery to a facility that meets the performance standards of WAC 173-350-040;

(e) Ensure that incompatible wastes are not allowed to come into contact with each other;

(f) Ensure that containers holding MRW remain closed except when adding or removing waste in order to prevent a release of MRW through evaporation or spillage if overturned;

(g) Ensure that containers holding MRW have legible labels and markings that identify the waste type;

(h) Ensure that containers holding MRW are maintained in good condition (e.g., no severe rusting or apparent structural defects);

(i) Ensure that personnel are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak or spill;

(j) Control public access and prevent unauthorized entry;

(k) Prepare and submit a copy of an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail the collection activities during the previous calendar year and shall include the following information:

(i) Name of owner or operator, and locations of all collection sites;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of MRW, in pounds or gallons by waste type;

(iv) Number of households and CESQGs served;

(v) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal); and

(vi) Any additional information required by written notification of the department;

(l) Allow inspections by the department or the jurisdictional health department at reasonable times;

(m) Notify the department and the jurisdictional health department of any failure to comply with the terms and conditions of this subsection within twenty-four hours; and

(n) Mobile collection systems using truck or trailers with concealed construction, permanently attached to a chassis may require a commercial coach insignia if subject to chapter

296-150C WAC, administered by the department of labor and industries.

(3) *Limited MRW facilities and product take-back centers*. In accordance with RCW 70.95.305, the operation of limited MRW facilities is subject solely to the requirements of (a) through (i) of this subsection and is exempt from solid waste handling permitting. Product take-back centers are only subject to (b), (e) and (f) of this subsection. An owner or operator that does not comply with the terms and conditions of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for an MRW facility. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315. Owners and operators of limited MRW facilities shall:

(a) Notify the department and the jurisdictional health department within thirty days prior to operation of the intent to operate a limited MRW facility with a description of the type and quantity of MRW to be handled;

(b) Ensure waste at a limited MRW facility or product take-back center is handled in a manner that:

(i) Prevents a spill or release of hazardous substances to the environment;

(ii) Prevents exposure of the public to hazardous substances; and

(iii) Results in delivery to a facility that meets the performance standards of WAC 173-350-040;

(c) Ensure that containers and tanks holding MRW are maintained in good condition (e.g., no severe rusting or apparent structural defects);

(d) Provide secondary containment for containers and tanks capable of storing fifty-five gallons or more of liquid MRW;

(e) Ensure the facility meets the performance standards of WAC 173-350-040;

(f) Notify the department and the jurisdictional health department of any failure to comply with the terms and conditions of this subsection within twenty-four hours of knowledge of an incident;

(g) Allow inspections by the department and jurisdictional health department at reasonable times;

(h) Maintain records of the amount and type of MRW received, and the final disposition of the MRW by amount and type; and

(i) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall cover the facility's activities during the previous calendar year and shall include the following information:

(A) Name and address of the facility;

(B) Calendar year covered by the report;

(C) Annual quantity and type of MRW, in pounds or gallons by waste type;

(D) Number of households and CESQGs served;

(E) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal); and

(F) Any additional information required by written notification of the department.

(4) *Moderate risk waste facilities - Location standards*. There are no specific location standards for moderate risk waste facilities subject to this chapter; however, moderate risk waste facilities must meet the requirements provided under WAC 173-350-040(5).

(5) *Moderate risk waste facilities - Design standards*.

(a) The owner or operator of a moderate risk waste facility shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards. Each MRW facility shall:

(i) Be surrounded by a fence, walls, or natural features and provided with a lockable door or gate to control public and animal access;

(ii) Be constructed of materials that are chemically compatible with the MRW handled;

(iii) Provide secondary containment to capture and contain releases and spills, and facilitate timely cleanup in areas where MRW is handled. All secondary containment shall:

(A) Have sufficient capacity to:

(I) Contain ten percent of volume of all containers or tanks holding liquid or the total volume of the largest container holding liquids in the area, whichever is greater;

(II) Provide additional capacity to hold the precipitation from a twenty-five-year storm as defined in WAC 173-350-100, in uncovered areas; and

(III) Provide additional capacity to hold twenty minutes of flow from an automatic fire suppression system, where such a suppression system exists;

(B) Be segregated for incompatible wastes; and

(C) Have a base underlying the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, accumulated precipitation, or fire suppression materials until the collected material is detected and removed. The base shall be sloped or the containment system shall otherwise be designed and operated to drain and remove liquids resulting from leaks, spills, precipitation, or fire suppression unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

(iv) Be accessible by all-weather roads;

(v) Prevent run-on and control runoff from a twenty-five-year storm, as defined in WAC 173-350-100;

(vi) Provide a sign at the site entrance that identifies the facility and shows at least the name of the site, and if applicable, hours during which the site is open for public use, and acceptable materials;

(vii) Provide sufficient ventilation to remove toxic vapors and dust from the breathing zone of workers and prevent the accumulation of flammable or combustible gases or fumes that could present a threat of fire or explosion;

(viii) Be constructed with explosion-proof electrical wiring, fixtures, lights, motors, switches and other electrical components as required by local fire code or the department of labor and industries;

(ix) Provide electrical grounding in areas where flammable and combustible liquids are consolidated to allow for bonding to consolidation equipment; and

(x) Provide protection of the MRW handling areas from wind, rain or snow.

(b) The owner or operator of a tank used to store or treat MRW shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards:

(i) Tanks and ancillary equipment shall be tested for tightness using a method acceptable to the jurisdictional

health department prior to being covered, enclosed or placed in use. If a tank is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed and verified to the satisfaction of the jurisdictional health department prior to the tank being covered or placed in use;

(ii) Below ground tanks shall be designed to resist buoyant forces in areas of high ground water and shall either be:

(A) Retested for tightness at a minimum of once every two years; or

(B) Equipped with a leak detection system capable of detecting a release from the tank;

(iii) For tanks or components in which the external shell of a metal tank or any metal component will be in contact with the soil or water, a determination shall be made by a corrosion expert of the type and degree of external corrosion protection that is needed to ensure the integrity of the tank during its operating life. This determination shall be included with design information submitted with the permit application;

(iv) Areas used to load or unload tanks shall be designed to contain spills, drippage and accidental releases during loading and unloading of vessels;

(v) Tanks and piping shall be protected from impact by vehicles or equipment through use of curbing, grade separation, bollards or other appropriate means;

(vi) Tanks shall be structurally suited for the proposed use; and

(vii) Tanks, valves, fittings and ancillary piping shall be protected from failure caused by freezing.

(c) Prefabricated structures with concealed construction shall meet the requirements of chapter 296-150F WAC, Factory-built housing and commercial structures, administered by the department of labor and industries.

(6) *Moderate risk waste facilities - Operating standards*. The owner or operator of a MRW facility shall:

(a) Manage MRW handling activities and facilities so that:

(i) Each storage area is marked with signs to clearly show the type of MRW to be stored in that area;

(ii) Incompatible MRW and materials shall not be mixed together or allowed to come into contact with each other;

(iii) MRW shall be compatible with the containment system;

(iv) Containers or tanks are closed except when adding or removing MRW in order to prevent a release of MRW through evaporation or spillage if overturned;

(v) All containers or tanks have visible and legible labels or markings that identify the MRW type and are visible for inspection;

(vi) Containers of MRW shall be stored in a manner that allows for easy access and inspection. Drums containing MRW shall have at least one side with a minimum of thirty inches clear aisle space;

(vii) Containers holding MRW are maintained in good condition including, but not limited to, no severe rusting or apparent structural defects;

(viii) Uniform hazardous waste manifests are prepared and used at the point where possession of the MRW is given to a commercial registered dangerous waste transporter for shipments of MRW destined for out-of-state locations. This shall be completed in accordance with WAC 173-303-180;

(ix) Public access is restricted to areas identified in the plan of operation and unauthorized entry is prevented;

(x) Communication capabilities are provided to summon fire, police, or emergency service personnel;

(xi) Flammable or explosive gases do not exceed ten percent of the lower explosive limit in the area where MRW is handled. An explosive gas monitoring program shall be implemented to ensure that this standard is achieved;

(xii) MRW is delivered to a facility that meets the performance standards of WAC 173-350-040;

(xiii) Personnel responsible for routine inspections and operations are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak or spill; and

(xiv) The jurisdictional health department and the department are notified of any spills or discharges of MRW to the environment.

(b) Ensure that routine and annual inspections are conducted as follows:

(i) Routine inspections shall be conducted at least weekly or once each operating day, whichever is more frequent, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. Routine inspections shall be performed for:

(A) Operating hazards;

(B) Presence of operable safety equipment;

(C) Container integrity; and

(D) General facility condition;

(ii) Annual inspections shall be conducted to determine the condition of:

(A) Secondary containment systems including all readily accessible below floor space, sumps, and tanks for deterioration and evidence of containment failure; and

(B) All ventilation and flammable vapor monitoring systems.

(c) Maintain daily operating records of the weights or gallons of each type of MRW collected and the number of households and CESQGs served. Facility inspection reports shall be maintained in the operating record, including at least the date and time of the inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available for inspection at the request of the jurisdictional health department.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and must include the following information:

(i) Name and address of the facility and locations of all collection sites;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of MRW, in pounds or gallons;

(iv) Number of households and CESQGs served;

(v) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal) by type of MRW;

(vi) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and

(vii) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

(i) A description of the types of solid wastes to be handled at the facility;

(ii) A description of how MRW will be handled on-site during the active life of the facility including:

(A) Methods for managing and/or identifying unknown wastes;

(B) Procedures for managing wastes that arrive in corroded or leaking containers or when MRW is left at the gate when the facility is unattended;

(C) Protocol for sorting, processing and packaging MRW;

(D) Procedures to protect containers of MRW susceptible to damage from weather and temperature extremes;

(E) Maximum quantities of MRW to be safely stored in each area at any time;

(F) Waste acceptance protocol to preclude and redirect fully regulated dangerous waste and any unacceptable waste types, such as explosives and/or radioactives; and

(G) For facilities that offer material exchanges, a procedure for determining what MRW is suitable for exchange and how the materials exchange will be operated;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans including:

(A) A list of all on-site emergency equipment with its capability, purpose, and training requirements;

(B) A description of actions to take if leaks in containers, tanks, or containment structures are suspected or detected and for other releases (e.g., failure of runoff containment system, gases generated due to chemical reactions or rapid volatilization);

(v) The forms used to record weights and volumes; and

(vi) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(7) *Moderate risk waste facilities - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for MRW facilities subject to this chapter; however, moderate risk waste facilities must meet the requirements provided under WAC 173-350-040(5).

(8) *Moderate risk waste facilities - Closure requirements*. The owner or operator of a moderate risk waste facility shall:

(a) Notify the jurisdictional health department, and where applicable, the financial assurance instrument provider, no later than one hundred eighty days prior to the projected date of the final receipt of MRW, of the intent to implement the closure plan in part or whole. The facility shall close in a manner that:

(i) Minimizes the need for further maintenance;

(ii) Removes all MRW and ensures delivery of the MRW to a facility that conforms with the applicable regulations for handling the waste;

(iii) Decontaminates all areas where MRW has been handled, including, but not limited to, secondary containment, buildings, tanks, equipment, and property; and

(iv) Prepares the facility for remedial measures after closure, if required.

(b) Commence closure activities in part or whole within thirty days following the receipt of the final volume of MRW. Waste shall not be accepted for disposal or for use in closure.

(c) At facility closure completion, in part or whole, submit the following to the jurisdictional health department:

(i) Certification by the owner or operator, and a professional engineer licensed in the state of Washington that the site has been closed in accordance with the approved closure plan; and

(ii) A closure report signed by the facility owner or operator and the certifying engineer that describes:

(A) Actions taken to determine if there has been a release to the environment; and

(B) The results of all inspections conducted as part of the closure procedure.

(d) Keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include:

(i) A description of the activities and procedures that will be used to ensure compliance with this subsection;

(ii) An estimate of the maximum volume of MRW on-site at any time during the active life of the facility; and

(iii) Closure cost estimates and projected fund withdrawal intervals from the financial assurance instrument, if such an instrument is required by subsection (9) of this section.

(e) The jurisdictional health department shall notify the owner or operator, the department and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has been closed in accordance with the specifications of the approved closure plan.

(9) *Moderate risk waste facilities - Financial assurance requirements*.

(a) The owner or operator of any fixed moderate risk waste facility that stores more than nine thousand gallons of MRW on-site, excluding used oil, is required to establish financial assurance in accordance with WAC 173-350-600.

(b) Proof of financial assurance shall be provided to the jurisdictional health department prior to the acceptance of any MRW. The financial assurance instrument shall provide sufficient funds to guarantee that all closure requirements are met. In the event that hazardous substances are released to the environment and site remediation is necessary, additional financial assurance shall be provided in order that site remediation can be accomplished.

(c) Nothing in this section shall prevent an owner or operator from including the cost of MRW facility financial assurance in an instrument established for a colocated permitted solid waste facility so long as there are adequate funds available for both closure activities and the instrument identifies the commitment of funds for both activities.

(10) *Moderate risk waste facilities - Permit application contents*. The owner or operator of a MRW facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the requirements established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (5) of this section;

(b) A plan of operation meeting the requirements of subsection (6) of this section;

(c) A closure plan meeting the requirements of subsection (8) of this section; and

(d) Documentation as needed to meet the financial assurance requirements of subsection (9) of this section.

(11) *Moderate risk waste facilities - Construction records*. The owner or operator of a moderate risk waste facility shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-360, filed 1/10/03, effective 2/10/03.]

WAC 173-350-400 Limited purpose landfills. (1) *Limited purpose landfills - Applicability*. These standards apply to all landfills except:

(a) Municipal solid waste landfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills;

(b) Inert waste landfills regulated under WAC 173-350-410;

(c) Special incinerator ash landfills regulated under chapter 173-306 WAC, Special incinerator ash management standards;

(d) Dangerous waste landfills regulated under chapter 173-303 WAC, Dangerous waste regulations; and

(e) Chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

(2) *Limited purpose landfills - Location standards*. All limited purpose landfills shall be located to meet the following requirements:

(a) No landfill shall be located over a Holocene fault, in subsidence areas, or on or adjacent to an unstable slope or other geologic features which could compromise the structural integrity of the facility.

(b) No landfill's active area shall be located closer than one thousand feet to a down-gradient drinking water supply well, unless the owner or operator can demonstrate that a minimum of ninety days will occur between the time that a contaminant is detected and the time the contaminant can reach the nearest down-gradient drinking water supply well. Such demonstrations shall be prepared by a licensed professional in accordance with the requirements of chapter 18.220 RCW and shall be included in the permit application. The demonstration shall be based on the details of the sampling and analysis plan and the hydrogeologic properties of the hydrostratigraphic unit.

(c) No landfill's active area shall be located in a channel migration zone as defined in WAC 173-350-100 or within two hundred feet measured horizontally, of a stream, lake, pond, river, or saltwater body, nor in any wetland nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4). All facilities shall conform to location restrictions established in local shoreline management plans adopted pursuant to chapter 90.58 RCW.

(d) No landfill shall be located within ten thousand feet of any airport runway currently used by turbojet aircraft or five thousand feet of any airport runway currently used by only piston-type aircraft unless the federal aviation administration grants a waiver. This requirement is only applicable where such landfill is used for disposing of wastes where a bird hazard to aircraft would be created.

(e) All landfills shall comply with the location standards specified in RCW 70.95.060.

(3) *Limited purpose landfills - Design standards*.

(a) This section applies to landfills with considerable variations in waste types, site conditions, and operational controls. All landfills shall be designed and constructed to meet the design standards of this subsection, the performance standards of WAC 173-350-040, and shall be appropriate for and compatible with the waste, the site, and the operation. The owner or operator of a limited purpose landfill shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. An owner or operator shall be able to demonstrate during the permitting process that the design of a proposed landfill will mitigate threats to human health and the environment. When evaluating a landfill design, the jurisdictional health department shall consider the following factors:

(i) Waste characterization;

(ii) Soil conditions;

(iii) Hydrogeologic conditions;

(iv) Hydraulic conditions;

(v) Contaminant fate and transport;

(vi) Topography;

(vii) Climate;

(viii) Seismic conditions;

(ix) The total capacity of the facility and each landfill unit;

(x) Anticipated leachate characteristics and quantity;

(xi) Operational controls; and

(xii) Environmental monitoring systems.

(b) Liner system design.

(i) Liner system performance standard. Limited purpose landfills shall be constructed in accordance with a design that:

(A) Will prevent the contamination of the hydrostratigraphic units identified in the hydrogeologic assessment of

the facility at the relevant point of compliance as specified during the permitting process; and

(B) Controls methane and other explosive gases generated by the facility to ensure they do not exceed:

(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);

(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and

(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures.

(ii) The jurisdictional health department may allow a limited purpose landfill to be designed and constructed without a liner system if the owner or operator can demonstrate during the permitting process that:

(A) The contaminant levels in the waste and leachate are unlikely to pose an adverse impact to the environment; and

(B) The ability of natural soils to provide a barrier or reduce the concentration of contaminants provides sufficient protection to meet the performance standards of WAC 173-350-040; and

(C) Explosive gases generated by the facility will not exceed:

(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);

(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and

(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures.

(iii) Liner separation from ground water. No landfill liner system shall be constructed such that the bottom of the lowest component is less than ten feet (three meters) above the seasonal high level of ground water, unless a hydraulic gradient control system has been installed which prevents ground water from contacting the liner. For the purpose of this section, ground water includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant as to harm or endanger the integrity of the liner at any time.

(iv) Hydraulic gradient control system performance standard. When a hydraulic gradient control system is to be incorporated into a landfill design, a demonstration shall be made during the permit process that the hydraulic gradient control system can be installed to control ground water fluctuations and maintain separation between the controlled seasonal high level of ground water in the identified water-bearing unit and the bottom of the lowest liner system component. The hydraulic gradient control system shall not have negative impacts on waters of the state or impede the capability to collect samples representative of the quality of ground water at the relevant point of compliance. The demonstration shall include:

(A) A discussion in the geologic and hydrogeologic site characterization showing the effects from subsoil settlement, changes in surrounding land uses, climatic trends or other impacts affecting ground water levels during the active life, closure and post-closure periods of the landfill;

(B) A discussion showing potential impacts of the gradient control operation to existing quality and quantity of ground water or surface waters. This discussion shall include potential impacts to water users and instream flow and levels of surface waters in direct hydrologic contact or continuity with the hydraulic gradient control system. Any currently available ground or surface water quality data for hydrostratigraphic units, springs, or surface waters in direct hydrologic contact or continuity with the hydraulic gradient control system shall be included;

(C) Conceptual engineering drawings of the proposed landfill and a discussion as to how the hydraulic gradient control system will protect or impact the structural integrity and performance of the liner system;

(D) Preliminary engineering drawings of the hydraulic gradient control system;

(E) Design specifications for the proposed ground and surface water monitoring systems; and

(F) A discussion of the potential impacts from the gradient control system on the capability of collecting ground water samples that will represent the quality of ground water passing the relevant point of compliance.

(v) Presumptive liner design. Limited purpose landfills designed and constructed with the following composite liner are presumed to meet the performance standard of (b)(i) of this subsection. An alternative liner system design shall be used when the nature of the waste, the disposal facility, or other factors are incompatible with the presumptive liner. The presumptive liner design consists of the following two components:

(A) A lower component consisting of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.

(B) An upper component consisting of a high-density polyethylene (HDPE) geomembrane with a minimum of 60-mil thickness. The geomembrane shall be installed in direct and uniform contact with the lower component.

(c) Leachate collection and control system design. Except as provided in (b)(ii) of this section, limited purpose landfills shall be constructed in accordance with a design that:

(i) Provides for collection and removal of leachate generated in the landfill;

(ii) Is capable of maintaining less than a one-foot head of leachate over the liner system and less than a two-foot head in leachate sump areas;

(iii) Includes a monitoring system capable of collecting representative samples of leachate generated in the landfill; and

(iv) Provides for leachate storage, treatment, or pretreatment to meet the requirements for permitted discharge under chapter 90.48 RCW, Water pollution control, and the Federal Clean Water Act.

(d) Run-on/runoff control system design. Limited purpose landfills shall be constructed in accordance with a design that:

(i) Will prevent flow onto the active portion of the landfill during the peak discharge from a twenty-five-year storm, as defined in WAC 173-350-100;

(ii) Will prevent unpermitted discharges from the active portion of the landfill resulting from a twenty-five-year storm, as defined in WAC 173-350-100; and

(iii) When located in a one hundred-year flood plain, the entrance and exit roads, and landfill practices do not restrict

the flow of the base flood, reduce the temporary water storage capacity of the flood plain or result in washout of solid waste, to pose a hazard to human life, wildlife, land or water resources.

(e) Final closure system design.

(i) Final closure performance standard. Limited purpose landfills shall be closed in accordance with a design that:

(A) Prevents exposure of waste;

(B) Minimizes infiltration (at a minimum, the design will prevent the generation of significant quantities of leachate to eliminate the need for leachate removal by the end of the post-closure period);

(C) Prevents erosion from wind and water;

(D) Is capable of sustaining native vegetation;

(E) Addresses anticipated settlement, with a goal of achieving no less than two to five percent slope after settlement;

(F) Provides sufficient stability and mechanical strength and addresses potential freeze-thaw and desiccation;

(G) Provides for the management of run-on and runoff, preventing erosion or otherwise damaging the closure cover;

(H) Minimizes the need for post-closure maintenance;

(I) Provides for collection and removal of methane and other gases generated in the landfill. Landfill gas shall be purified for sale, used for its energy value, or flared when the quantity and quality of landfill gases will support combustion. Landfill gases may be vented when they will not support combustion. The collection and removal system shall include a monitoring system capable of collecting representative samples of gases generated in the landfill; and

(J) Meets the requirements of regulations, permits and policies administered by the jurisdictional air pollution control authority or the department under chapter 70.94 RCW, Washington Clean Air Act and Section 110 of the Federal Clean Air Act.

(ii) Presumptive final closure cover. Limited purpose landfills designed and constructed with the following closure cover are presumed to meet the performance standards in (e)(i)(A) through (D) of this subsection. An alternative final closure cover shall be used when the nature of the waste, the disposal facility or other factors are incompatible with the presumptive final closure cover system. The presumptive final closure cover consists of the following components:

(A) An antierosion layer consisting of a minimum of two feet (60 cm) of earthen material of which at least twelve inches (30 cm) of the uppermost layer is capable of sustaining native vegetation, seeded with grass or other shallow rooted vegetation; and

(B) A geomembrane with a minimum of 30-mil (.76 mm) thickness, or a greater thickness that is commensurate with the ability to join the geomembrane material and site characteristics such as slope, overlaying a competent foundation.

(f) Water balance and ground water contaminant fate and transport modeling. Any modeling performed for evaluating a landfill design shall meet the following performance standards:

(i) All water balance analysis shall be performed using:

(A) The Hydrologic Evaluation of Landfill Performance (HELP) Model; or

(B) Alternate methods approved by the jurisdictional health department. Alternate methods shall have supporting documentation establishing its ability to accurately represent the water balance within the landfill unit.

(ii) Any ground water and contaminant fate and transport modeling shall be conducted by a licensed professional in accordance with the requirements of chapter 18.220 RCW and meet the following performance standards:

(A) The model shall have supporting documentation that establishes the ability of those methods to represent ground water flow and contaminant transport under the conditions at the site;

(B) The model shall be calibrated against site-specific field data;

(C) A sensitivity analysis shall be conducted to measure the model's response to changes in the values assigned to major parameters, specific tolerances, and numerically assigned space and time discretizations;

(D) The value of the model's parameters requiring site-specific data shall be based upon actual field or laboratory measurements; and

(E) The values of the model's parameters that do not require site-specific data shall be supported by laboratory test results or equivalent methods documenting the validity of the chosen parameter values.

(g) Seismic impact zones. Limited purpose landfills located in seismic impact zones shall be designed and constructed so that all containment structures, including liners, leachate collection systems, surface water control systems, gas management, and closure cover systems are able to resist the maximum horizontal acceleration in lithified earth materials for the site.

(h) The owner or operator of limited purpose landfills located in an unstable area shall demonstrate that engineering measures have been incorporated into the landfill's design to ensure that the integrity of the structural components of the landfill will not be disrupted. The owner or operator shall place the demonstration in the application for a permit. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

(i) On-site or local soil conditions that may result in significant differential settling;

(ii) On-site or local geologic or geomorphologic features; and

(iii) On-site or local human-made features or events (both surface and subsurface).

(i) Limited purpose landfills shall be designed to provide a setback of at least one hundred feet between the active area and the property boundary. The setback shall be increased if necessary to:

(i) Control nuisance odors, dust, and litter;

(ii) Provide a space for the placement of monitoring wells, gas probes, run-on/runoff controls, and other design elements; or

(iii) Provide sufficient area to allow proper operation of the landfill and access to environmental monitoring systems and facility structures.

(4) *Limited purpose landfills - Operating standards.* The owner or operator of a limited purpose landfill shall:

(a) Operate the facility to:

(i) Control public access and prevent unauthorized vehicular traffic, illegal dumping of wastes, and keep animals out by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment. A lockable gate shall be required at each entry to the landfill;

(ii) Provide approach and exit roads of all-weather construction, with traffic separation and traffic control on-site, and at the site entrance;

(iii) Ensure that no liquid waste or liquids are placed in disposal facilities;

(iv) Provide on-site fire protection as determined by the local and state fire control jurisdiction. Landfills disposing of wastes that can support combustion shall have a method to control subsurface fires;

(v) Ensure that at least two landfill personnel are on-site with one person at the active face when the site is open to the public for disposal facilities with a permitted capacity of greater than fifty thousand cubic yards per year;

(vi) Provide communication between employees working at the landfill and management offices, on-site and off-site, sufficient to handle emergencies;

(vii) Control fugitive dust;

(viii) Perform no open burning unless permitted by the jurisdictional air pollution control agency or the department under chapter 70.94 RCW, Washington Clean Air Act;

(ix) Collect scattered litter as necessary to prevent vector harborage, a fire hazard, aesthetic impacts, or adversely affect wildlife or its habitat;

(x) Prohibit scavenging;

(xi) Ensure that reserve operational equipment shall be available to maintain and meet these standards; and

(xii) Ensure that operations do not endanger any containment or monitoring structures such as liners, leachate collection systems, surface water control systems, gas management, cover systems and monitoring wells.

(b) Operate the facility in compliance with the following operating standards unless a demonstration can be made during the permitting process that due to the nature, source of the waste, or quality of the leachate generated, these standards are not necessary for the protection of human health or the environment:

(i) Implement a program at the facility for detecting and preventing the disposal of dangerous waste fully regulated under chapter 173-303 WAC, municipal solid waste and other prohibited wastes. This program shall include, at a minimum:

(A) Random inspections of incoming loads unless the owner or operator takes other steps (for example, instituting source controls restricting the type of waste received) to ensure that incoming loads do not contain prohibited wastes. Random inspections shall include:

(I) Discharging a random waste load onto a suitable surface, or portion of the tipping area. A suitable surface shall be chosen to avoid interference with operations, so that sorted waste can be distinguished from other loads of uninspected waste, to avoid litter, and to contain runoff;

(II) The contents of the load shall be visually inspected prior to actual disposal of the waste. The facility owner or operator shall return prohibited waste to the hauler, arrange for disposal of prohibited wastes at a facility permitted to manage those wastes, or take other measures to prevent disposal of the prohibited waste at the facility;

(B) Maintaining records of inspections, or the results of other procedures if appropriate;

(C) Training facility personnel to recognize regulated dangerous waste, prohibited polychlorinated biphenyls (PCB) wastes and other prohibited wastes; and

(D) Immediate notification of the department and the jurisdictional health department if a regulated dangerous waste or prohibited PCB waste is discovered at the facility.

(ii) Thoroughly compact the solid waste before succeeding layers are added except for the first lift over a liner.

(iii) Cover disposed waste to control disease vectors, fires, nuisance odors, blowing litter, and scavenging. Putrescible waste shall be covered at the end of each operating day, or at more frequent intervals if necessary. The jurisdictional health department may grant a temporary waiver, not to exceed three months, from the requirement of this subsection if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical. Materials used for cover shall be:

(A) At least six inches (15 cm) of earthen material, such as soils; or

(B) Alternative materials or an alternative thickness other than at least six inches (15 cm) of earthen material as approved by the jurisdictional health department when the owner or operator demonstrates that the alternative material or thickness will control vectors, fires, nuisance odors, blowing litter, scavenging, provide adequate access for heavy vehicles, and will not adversely affect gas or leachate composition and controls.

(iv) Prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment; and

(v) Implement a program at the facility to control and monitor explosive gases and to respond to the detection of explosive gases in a manner that ensures protection of human health. This program shall include, at a minimum:

(A) Ensure that explosive gases generated by the facility do not exceed:

(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);

(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and

(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures;

(B) A routine explosive gas-monitoring program to ensure that all standards are met. The minimum frequency for monitoring is quarterly. The type and frequency of monitoring shall be determined based on the following factors:

(I) Soil conditions;

(II) The hydrogeologic conditions surrounding the facility;

(III) The hydraulic conditions surrounding the facility; and

(IV) The location of facility structures and property boundaries;

(C) If explosive gas levels exceed those of this subsection take all necessary steps to ensure protection of human health including:

(I) Notifying the jurisdictional health department;

(II) Monitoring off-site structures;

(III) Monitoring explosive gas levels daily, unless otherwise authorized by the jurisdictional health department;

(IV) Evacuation of buildings affected by landfill gas until determined to be safe for occupancy;

(V) Within seven calendar days of the explosive gas levels detection, placing in the operating record the explosive gas levels detected and a description of the steps taken to protect human health and provide written notification to the jurisdictional health department; and

(VI) Within sixty days of the explosive gas levels detection, implementing a remediation plan for the explosive gas releases, describing the nature and extent of the problem and the remedy. This shall be sent to the jurisdictional health department for approval as an amendment to the plan of operation. A copy of the remediation plan shall be placed in the operating record;

(D) Construction and decommissioning of all gas monitoring and extraction wells in a manner that protects ground water and meets the requirements of chapter 173-160 WAC, Minimum standards for construction and maintenance of wells;

(c) Inspect and maintain the facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment or cause a threat to human health. The inspections shall be at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The owner or operator shall keep an inspection report or summary including at least the date and time of inspection, the printed name and the signature of the inspector, a notation of observations made, and the date and nature of any repairs or corrective actions;

(d) Maintain daily operating records on the weights (or volumes), number of vehicles entering and the types of wastes received. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted on the operating record. Records shall be maintained for a minimum of five years and shall be available upon request by the jurisdictional health department;

(e) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year. The annual report shall cover landfill activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of waste accepted in tons or cubic yards with an estimate of density in pounds per cubic yard;

(iv) Results of ground water monitoring in accordance with WAC 173-350-500;

(v) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit;

(f) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the operation of the facility and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall contain:

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during its active life including:

(A) The acceptance criteria that will be applied to the waste;

(B) Procedures for ensuring only the waste described will be accepted;

(C) Procedures for handling unacceptable wastes; and

(D) Unloading and staging areas, transportation, routine filling, compaction, grading, cover or other vector controls, and housekeeping;

(iii) A description of how equipment, structures and other systems, including leachate collection, gas collection, run-on/runoff controls, and hydraulic gradient control systems, are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans including;

(A) Procedures for fire (including subsurface fires) prevention, a description of fire protection equipment available on-site and actions to take if there is a fire or explosion;

(B) Actions to take if leaks are detected or for other releases, such as failure of runoff containment system, if such systems are required;

(v) The forms for recording weights and volumes; and

(vi) Other such details to demonstrate that the landfill will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Limited purpose landfills - Ground water monitoring requirements*. Limited purpose landfills are subject to the ground water monitoring requirements of WAC 173-350-500.

(6) *Limited purpose landfills - Closure requirements*. The following closure requirements apply in full to facilities with limited purpose landfills:

(a) The owner or operator shall notify the jurisdictional health department, and where applicable, the financial assurance instrument provider, one hundred eighty days in advance of closure of the facility, or any portion thereof. The facility, or any portion thereof, shall close in a manner that:

(i) Minimizes the need for further maintenance;

(ii) Controls, minimizes, or eliminates threats to human health and the environment from post-closure escape of solid waste constituents, leachate, landfill gases, contaminated runoff, or waste decomposition products to the ground, ground water, surface water, and the atmosphere; and

(iii) Prepares the facility, or any portion thereof, for the post-closure period.

(b) The owner or operator shall commence implementation of the closure plan in part or whole within thirty days after receipt of the final volume of waste and/or attaining the final landfill elevation at part of or at the entire landfill as identified in the approved facility closure plan unless otherwise specified in the closure plan.

(c) The owner or operator shall not accept waste, including inert wastes, for disposal or for use in closure except as identified in the closure plan approved by the jurisdictional health department.

(d) The owner or operator shall develop, keep, and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the following information:

(i) A description of the final closure cover, designed in accordance with subsection (3)(e) of this section, the methods and procedures to be used to install the closure cover, sources of borrow materials for the closure cover, and a schedule or description of the time required for completing closure activities;

(ii) Projected time intervals at which sequential partial closure and final closure are to be implemented;

(iii) A description of the activities and procedures that will be used to ensure compliance with (a) through (g) of this subsection; and

(iv) Identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument.

(e) The owner or operator shall submit final engineering closure plans, in accordance with the approved closure plan and all approved amendments, for review, comment, and approval by the jurisdictional health department.

(f) When landfill closure is completed in part or whole, the owner or operator shall submit the following to the jurisdictional health department:

(i) Landfill closure plan sheets signed by a professional engineer registered in the state of Washington and modified as necessary to represent as-built changes to final closure construction for the landfill, or a portion thereof, as approved in the closure plan; and

(ii) Certification by the owner or operator, and a professional engineer registered in the state of Washington, that the landfill, or a portion thereof has been closed in accordance with the approved closure plan.

(g) The owner or operator shall record maps and a statement of fact concerning the location of the disposal facility as part of the deed with the county auditor not later than three months after closure.

(h) The jurisdictional health department shall notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility, or a portion thereof, has been closed in accordance with the specifications of the approved closure plan and the closure requirements of this section, at which time the post-closure period shall commence.

(7) *Limited purpose landfills - Post-closure requirements.* The following post-closure requirements apply in full to facilities with limited purpose landfills:

(a) The owner or operator shall provide post-closure activities to allow for continued facility maintenance and monitoring of air, land, and water for a period of twenty years, or as long as necessary for the landfill to stabilize and to protect human health and the environment. For disposal facilities, post-closure care includes at least the following:

(i) Maintaining the integrity and effectiveness of any final closure cover, including making repairs to the closure cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, maintaining the vegetative cover, and preventing run-on and runoff from eroding or otherwise damaging the final closure cover;

(ii) General maintenance of the facility and facility structures for their intended use;

(iii) Monitoring ground water, surface water, leachate, or other waters in accordance with the requirements of WAC 173-350-500 and the approved monitoring plan, including remedial measures if applicable, and maintaining all monitoring systems;

(iv) Monitoring landfill gas and maintaining and operating the gas collection and control systems;

(v) Maintaining, operating, and monitoring hydraulic gradient controls systems if applicable;

(vi) Monitoring settlement; and

(vii) Any other activities deemed appropriate by the jurisdictional health department.

(b) The owner or operator shall commence post-closure activities for the facility, or portion thereof, after completion of closure activities outlined in subsection (6) of this section. The jurisdictional health department may direct that post-closure activities cease until the owner or operator receives a notice to proceed with post-closure activities.

(c) The owner or operator shall develop, keep, and abide by a post-closure plan approved by the jurisdictional health department as a part of the permitting process. The post-closure plan shall:

(i) Address facility maintenance and monitoring activities for at least a twenty-year period or until the landfill becomes stabilized (i.e., little or no settlement, gas production or leachate generation), and monitoring of ground water, surface water, gases and settlement can be safely discontinued; and

(ii) Project time intervals at which post-closure activities are to be implemented, and identify post-closure cost estimates and projected fund withdrawal intervals from the selected financial assurance instrument, where applicable, for the associated post-closure costs.

(d) The owner or operator shall complete post-closure activities for the facility, or portion thereof, in accordance with the approved post-closure plan and schedule, or the plan shall be so amended with the approval of the jurisdictional health department. The jurisdictional health department may direct facility post-closure activities, in part or completely, to cease until the post-closure plan has been amended and has received written approval by the health department.

(e) When post-closure activities are complete, the owner or operator shall submit a certification to the jurisdictional health department, signed by the owner or operator, and a professional engineer registered in the state of Washington stating why post-closure activities are no longer necessary.

(f) If the jurisdictional health department finds that post-closure monitoring has established that the landfill is stabilized, the health department may authorize the owner or operator to discontinue post-closure maintenance and monitoring activities.

(g) The jurisdictional health department shall notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has completed

post-closure activities in accordance with the specifications of the approved post-closure plan.

(8) *Limited purpose landfills - Financial assurance requirements.*

(a) Financial assurance is required for all limited purpose landfills.

(b) Each owner or operator shall establish a financial assurance mechanism in accordance with WAC 173-350-600 that will accumulate funds equal to the closure and post-closure cost estimates over the life of the landfill, or over the life of each landfill unit if closed discretely.

(c) No owner or operator shall commence or continue disposal operations in any part of a facility subject to this section until a financial assurance instrument has been provided for closure and post-closure activities in conformance with WAC 173-350-600.

(9) *Limited purpose landfills - Permit application contents*. The owner or operator shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Demonstrations that the facility meets the location standards of subsection (2) of this section;

(b) Documentation that all owners of property located within one thousand feet of the facility property boundary have been notified that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells;

(c) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(d) A plan of operation meeting the requirements of subsection (4) of this section;

(e) Hydrogeologic reports and plans that address the requirements of subsection (5) of this section;

(f) A closure plan meeting the requirements of subsection (6) of this section;

(g) A post-closure plan meeting the requirements of subsection (7) of this section; and

(h) Documentation as needed to meet the financial assurance requirements of subsection (8) of this section.

(10) *Limited purpose landfills - Construction records*. The owner or operator of a limited purpose landfill shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-400, filed 1/10/03, effective 2/10/03.]

WAC 173-350-410 Inert waste landfills. (1) *Inert waste landfills - Applicability*. These standards apply to landfills that receive only inert wastes, as identified pursuant to WAC 173-350-990, including facilities that use inert wastes as a component of fill. In accordance with RCW 70.95.305, facilities with a total capacity of two hundred fifty cubic yards or less of inert wastes are categorically exempt from solid waste handling permitting and other requirements of this section, provided that the inert waste landfill is operated in compliance with the performance standards of WAC 173-350-040. An owner or operator that does not comply with the performance standards of WAC 173-350-040 is required to obtain a permit from the jurisdictional health department, and may be subject to the penalty provisions of RCW 70.95.315.

(2) *Inert waste landfills - Location standards.* All inert waste landfills shall be located to meet the following requirements. No inert waste landfill's active area shall be located:

(a) On an unstable slope;

(b) Closer than ten feet from the facility property line;

(c) Closer than one hundred feet to a drinking water supply well; or

(d) In a channel migration zone as defined in WAC 173-350-100, or within one hundred feet measured horizontally, of a stream, lake, pond, river, or saltwater body, nor in any wetland nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4).

(3) *Inert waste landfills - Design standards*. The owner or operator of an inert waste landfill shall prepare engineering reports/plans and specifications to address the design standards of this subsection. The existing site topography, including the location and approximate thickness and nature of any existing waste, the vertical and horizontal limits of excavation and waste placement, final closure elevation and grades, and the design capacity of each landfill unit, total design capacity, and future use of the facility after closure, shall be included. Inert waste landfills shall be designed and constructed to:

(a) Ensure that all waste is above the seasonal high level of ground water. For the purpose of this section, ground water includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant;

(b) Maintain a stable site; and

(c) Manage surface water, including run-on prevention and runoff conveyance, storage, and treatment, to protect the waters of the state;

(4) *Inert waste landfills - Operating standards*. The owner or operator of an inert waste landfill shall:

(a) Operate the facility to:

(i) Control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes;

(ii) Implement a program at the facility capable of detecting and preventing noninert wastes from being accepted or mixed with inert waste;

(iii) Handle all inert waste in a manner that is in compliance with the performance standards of WAC 173-350-040;

(iv) Handle all inert waste in a manner that controls fugitive dust and is protective of waters of the state; and

(v) Prevent unstable conditions resulting from their activities;

(b) Inspect and maintain the facility to prevent malfunctions and deterioration, operator errors and discharges that may cause a threat to human health. Inspections shall be as

needed, but at least weekly, to ensure meeting operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records of the quantities of inert waste disposed. In addition, record and retain information that documents that all wastes landfilled meet the criteria for inert waste. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be maintained for minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of waste disposed in tons or cubic yards with an estimate of density in pounds per cubic yard; and

(iv) Any additional information required by the jurisdictional health department as a condition of the permit;

(e) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include:

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during its active life including:

(A) Acceptance criteria that will be applied to the waste;

(B) Procedures for ensuring only the waste described will be accepted;

(C) Procedures for handling unacceptable wastes; and

(D) Procedures for transporting and routine filling and grading;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans;

(v) The forms used to record weights and volumes; and

(vi) Other such details to demonstrate that the facility will meet the requirements of this subsection and as required by the jurisdictional health department.

(5) *Inert waste landfills - Ground water monitoring standards*. There are no specific ground water monitoring requirements for inert waste landfills subject to this chapter; however, inert waste landfills must meet the requirements provided under WAC 173-350-040(5).

(6) *Inert waste landfills - Closure requirements*. The owner or operator of an inert waste landfill shall:

(a) Notify the jurisdictional health department sixty days in advance of closure of the facility;

(b) Close the inert waste landfill unit by leveling the wastes to the extent practicable, or as appropriate for the proposed future use, and fill all voids which could pose a physical threat for persons, or which provide disease vector harborages. The inert waste landfills shall be closed in a manner to control fugitive dust and protect the waters of the state; and

(c) Record maps and a statement of fact concerning the location of the landfill as part of the deed with the county auditor not later than three months after closure.

(7) *Inert waste landfills - Financial assurance requirements*. There are no specific financial assurance requirements for inert waste landfills subject to this chapter; however, inert waste landfills must meet the requirements provided under WAC 173-350-040(5).

(8) *Inert waste landfills - Permit application contents*. The owner or operator shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(b) A plan of operation that meets the requirements of subsection (4) of this section; and

(c) Documentation that all owners of property located within one thousand feet of the facility property boundary have been notified that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-410, filed 1/10/03, effective 2/10/03.]

WAC 173-350-490 Other methods of solid waste handling. (1) *Other methods of solid waste handling - Applicability*. This section applies to other methods of solid waste handling not specifically identified elsewhere in this regulation, nor excluded from this regulation.

(2) *Other methods of solid waste handling - Requirements*. Owners and operators of solid waste handling facilities subject to this section shall:

(a) Comply with the requirements in WAC 173-350-040; and

(b) Obtain a permit in accordance with the provisions of WAC 173-350-700 from the jurisdictional health department. Permit applications shall be submitted in accordance with the provisions of WAC 173-350-710 and shall include information required in WAC 173-350-715, and any other information as may be required by the jurisdictional health department.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-490, filed 1/10/03, effective 2/10/03.]

WAC 173-350-500 Ground water monitoring. (1) *Ground water monitoring - Professional qualifications*. All reports, plans, procedures, and design specifications required by this section shall be prepared by a licensed professional in accordance with the requirements of chapter 18.220 RCW.

(2) *Ground water monitoring - Site characterization*. A site proposed for solid waste activities shall be characterized

for its geologic and hydrogeologic properties and suitability for constructing, operating, and monitoring a solid waste facility in accordance with all applicable requirements of this chapter. The site characterization report shall be submitted with the permit application and shall include at a minimum the following:

(a) A summary of local and regional geology and hydrology, including:

(i) Faults;

(ii) Zones of joint concentrations;

(iii) Unstable slopes and subsidence areas on-site;

(iv) Areas of ground water recharge and discharge;

(v) Stratigraphy; and

(vi) Erosional and depositional environments and facies interpretation(s);

(b) A site-specific borehole program including description of lithology, soil/bedrock types and properties, preferential ground water flow paths or zones of higher hydraulic conductivity, the presence of confining unit(s) and geologic features such as fault zones, cross-cutting structures, etc., and the target hydrostratigraphic unit(s) to be monitored. Requirements of the borehole program include:

(i) Each boring will be of sufficient depth below the proposed grade of the bottom liner to identify soil, bedrock, and hydrostratigraphic unit(s);

(ii) Boring samples shall be collected from five-foot intervals at a minimum and at changes in lithology. Representative samples shall be described using the unified soil classification system following ASTM D2487-85 and tested for the following if appropriate:

(A) Particle size distribution by sieve and hydrometer analyses in accordance with approved ASTM methods (D422 and D1120); and

(B) Atterburg limits following approved ASTM method D4318;

(iii) Each lithologic unit on-site will be analyzed for:

(A) Moisture content sufficient to characterize the unit using ASTM method D2216; and

(B) Hydraulic conductivity by an in situ field method or laboratory method. All samples collected for the determination of permeability shall be collected by standard ASTM procedures;

(iv) All boring logs shall be submitted with the following information:

(A) Soil and rock descriptions and classifications;

(B) Method of sampling;

(C) Sample depth, interval and recovery;

(D) Date of boring;

(E) Water level measurements;

(F) Standard penetration number following approved ASTM method D1586-67;

(G) Boring location; and

(H) Soil test data;

(v) All borings not converted to monitoring wells or piezometers shall be carefully backfilled, plugged, and recorded in accordance with WAC 173-160-420;

(vi) During the borehole drilling program, any on-site drilling and lithologic unit identification shall be performed under the direction of a licensed professional in accordance with the requirements of chapter 18.220 RCW who is trained to sample and identify soils and bedrock lithology;

(vii) An on-site horizontal and vertical reference datum shall be established during the site characterization. The standards for land boundary surveys and geodetic control surveys and guidelines for the preparation of land descriptions shall be used to establish borehole and monitoring well coordinates and casing elevations from the reference datum;

(viii) Other methods, including geophysical techniques, may be used to supplement the borehole program to ensure that a sufficient hydrogeologic site characterization is accomplished;

(c) A site-specific flow path analysis that includes:

(i) The depths to ground water and hydrostratigraphic unit(s) including transmissive and confining units; and

(ii) Potentiometric surface elevations and contour maps, direction and rate of horizontal and vertical ground water flow;

(d) Identification of the quantity, location, and construction (where available) of private and public wells within a two thousand-foot radius, measured from the site boundaries;

(e) Tabulation of all water rights for ground water and surface water within a two thousand-foot (610 m) radius, measured from site boundaries;

(f) Identification and description of all surface waters within a one-mile (1.6 km) radius, measured from site boundaries;

(g) A summary of all previously collected site ground water and surface water analytical data, and for expanded facilities, identification of impacts of the existing facility upon ground and surface waters from landfill leachate discharges to date;

(h) Calculation of a site water balance;

(i) Conceptual design of ground water and surface water monitoring systems, and where applicable a vadose zone monitoring system, including proposed construction and installation methods for these systems;

(j) Description of land use in the area, including nearby residences;

(k) A topographic map of the site and drainage patterns, including an outline of the waste management area, property boundary, the proposed location of ground water monitoring wells, and township and range designations; and

(l) Geologic cross sections.

(3) *Ground water monitoring - System design*.

(a) The ground water monitoring system design and report shall be submitted with the permit application and shall meet the following criteria:

(i) A sufficient number of monitoring wells shall be installed at appropriate locations and depths to yield representative ground water samples from those hydrostratigraphic units which have been identified in the site characterization as the earliest potential contaminant flowpaths;

(ii) Represent the quality of ground water at the point of compliance, and include at a minimum:

(A) A ground water flow path analysis which supports why the chosen hydrostratigraphic unit is capable of providing an early warning detection of any ground water contamination.

(B) Documentation and calculations of all of the following information:

(I) Hydrostratigraphic unit thickness including confining units and transmissive units;

(II) Vertical and horizontal ground water flow directions including seasonal, man-made, or other short-term fluctuations in ground water flow;

(III) Stratigraphy and lithology;

(IV) Hydraulic conductivity; and

(V) Porosity and effective porosity.

(b) Upgradient monitoring wells (background wells) shall meet the following performance criteria:

(i) Shall be installed in ground water that has not been affected by leakage from a landfill unit; or

(ii) If hydrogeologic conditions do not allow for the determination of an upgradient monitoring well, then sampling at other monitoring wells which provide representative background ground water quality may be allowed.

(c) Downgradient monitoring wells (compliance wells) shall meet the following performance criteria:

(i) Represent the quality of ground water at the point of compliance;

(ii) Be installed as close as practical to the point of compliance;

(iii) When physical obstacles preclude installation of ground water monitoring wells at the relevant point of compliance at the landfill unit or solid waste facility, the downgradient monitoring system may be installed at the closest practical distance hydraulically downgradient from the relevant point of compliance that ensures detection of ground water contamination in the chosen hydrostratigraphic unit.

(d) All monitoring wells shall be constructed in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells, and chapter 173-162 WAC, Regulation and licensing of well contractors and operators.

(e) The owner or operator shall notify the jurisdictional health department and the department of any proposed changes to the design, installation, development, and decommission of any monitoring wells, piezometers, and other measurement, sampling, and analytical devices. Proposed changes shall not be implemented prior to the jurisdictional health department's written approval. Upon completing changes, all documentation, including date of change, new monitoring well location maps, boring logs, and monitoring well diagrams, shall be submitted to the jurisdictional health department and shall be placed in the operating record.

(f) All monitoring wells, piezometers, and other measurement, sampling, and analytical devices shall be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

(4) *Ground water monitoring - Sampling and analysis plan.*

(a) The ground water monitoring program shall include consistent sampling and analysis procedures that are designed to provide monitoring results that are representative of ground water quality at the upgradient and downgradient monitoring wells. In addition to monitoring wells, facilities with hydraulic gradient control and/or leak detection systems will provide representative ground water samples from those systems. The owner or operator shall submit a compliance sampling and analysis plan as part of the permit application. The plan shall include procedures and techniques for:

(i) Sample collection and handling;

(ii) Sample preservation and shipment;

(iii) Analytical procedures;

(iv) Chain-of-custody control;

(v) Quality assurance and quality control;

(vi) Decontamination of drilling and sampling equipment;

(vii) Procedures to ensure employee health and safety during well installation and monitoring; and

(viii) Well operation and maintenance procedures.

(b) Facilities collecting leachate shall include leachate sampling and analysis as part of compliance monitoring.

(c) The ground water monitoring program shall include sampling and analytical methods that are appropriate for ground water samples. The sampling and analytical methods shall provide sufficient sensitivity, precision, selectivity and limited bias such that changes in ground water quality can be detected and quantified. All samples shall be sent to an accredited laboratory for analyses in accordance with chapter 173-50 WAC, Accreditation of environmental laboratories.

(d) Ground water elevations shall be measured in each monitoring well immediately prior to purging, each time ground water is sampled. The owner or operator shall determine the rate and direction of ground water flow each time ground water is sampled. All ground water elevations shall be determined by a method that ensures measurement to the one hundredth of a foot (3 mm) relative to the top of the well casing.

(e) Ground water elevations in wells that monitor the same landfill unit shall be measured within a period of time short enough to avoid any ground water fluctuations which could preclude the accurate determination of ground water flow rate and direction.

(f) The owner or operator shall establish background ground water quality in each upgradient and downgradient monitoring well. Background ground water quality shall be based upon a minimum of eight independent samples. Samples shall be collected for each monitoring well and shall be analyzed for parameters required in the permit for the first year of ground water monitoring. Each independent sampling event shall be no less than one month after the previous sampling event.

(g) Ground water quality shall be determined at each monitoring well at least quarterly during the active life of the solid waste facility, including closure and the post-closure period. More frequent monitoring may be required to protect downgradient water supply wells. Ground water monitoring shall begin after background ground water quality has been established. The owner or operator may propose an alternate ground water monitoring frequency. Ground water monitoring frequency must be no less than semiannually. The owner or operator must apply for a permit modification or must apply during the renewal process for changes in ground water monitoring frequency making a demonstration based on the following information:

(i) A characterization of the hydrostratigraphic unit(s) including the unsaturated zone, transmissive and confining units and include the following:

(A) Hydraulic conductivity; and

(B) Ground water flow rates;

(ii) Minimum distance between upgradient edge of the solid waste handling unit and downgradient monitoring wells (minimum distance of travel); and

(iii) Contaminant fate and transport characteristics.

(h) All facilities shall test for the following parameters:

(i) Field parameters:

(A) pH;

(B) Specific conductance;

(C) Temperature;

(D) Static water level;

(ii) Geochemical indicator parameters:

(A) Alkalinity (as Ca CO_3);

(B) Bicarbonate (HCO_3);

(C) Calcium (Ca);

(D) Chloride (Cl);

(E) Iron (Fe);

(F) Magnesium (Mg);

(G) Manganese (Mn);

(H) Nitrate(NO_3);

(I) Sodium (Na);

(J) Sulfate (SO_4);

(iii) Leachate indicators:

(A) Ammonia (NH_3-N);

(B) Total organic carbon (TOC);

(C) Total dissolved solids (TDS).

(i) Based upon the site specific waste profile and also the leachate characteristics for lined facilities, the owner or operator shall propose additional constituents to include in the monitoring program. The jurisdictional health department shall specify the additional constituents in the solid waste permit.

(j) Testing shall be performed in accordance with "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," U.S. EPA Publication SW-846, or other testing methods approved by the jurisdictional health department.

(k) Maximum contaminant levels (MCL) for ground water are those specified in chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington.

(5) *Ground water monitoring - Data analysis, notification and reporting*.

(a) The results of monitoring well sample analyses as required by subsection (4)(h) and (i) of this section shall be evaluated using an appropriate statistical procedure(s), as approved by the jurisdictional health department during the permitting process, to determine if a significant increase over background has occurred. The statistical procedure(s) used shall be proposed in the sampling and analysis plan and be designed specifically for the intended site, or prescriptive statistical procedures from appropriate state and federal guidance may be used.

(b) If statistical analyses determine a significant increase over background:

(i) The owner or operator shall:

(A) Notify the jurisdictional health department and the department of this finding within thirty days of receipt of the sampling data. The notification shall indicate what parameters or constituents have shown statistically significant increases;

(B) Immediately resample the ground water for the parameter(s) showing statistically significant increase in the monitoring well(s) where the statistically significant increase has occurred;

(C) Establish a ground water protection standard using the ground water quality criteria of chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington. Constituents for which the background concentration level is higher than the protection standard, the owner or operator shall use background concentration for constituents established in the facility's monitoring record.

(ii) The owner or operator may demonstrate that a source other than a landfill unit or solid waste facility caused the contamination, or the statistically significant increase resulted from error in sampling, analyses, statistical evaluation, or natural variation in ground water quality. If such a demonstration cannot be made and the concentrations or levels of the constituents:

(A) Meet the criteria established by chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington, the owner or operator shall:

(I) Assess and evaluate sources of contamination; and

(II) Implement remedial measures in consultation with the jurisdictional health department and the department.

(B) Exceed the criteria established by chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington, the owner or operator shall:

(I) Characterize the chemical composition of the release and the contaminant fate and transport characteristics by installing additional monitoring wells;

(II) Assess and, if necessary, implement appropriate intermediate measures to remedy the release. The measures shall be approved by the jurisdictional health department and the department; and

(III) Evaluate, select, and implement remedial measures as required by chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation, where applicable. The roles of the jurisdictional health department and the department in remedial action are further defined by WAC 173-350-900.

(c) The owner or operator shall submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year. The jurisdictional health department may require more frequent reporting based on the results of ground water monitoring. The annual report shall summarize and interpret the following information:

(i) All ground water monitoring data, including laboratory and field data for the sampling periods;

(ii) Statistical results and/or any statistical trends including any findings of any statistical increases for the year and time/concentration series plots;

(iii) A summary of concentrations above the maximum contaminant levels of chapter 173-200 WAC;

(iv) Static water level readings for each monitoring well for each sampling event;

(v) Potentiometric surface elevation maps depicting ground water flow rate and direction for each sampling event, noting any trends or changes during the year;

(vi) Geochemical evaluation including cation-anion balancing and trilinear and/or stiff diagraming for each sampling event noting any changes or trends in water chemistry for each well during the year; and

(vii) Leachate analyses where appropriate for each sampling event.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-500, filed 1/10/03, effective 2/10/03.]

WAC 173-350-600 Financial assurance requirements. (1) *Financial assurance requirements - Applicability*. This section is applicable to:

(a) Waste tires storage facilities regulated under WAC 173-350-350;

(b) Moderate risk waste facilities regulated under WAC 173-350-360; and

(c) Limited purpose landfills regulated under WAC 173-350-400.

(2) *Financial assurance requirements - Definitions*. For the purposes of this section, the following definitions apply:

(a) Public facility means a publicly or privately owned facility that accepts solid waste generated by other persons.

(b) Private facility means a privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.

(3) *Financial assurance requirements - Instrument options*. Financial assurance options are available, based on facility type as defined in WAC 173-350-600(2), ownership and permittee. Contents of all instruments must be acceptable to the jurisdictional health department. The following instrument options exist:

(a) Reserve accounts that are managed as either:

(i) Cash and investments accumulated and restricted for activities identified in the closure or post-closure plans, with the equivalent amount of fund balance reserved in the fund; or

(ii) Cash and investments held in a nonexpendable trust fund.

(b) Trust funds to receive, manage and disburse funds for activities identified in the approved closure and post-closure plans. Trust funds shall be established with an entity that has authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(c) Surety bond(s) issued by a surety company listed as acceptable in Circular 570 of the United States Treasury Department. A standby trust fund for closure or post-closure shall also be established by the owner or operator to receive any funds that may be paid by the operator or surety company. The surety shall become liable for the bond obligation if the owner or operator fails to perform as guaranteed by the bond. The surety may not cancel the bond until at least one hundred twenty days after the owner or operator, the jurisdictional health department and the department have received notice of cancellation. If the owner or operator has not provided alternate financial assurance acceptable under this section within ninety days of the cancellation notice, the surety shall pay the amount of the bond into the standby closure or post-closure trust account. The following types of surety bonds are options:

(i) Surety bond; or

(ii) Surety bond guaranteeing that the owner or operator will perform final closure or post-closure activities.

(d) Irrevocable letter of credit issued by an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency. Standby trust funds for closure and post-closure shall also be established by the owner or operator to receive any funds deposited by the issuing institution resulting from a draw on the letter of credit. The letter of credit shall be irrevocable and issued for a period of at least one year, and renewed annually, unless the issuing institution notifies the owner or operator, the jurisdictional health department and the department at least one hundred twenty days before the current expiration date. If the owner or operator fails to perform activities according to the closure or post-closure plan and permit requirements, or if the owner or operator fails to provide alternate financial assurance acceptable to the jurisdictional health department within ninety days after notification that the letter of credit will not be extended, the jurisdictional health department may require that the financial institution provide the funds from the letter of credit to the jurisdictional health department to be used to complete the required closure and post-closure activities;

(e) Insurance policies issued by an insurer who is licensed to transact the business of insurance or is eligible as an excess or surplus line insurer in one or more states, the content of which:

(i) Guarantees that the funds will be available to complete those activities identified in the approved closure or post-closure plans;

(ii) Guarantees that the insurer will be responsible for paying out funds for those activities;

(iii) Provides that the insurance is automatically renewable and that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium;

(iv) Provides that if there is a failure to pay the premium, the insurer may not terminate the policy until at least one hundred twenty days after the notice of cancellation has been received by the owner or operator, the jurisdictional health department and the department;

(v) Provides that termination of the policy may not occur and the policy shall remain in full force and effect if:

(A) The jurisdictional health department determines the facility has been abandoned;

(B) Closure has been ordered by the jurisdictional health department or a court of competent jurisdiction;

(C) The owner or operator has been named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C., Bankruptcy; or

(D) The premium due is paid;

(vi) The owner or operator is required to maintain the policy in full force and until an alternative financial assurance guarantee is provided or when the jurisdictional health department has verified that closure, and/or post-closure, as appropriate, have been completed in accordance with the approved closure or post-closure plan;

(vii) For purposes of this rule, "captive" insurance companies as defined in WAC 173-350-100, are not an acceptable insurance company.

(f) Financial Test/corporate guarantee allows for a private corporation meeting the financial test to provide a corporate guarantee those activities identified in the closure and post-closure plans will be completed.

(i) To qualify, a private corporation owner or operator shall meet the criteria of either option A or B:

(A) Option A - to pass the financial test under this option the private corporation shall have:

(I) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total

liabilities greater than 0.1; or a ratio of current assets to current liabilities greater than 1.5;

(II) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.

(B) Option B - to pass this alternative financial test, the private corporation shall have:

(I) A current rating of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;

(II) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator's chief financial officer shall provide a corporate guarantee that the corporation passes the financial test at the time the closure plan is filed. This corporate guarantee shall be reconfirmed annually ninety days after the end of the corporation's fiscal year by submitting to the jurisdictional health department a letter signed by the chief financial officer that:

(A) Provides the information necessary to document that the owner or operator passes the financial test;

(B) Guarantees that the funds to finance closure and post-closure activities according to the closure or post-closure plan and permit requirements are available;

(C) Guarantees that closure and post-closure activities will be completed according to the closure or post-closure plan and permit requirements;

(D) Guarantees that within thirty days if written notification is received from the jurisdictional health department that the owner or operator no longer meets the criteria of the financial test, the owner or operator shall provide an alternative form of financial assurance consistent with the requirements of this section;

(E) Guarantees that the owner or operator's chief financial officer will notify in writing the jurisdictional health department and the department within fifteen days any time that the owner or operator no longer meets the criteria of the financial test or is named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C., Bankruptcy;

(F) Acknowledges that the corporate guarantee is a binding obligation on the corporation and that the chief financial officer has the authority to bind the corporation to the guarantee;

(G) Attaches a copy of the independent certified public accountant's report on examination of the owner or operator's financial statements for the latest completed fiscal year; and

(H) Attaches a special report from the owner or operator's independent certified public accountant (CPA) stating that the CPA has reviewed the information in the letter from the owner or operator's chief financial officer and has determined that the information is true and accurate.

(iii) The jurisdictional health department may, based on a reasonable belief that the owner or operator no longer meets the criteria of the financial test, require reports of the financial condition at any time in addition to the annual report. The jurisdictional health department will specify the information required in the report. If the jurisdictional health department finds, on the basis of such reports or other information, that the owner or operator no longer meets the criteria of the financial test, the owner or operator shall provide an alternative form of financial assurance consistent with the requirements of this section, within thirty days after notification by the jurisdictional health department.

(iv) If the owner or operator fails to perform final closure and, where required, provide post-closure care of a facility covered by the guarantee in accordance with the approved closure and post-closure plans, the guarantor will be required to complete the appropriate activities.

(v) The guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator, the jurisdictional health department and the department. Cancellation may not occur, however, during the one hundred twenty days beginning on the date of receipt of the notice of cancellation by the owner or operator, the jurisdictional health department and the department.

(vi) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the jurisdictional health department within ninety days after receipt of a notice of cancellation of the guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.

(4) *Financial assurance requirements - Eligible financial assurance instruments*. The financial assurance instruments identified in subsection (3) of this section are available for use based on facility category and whether the permittee is a public or private entity as follows:

(a) For a public facility, as defined in subsection (2) of this section, when the permittee is a public entity, the following options are available:

(i) Reserve account;

(ii) Trust account;

(iii) Surety bond (payment or performance); or

(iv) Insurance;

(b) For a public facility as defined in subsection (2) of this section, where the permittee is a private entity, the following options are available:

(i) Trust account;

(ii) Surety bond (payment or performance);

(iii) Letter of credit; or

(iv) Insurance;

(c) For private facilities as defined in subsection (2) of this section, the following options are available:

(i) Trust account;

(ii) Surety bond (payment or performance);

(iii) Letter of credit;

(iv) Insurance; or

(v) Financial test/corporate guarantee.

(5) *Financial assurance requirements - Cost estimate for closure*. The owner or operator shall:

(a) Prepare a written closure cost estimate as part of the facility closure plan. The closure cost estimate shall:

(i) Be in current dollars and represent the cost of closing the facility;

(ii) Provide a detailed written estimate, in current dollars, of the cost of hiring a third party to close the facility at any time during the active life when the extent and manner of its operation would make closure the most expensive in accordance with the approved closure plan;

(iii) Project intervals for withdrawal of closure funds from the closure financial assurance instrument to complete the activities identified in the approved closure plan;

(iv) Not reduce by allowance for salvage value of equipment, solid waste, or the resale value of property or land;

(b) Prepare a new closure cost estimate in accordance with (a) of this subsection whenever:

(i) Changes in operating plans or facility design affect the closure plan; or

(ii) There is a change in the expected year of closure that affects the closure plan;

(c) Review the closure cost estimate by March 1st of each calendar year. The review shall be submitted to the jurisdictional health department, with a copy to the department, by April 1st of each calendar year stating that the review was completed and the findings of the review. The review will examine all factors, including inflation, involved in estimating the closure cost. Any cost changes shall be factored into a revised closure cost estimate and submit the revised cost estimate to the jurisdictional health department for review and approval. The jurisdictional health department shall evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation.

(6) *Financial assurance requirements - Cost estimate for post-closure*. The owner or operator shall:

(a) Prepare a written post-closure cost estimate as part of the facility post-closure plan. The post-closure cost estimate shall:

(i) Be in current dollars and represent the total cost of completing post-closure activities for the facility for a twenty-year post-closure period or a time frame determined by the jurisdictional health department;

(ii) Provide a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the facility in compliance with the post-closure plan;

(iii) Project intervals for withdrawal of post-closure funds from the post-closure financial assurance instrument to complete the activities identified in the approved post-closure plan; and

(iv) Not reduce by allowance for salvage, value of equipment, or resale value of property or land.

(b) Prepare a new post-closure cost estimate for the remainder of the post-closure care period in accordance with (a) of this subsection, whenever a change in the post-closure plan increases or decreases the cost of post-closure care.

(c) During the operating life of the facility, the owner or operator must review the post-closure cost estimate by March 1st of each calendar year. The review will be submitted to the jurisdictional health department, with a copy to the department by April 1st of each calendar year stating that the review was completed and the finding of the review. The review shall examine all factors, including inflation, involved in estimating the post-closure cost estimate. Any changes in costs shall be factored into a revised post-closure cost estimate. The new estimate shall be submitted to the jurisdictional health department for approval. The jurisdictional health department shall evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation.

(7) *Financial assurance requirements - Closure/post-closure financial assurance account establishment and reporting*.

(a) Closure and post-closure financial assurance funds generated shall be provided to the selected financial assurance instrument at the schedule specified in the closure and post-closure plans, such that adequate closure and post-closure funds will be generated to ensure full implementation of the approved closure and post-closure plans.

(b) The facility owner or operator with systematic deposits shall establish a procedure with the financial assurance instruments trustee for notification of nonpayment of funds to be sent to the jurisdictional health department and the department.

(c) The owner or operator shall file with the jurisdictional health department, no later than April 1st of each year, an annual audit of the financial assurance accounts established for closure and post-closure activities, and a statement of the percentage of user fees, as applicable, diverted to the financial assurance instruments, for the previous calendar year:

(i) For facilities owned and operated by municipal corporations, the financial assurance accounts shall be audited according to the audit schedule of the office of state auditor. A certification of audit completion and summary findings shall be filed with the jurisdictional health department and the department, including during each of the post-closure care years.

(ii) For facilities not owned or operated by municipal corporations:

(A) Annual audits shall be conducted by a certified public accountant licensed in the state of Washington. A certification of audit completion and summary findings shall be filed with the jurisdictional health department and the department, including during each of the post-closure care years.

(B) The audit shall also include, as applicable, calculations demonstrating the proportion of closure or post-closure, completed during the preceding year as specified in the closure and post-closure plans.

(d) Established financial assurance accounts shall not constitute an asset of the facility owner or operator.

(e) Any income accruing to the established financial assurance account(s) will be used at the owner's discretion upon approval of the jurisdictional health department.

(8) *Financial assurance requirements - Fund withdrawal for closure and post-closure activities*.

(a) The owner or operator will withdraw funds from the closure and/or post-closure financial assurance instrument as specified in the approved closure/post-closure plans;

(b) If the withdrawal of funds from the financial assurance instrument exceeds by more than five percent the withdrawal schedule stated in the approved closure and/or post-closure plan over the life of the permit, the closure and/or post-closure plan shall be amended.

(c) After verification by the jurisdictional health department of facility closure, excess funds remaining for closure in a financial assurance account shall be released to the facility owner or operator.

(d) After verification by the jurisdictional health department of facility post-closure, excess funds remaining for post-closure in a financial assurance account shall be released to the facility owner or operator.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 and 03-04-103 (Order 99-24 and Order 99-24A), § 173-350-600, filed 1/10/03 and 2/4/03, effective 3/7/03 and 3/31/03.]

WAC 173-350-700 Permits and local ordinances. (1) *Permit required.*

(a) No solid waste storage, treatment, processing, handling or disposal facility shall be maintained, established, substantially altered, expanded or improved until the person operating or owning such site has obtained a permit or permit deferral from the jurisdictional health department or a beneficial use exemption from the department pursuant to the provisions of this chapter. Facilities operating under categorical exemptions established by this chapter shall meet all the conditions of such exemptions or will be required to obtain a permit under this chapter. Persons dumping or depositing solid waste without a permit in violation of this chapter shall be subject to the penalty provisions of RCW 70.95.240.

(b) Permits issued under this chapter are not required for remedial actions performed by the state and/or in conjunction with the United States Environmental Protection Agency to implement the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), or remedial actions taken by others to comply with a state and/or federal cleanup order or consent decree.

(c) Any jurisdictional health department and the department may enter into an agreement providing for the exercise by the department of any power that is specified in the contract and that is granted to the jurisdictional health department under chapter 70.95 RCW, Solid waste management—Reduction and recycling. However, the jurisdictional health department shall have the approval of the legislative authority or authorities it serves before entering into any such agreement with the department.

(2) *Local ordinances.* Each jurisdictional health department shall adopt local ordinances implementing this chapter not later than one year after the effective date of this chapter, and shall file the ordinances with the department within ninety days following local adoption. Local ordinances shall not be less stringent than this chapter, but may include additional requirements.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-700, filed 1/10/03, effective 2/10/03.]

WAC 173-350-710 Permit application and issuance. (1) *Permit application process.*

(a) Any owner or operator required to obtain a permit shall apply for a permit from the jurisdictional health department. All permit application filings shall include two copies of the application. An application shall not be considered complete by the jurisdictional health department until the information required under WAC 173-350-715 has been submitted.

(b) The jurisdictional health department may establish reasonable fees for permits, permit modifications, and renewal of permits. All permit fees collected by the health department shall be deposited in the account from which the health department's operating expenses are paid.

(c) Once the jurisdictional health department determines that an application for a permit is complete, it shall:

(i) Refer one copy to the appropriate regional office of the department for review and comment;

(ii) Investigate every application to determine whether the facilities meet all applicable laws and regulations, conform to the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan, and comply with all zoning requirements; and

(d) Once the department has received a complete application for review, it shall:

(i) Ensure that the proposed site or facility conforms with all applicable laws and regulations including the minimum functional standards for solid waste handling;

(ii) Ensure that the proposed site or facility conforms to the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan; and

(iii) Recommend for or against the issuance of each permit by the jurisdictional health department within forty-five days of receipt of a complete application.

(e) Application procedures for statewide beneficial use exemptions and permit deferrals are contained in WAC 173-350-200 and 173-350-710(8), respectively.

(2) *Permit issuance*.

(a) When the jurisdictional health department has evaluated all pertinent information, it may issue or deny a permit. Every solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department. Every permit issued by a jurisdictional health department shall contain specific requirements necessary for the proper operation of the permitted site or facility.

(b) Every permit issued shall be valid for a period not to exceed five years at the discretion of the jurisdictional health department.

(c) Jurisdictional health departments shall file all issued permits with the appropriate regional office of the department no more than seven days after the date of issuance.

(d) The department shall review the permit in accordance with RCW 70.95.185 and report its findings to the jurisdictional health department in writing within thirty days of permit issuance.

(e) The jurisdictional health department is authorized to issue one permit for a location where multiple solid waste handling activities occur, provided all activities meet the applicable requirements of this chapter.

(3) *Permit renewals*.

(a) Prior to renewing a permit, the health department shall conduct a review as it deems necessary to ensure that the solid waste handling facility or facilities located on the site continue to:

(i) Meet the solid waste handling standards of the department;

(ii) Comply with applicable local regulations; and

(iii) Conform to the approved solid waste management plan and/or the approved hazardous waste management plan.

(b) A jurisdictional health department shall approve or deny a permit renewal within forty-five days of conducting its review.

(c) Every permit renewal shall be valid for a period not to exceed five years at the discretion of the jurisdictional health department.

(d) The department shall review the renewal in accordance with RCW 70.95.190 and report its findings to the jurisdictional health department in writing.

(e) The jurisdictional board of health may establish reasonable fees for permits reviewed under this section. All permit fees collected by the health department shall be deposited in the treasury and to the account from which the health department's operating expenses are paid.

(4) *Permit modifications.* Any significant change to the operation, design, capacity, performance or monitoring of a permitted facility may require a modification to the permit. The following procedures shall be followed by an owner or operator prior to making any change in facility operation, design, performance or monitoring:

(a) The facility owner or operator shall consult with the jurisdictional health department regarding the need for a permit modification;

(b) The jurisdictional health department shall determine whether the proposed modification is significant. Upon such a determination, the owner or operator shall make application for a permit modification, using the process outlined in subsections (1) through (3) of this section; and

(c) If a proposed change is determined to not be significant and not require a modification to the permit, the department shall be notified.

(5) *Inspections.*

(a) At a minimum, annual inspections of all permitted solid waste facilities shall be performed by the jurisdictional health department, unless otherwise specified in this chapter.

(b) All facilities and sites shall be physically inspected prior to issuing a permit, permit renewal or permit modification.

(c) Any duly authorized representative of the jurisdictional health department may enter and inspect any property, premises or place at any reasonable time for the purpose of determining compliance with this chapter, and relevant laws and regulations. Findings shall be noted and kept on file. A copy of the inspection report or annual summary shall be furnished to the site operator.

(6) *Permit suspension and appeals.*

(a) Any permit for a solid waste handling facility shall be subject to suspension at any time the jurisdictional health department determines that the site or the solid waste handling facility is being operated in violation of this chapter.

(b) Whenever the jurisdictional health department denies a permit or suspends a permit for a solid waste handling facility, it shall:

(i) Upon request of the applicant or holder of the permit, grant a hearing on such denial or suspension within thirty days after the request;

(ii) Provide notice of the hearing to all interested parties including the county or city having jurisdiction over the site and the department; and

(iii) Within thirty days after the hearing, notify the applicant or the holder of the permit in writing of the determination and the reasons therefore. Any party aggrieved by such determination may appeal to the pollution control hearings board by filing with the board a notice of appeal within thirty days after receipt of notice of the determination of the health officer.

(c) If the jurisdictional health department denies a permit renewal or suspends a permit for an operating waste recycling facility that receives waste from more than one city or county, and the applicant or holder of the permit requests a hearing or files an appeal under this section, the permit denial or suspension shall not be effective until the completion of the appeal process under this section, unless the jurisdictional health department declares that continued operation of the waste recycling facility poses a very probable threat to human health and the environment.

(d) Procedures for appealing beneficial use exemption determinations are contained in WAC 173-350-200 (5)(g).

(7) *Variances.*

(a) Any person who owns or operates a solid waste handling facility subject to a solid waste permit under WAC 173-350-700, may apply to the jurisdictional health department for a variance from any section of this chapter. No variance shall be granted for requirements specific to chapter 70.95 RCW, Solid waste management—Reduction and recycling. The application shall be accompanied by such information as the jurisdictional health department may require. The jurisdictional health department may grant such variance, but only after due notice or a public hearing if requested, if it finds that:

(i) The solid waste handling practices or location do not endanger public health, safety or the environment; and

(ii) Compliance with the section from which variance is sought would produce hardship without equal or greater benefits to the public.

(b) No variance shall be granted pursuant to this section until the jurisdictional health department has considered the relative interests of the applicant, other owners of property likely to be affected by the handling practices and the general public.

(c) Any variance or renewal shall be granted within the requirements of subsections (1) through (3) of this section and for time period and conditions consistent with the reasons therefore, and within the following limitations:

(i) If the variance is granted on the grounds that there is no practicable means known or available for the adequate prevention, abatement, or control of pollution involved, it shall be only until the necessary means for prevention, abatement or control become known and available and subject to the taking of any substitute or alternative measures that the jurisdictional health department may prescribe;

(ii) The jurisdictional health department may grant a variance conditioned by a timetable if:

(A) Compliance with this chapter will require spreading of costs over a considerable time period; and

(B) The timetable is for a period that is needed to comply with the chapter.

(d) An application for a variance, or for the renewal thereof, submitted to the jurisdictional health department shall be approved or disapproved by the jurisdictional health department within ninety days of receipt unless the applicant

and the jurisdictional health department agree to a continuance.

(e) No variance shall be granted by a jurisdictional health department except with the approval and written concurrence of the department prior to action on the variance by the jurisdictional health department.

(8) *Permit deferral*.

(a) A jurisdictional health department may, at its discretion and with the concurrence of the department, waive the requirement that a solid waste permit be issued for a facility under this chapter by deferring to other air, water or environmental permits issued for the facility which provide an equivalent or superior level of environmental protection.

(b) The requirement to obtain a solid waste permit from the jurisdictional health department shall not be waived for any transfer station, landfill, or incinerator that receives municipal solid waste destined for final disposal.

(c) Any deferral of permitting or regulation of a solid waste facility granted by the department or a jurisdictional health department prior to June 11, 1998, shall remain valid and shall not be affected by this subsection.

(d) Any person who owns or operates an applicable solid waste handling facility subject to obtaining a solid waste permit may apply to the jurisdictional health department for permit deferral. Two copies of an application for permit deferral shall be signed by the owner or operator and submitted to the jurisdictional health department. Each application for permit deferral shall include:

(i) A description of the solid waste handling units for which the facility is requesting deferral;

(ii) A list of the other environmental permits issued for the facility;

(iii) A demonstration that identifies each requirement of this chapter and a detailed description of how the other environmental permits will provide an equivalent or superior level of environmental protection;

(iv) Evidence that the facility is in conformance with the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan;

(v) Evidence of compliance with chapter 197-11 WAC, SEPA rules; and

(vi) Other information that the jurisdictional health department or the department may require.

(e) The jurisdictional health department shall notify the applicant if it elects not to waive the requirement that a solid waste permit be issued for a facility under this chapter. If the jurisdictional health department elects to proceed with permit deferral, it shall:

(i) Forward one copy of the complete application to the department for review;

(ii) Notify the permit issuing authority for the other environmental permits described in (d)(ii) of this subsection and allow an opportunity for comment; and

(iii) Determine if the proposed permit deferral provides an equivalent or superior level of environmental protection.

(f) The department shall provide a written report of its findings to the jurisdictional health department and recommend for or against the permit deferral. The department shall provide its findings within forty-five days of receipt of a complete permit deferral application or inform the jurisdictional health department as to the status with a schedule for its determination.

(g) No solid waste permit deferral shall be effective unless the department has provided written concurrence. All requirements for solid waste permitting shall remain in effect until the department has provided written concurrence.

(h) When the jurisdictional health department has evaluated all information, it shall provide written notification to the applicant and the department whether or not it elects to waive the requirement that a solid waste permit be issued for a facility under this chapter by deferring to other environmental permits issued for the facility. Every complete permit deferral application shall be approved or denied within ninety days after its receipt by the jurisdictional health department or the owner or operator shall be informed as to the status of the application with a schedule for final determination.

(i) The jurisdictional health department shall revoke any permit deferral if it or the department determines that the other environmental permits are providing a lower level of environmental protection than a solid waste permit. Jurisdictional health departments shall notify the facility's owner or operator of intent to revoke the permit deferral and direct the owner or operator to take measures necessary to protect human health and the environment and to comply with the permit requirements of this chapter.

(j) Facilities which are operating under the deferral of solid waste permitting to other environmental permits shall:

(i) Allow the jurisdictional health department, at any reasonable time, to inspect the solid waste handling units which have been granted a permit deferral;

(ii) Notify the jurisdictional health department and the department whenever changes are made to the other environmental permits identified in (d)(ii) of this subsection. This notification shall include a detailed description of how the changes will affect the facility's operation and a demonstration, as described in (d)(iii) of this subsection, that the amended permits continue to provide an equivalent or superior level of environmental protection to the deferred solid waste permits. If the amended permits no longer provide an equivalent or superior level of environmental protection, the facility owner or operator shall close the solid waste handling unit or apply for a permit from the jurisdictional health department;

(iii) Notify the jurisdictional health department and the department within seven days of discovery of any violation of, or failure to comply with, the conditions of the other environmental permits identified in (d)(ii) of this subsection;

(iv) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st as required under the appropriate annual reporting section of this chapter;

(v) Operate in accordance with any other written conditions that the jurisdictional health department deems appropriate; and

(vi) Shall take any measures deemed necessary by the jurisdictional health department when the permit deferral has been revoked.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-710, filed 1/10/03, effective 2/10/03.]

WAC 173-350-715 General permit application requirements. (1) Every permit application shall be on a format supplied by the department and shall contain the following information:

(a) Contact information for the facility owner, and the facility operator and property owner if different, including contact name, company name, mailing address, phone fax, and e-mail;

(b) Identification of the type of facility that is to be permitted;

(c) Identification of any other permit (local, state or federal) in effect at the site;

(d) A vicinity plan or map (having a minimum scale of 1:24,000) that shall show the area within one mile (1.6 km) of the property boundaries of the facility in terms of the existing and proposed zoning and land uses within that area, residences, and access roads, and other existing and proposed man-made or natural features that may impact the operation of the facility;

(e) Evidence of compliance with chapter 197-11 WAC, SEPA rules;

(f) Information as required under the appropriate facility permit application subsection of this chapter; and

(g) Any additional information as requested by the jurisdictional health department or the department.

(2) Engineering plans, reports, specifications, programs, and manuals submitted to the jurisdictional health department or the department shall be prepared and certified by an individual licensed to practice engineering in the state of Washington, in an engineering discipline appropriate for the solid waste facility type or activity.

(3) Signature and verification of applicants:

(a) All applications for permits shall be accompanied by evidence of authority to sign the application and shall be signed by the owner or operator as follows:

(i) In the case of corporations, by a duly authorized principal executive officer of at least the level of vice-president; in the case of a partnership or limited partnership, by:

(A) A general partner;

(B) Proprietor; or

(C) In case of sole proprietorship, by the proprietor;

(ii) In the case of a municipal, state, or other government entity, by a duly authorized principal executive officer or elected official.

(b) Applications shall be signed or attested to by, or on behalf of, the owner or operator, in respect to the veracity of all statements therein; or shall bear an executed statement by, or on behalf of, the owner or operator to the effect that false statements made therein are made under penalty of perjury.

(c) The signature of the applicant shall be notarized on the permit application form.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-715, filed 1/10/03, effective 2/10/03.]

WAC 173-350-900 Remedial action. When the owner or operator of a solid waste facility is subject to remedial measures in compliance with chapter 173-340 WAC, the Model Toxics Control Act, the roles of the jurisdictional health department and the department shall be as follows:

(1) The jurisdictional health department:

(a) May participate in all negotiations, meetings, and correspondence between the owner and operator and the department in implementing the model toxics control action;

(b) May comment upon and participate in all decisions made by the department in assessing, choosing, and implementing a remedial action program;

(c) Shall require the owner or operator to continue closure and post-closure activities as appropriate under this chapter, after remedial action measures are completed; and

(d) Shall continue to regulate all solid waste facilities during construction, operation, closure and post-closure, that are not directly impacted by chapter 173-340 WAC.

(2) The department shall carry out all the responsibilities assigned to it by chapter 70.105D RCW, Hazardous waste cleanup—Model Toxics Control Act.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-900, filed 1/10/03, effective 2/10/03.]

WAC 173-350-990 Criteria for inert waste. (1) *Criteria for inert waste - Applicability*. This section provides the criteria for determining if a solid waste is an inert waste. Dangerous wastes regulated under chapter 173-303 WAC, Dangerous waste regulation, PCB wastes regulated under 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, and asbestos-containing waste regulated under federal 40 CFR Part 61 rules are not inert waste. For the purposes of determining if a solid waste meets the criteria for an inert waste a person shall:

(a) Apply knowledge of the waste in light of the materials or process used and potential chemical, physical, biological, or radiological substances that may be present; or

(b) Test the waste for those potential substances that may exceed the applicable criteria. A jurisdictional health department may require a person to test a waste to determine if it meets the applicable criteria. Such testing may be required if the jurisdictional health department has reason to believe that a waste does not meet the applicable criteria or has not been adequately characterized. Testing shall be performed in accordance with:

(i) "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," U.S. EPA Publication SW-846; or

(ii) Other testing methods approved by the jurisdictional health department.

(2) *Criteria for inert waste - Listed inert wastes*. For the purpose of this chapter, the following solid wastes are inert wastes, provided that the waste has not been tainted, through exposure from chemical, physical, biological, or radiological substances, such that it presents a threat to human health or the environment greater than that inherent to the material:

(a) Cured concrete that has been used for structural and construction purposes, including embedded steel reinforcing and wood, that was produced from mixtures of Portland cement and sand, gravel or other similar materials;

(b) Asphaltic materials that have been used for structural and construction purposes (e.g., roads, dikes, paving) that were produced from mixtures of petroleum asphalt and sand, gravel or other similar materials. Waste roofing materials are not presumed to be inert;

(c) Brick and masonry that have been used for structural and construction purposes;

(d) Ceramic materials produced from fired clay or porcelain;

(e) Glass, composed primarily of sodium, calcium, silica, boric oxide, magnesium oxide, lithium oxide or aluminum oxide. Glass presumed to be inert includes, but is not limited to, window glass, glass containers, glass fiber, glasses resistant to thermal shock, and glass-ceramics. Glass containing significant concentrations of lead, mercury, or other toxic substance is not presumed to be inert; and

(f) Stainless steel and aluminum.

(3) *Criteria for inert waste - Inert waste characteristics*. This subsection provides the criteria for determining if a solid waste not listed in subsection (2) of this section is an inert waste. Solid wastes meeting the criteria below shall have comparable physical characteristics and comparable or lower level of risk to human health and the environment as those listed in subsection (2) of this section.

(a) Inert waste shall have physical characteristics that meet the following criteria. Inert waste shall:

(i) Not be capable of catching fire and burning from contact with flames;

(ii) Maintain its physical and chemical structure under expected conditions of storage or disposal including resistance to biological and chemical degradation; and

(iii) Have sufficient structural integrity and strength to prevent settling and unstable situations under expected conditions of storage or disposal.

(b) Inert waste shall not contain chemical, physical, biological, or radiological substances at concentrations that exceed the following criteria. Inert waste shall not:

(i) Be capable of producing leachate or emissions that have the potential to negatively impact soil, ground water, surface water, or air quality;

(ii) Pose a health threat to humans or other living organisms through direct or indirect exposure; or

(iii) Result in applicable air quality standards to be exceeded, or pose a threat to human health or the environment under potential conditions during handling, storage, or disposal.

[Statutory Authority: Chapter 70.95 RCW. 03-03-043 (Order 99-24), § 173-350-990, filed 1/10/03, effective 2/10/03.]

Chapter 173-351 WAC

CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS

WAC

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WAC 173-351-010 Purpose, applicability and effective dates. (1) Purpose. The purpose of this regulation is to establish minimum statewide standards for all municipal solid waste landfill (MSWLF) units under the authority of chapter 70.95 RCW as amended in order that jurisdictional health departments can enact ordinances equally as or more stringent than this regulation and to have jurisdictional health departments implement such ordinances through a permit system set forth in Section 700. It is also the purpose of this regulation to implement rule making by the Environmental Protection Agency (EPA) under the authority of subtitle D of the Resource Conservation and Recovery Act (RCRA), as amended in 1984, and under the authority of Section 405(d) of the Clean Water Act as amended. The Clean Water Act required EPA "to establish standards for sewage sludge that is co-disposed with municipal solid waste." EPA satisfied both statutory requirements with the publication of 40 CFR Part 258-Criteria For Municipal Solid Waste Landfills on October 9, 1991. These minimum statewide criteria ensure the protection of human health and the environment.

(2) Applicability.

(a) These criteria apply to new MSWLF units, existing MSWLF units, and lateral expansions, except as otherwise specifically provided in this regulation; all other solid waste disposal facilities and practices that are not regulated under subtitle C of RCRA and chapter 70.105 RCW are subject to the criteria contained in 40 CFR Part 257, Criteria For Classification of Solid Waste Disposal Facilities, and/or chapter 173-304 WAC as amended.

Note: These rules do not apply to facilities that receive only inert and demolition waste, wood waste, industrial solid wastes, or other types of solid waste (other than household waste) disposed of in limited purpose landfills regulated in chapter 173-304 WAC, minimum functional standards for solid waste handling. Co-disposal of any solid waste with household waste is governed by these rules.

(b) These criteria do not apply to MSWLF units that do not receive waste on or after the effective date of this chapter. MSWLF units that stopped receiving waste prior to October 9, 1991, are subject to closure and post-closure rules under chapter 173-304 WAC, the Minimum Functional Standards for Solid Waste Handling. MSWLF units that received waste on and after October 9, 1991, but stop receiving waste prior to the effective date of this rule:

(i) Are also subject to federal closure rules under 40 CFR Part 258.60(a);

(ii) Will be subject to all the requirements of this regulation unless otherwise specified, if such MSWLF units fail to meet the federal closure rules under 40 CFR Part 258.60(a) by April 9, 1994, and the closure standards of chapter 173-

304 WAC; except that jurisdictional health departments may grant time extensions to complete closure under 40 CFR Part 258.60(a) by October 9, 1994; and

(iii) Will be subject to the ground water monitoring and corrective action requirements of WAC 173-351-400 and the permitting requirements of WAC 173-351-700 if such MSWLF units are part of a multiunit ground water monitoring system of WAC 173-351-450(4).

(c) All MSWLF units that receive waste on or after the effective date of this chapter must comply with this chapter by the effective date of this chapter unless:

(i) Later effective dates are specified elsewhere in this chapter, such as WAC 173-351-400 (1)(b), ground water monitoring and WAC 173-351-600 (4)(c); or

(ii) The MSWLF unit is an existing MSWLF unit or an existing lateral expansion of an existing unit that:

(A) Disposed of 100 tons per day or less of solid waste during a representative period prior to the effective date of this chapter;

(B) Does not dispose of more than an average of 100 tons per day of solid waste each month between the effective date of this chapter and April 9, 1994; and

(C) Is not on the National Priorities List (NPL) as found in Appendix B to 40 CFR Part 300.

(d) MSWLF units that meet conditions of (c) of this subsection are exempt from all requirements of this rule but must meet the final cover requirement specified in 40 CFR 258.60 (a) and the requirements of chapter 173-304 WAC. The final cover must be installed by October 9, 1994. Owners or operators of MSWLF units described in (c) and (d) of this section that fail to complete cover installation by October 9, 1994, will be subject to all requirements of this chapter, unless otherwise specified.

(e) MSWLF units failing to satisfy these criteria are considered open dumps for purposes of state solid waste management planning under RCRA.

(f) MSWLF units failing to satisfy these criteria constitute open dumps, which are prohibited under section 4005 of RCRA.

(g) MSWLF units containing sewage sludge and failing to satisfy these criteria violate Sections 309 and 405(e) of the Federal Clean Water Act.

Note: All state codes standards, rules and regulations cited in this chapter are available by writing to the Department of Ecology, P.O. Box 4-7600, Olympia, Washington 98504-7600, or call 1-800-RECYCLE for the location of the nearest regional office of the department.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-010, filed 10/26/93, effective 11/26/93.]

WAC 173-351-100 Definitions. Unless otherwise noted, all terms contained in this part are defined by their plain meaning. This section contains definitions for terms that appear throughout this regulation; additional definitions appear in the specific sections to which they apply.

"Active area" means that part of a facility that includes the active portion and portions of a facility that recycle, store, treat, or dispose of solid (including liquid) wastes. The active area includes leachate treatment facilities and runoff ponds. It excludes run-on ponds and on-site roads which are used for any purpose; on-site roads are considered part of the buffer zone. See active portion and buffer zone definition below.

"Active life" means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities in accordance with WAC 173-351-500, Closure and post-closure care.

"Active portion" means that part of a facility or MSWLF unit that has received or is receiving wastes and that has not been closed in accordance with WAC 173-351-500, Closure and post-closure care.

"Airport." See WAC 173-351-130 (2)(d)(i).

"Areas susceptible to mass movement." See WAC 173-351-130 (7)(b)(iv).

"Arid" means locations in the state of Washington having less than twelve inches (30 centimeters) of precipitation annually.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all requirements under chapter 70.95J RCW. Biosolids includes septic tank sludge, also known as septage, that can be beneficially recycled and meets all requirements of chapter 70.95J RCW.

"Bird hazard." See WAC 173-351-130 (2)(d)(ii).

"Buffer zone" means that part of a facility which lies between the active area and the property boundary.

"Closure" means those actions taken by the owner or operator of a MSWLF unit or facility to cease disposal operations and to ensure that a MSWLF unit or facility is closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period. Closure is considered part of operation. See definition of operation.

"Commercial solid waste" means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

"Composite layer." See WAC 173-351-500 (1)(i)(B).

"Composite liner." See WAC 173-351-300 (2)(a)(ii).

"Construction quality assurance" means a planned system of activities that provide assurance that a facility is constructed as specified in the design and that the materials used in construction are manufactured according to specifications. Construction quality assurance includes inspections, verifications, audits, and evaluations of materials and workmanship necessary to determine and document the quality of the constructed facility.

"Construction quality control" means a planned system of activities that is used to directly monitor and control the quality of a construction project. Construction quality controls are the measures under taken by the contractor or installer to determine compliance with requirements for workmanship and materials put forth in the plans and specification for the construction project.

"Contaminate" means to allow to discharge a substance into ground water that would cause:

The concentration of that substance in the ground water to exceed the maximum contamination level specified in chapter 173-200 WAC; or

A statistically significant increase in the concentration of that substance in the ground water where the existing concen-

tration of that substance exceeds the maximum contaminant level specified in chapter 173-200 WAC; or

A statistically significant increase above background in the concentration of a substance which:

Is not specified in chapter 173-200 WAC; and

Is present in the solid waste; and

Has been determined to present a substantial risk to human health or the environment in the concentrations found at the point of compliance by the jurisdictional health department in consultation with the department and the department of health.

"Dangerous wastes" means any solid waste designated as dangerous waste under chapter 173-303 WAC, the Dangerous waste regulations.

"Demolition waste" means solid waste, largely inert waste resulting from the demolition or razing of buildings, roads and other man-made structures.

"Demonstration" means a showing by the owner or operator that human health and the environment can be protected as equally as a given requirement in the regulation. A demonstration is made in the application for a permit under WAC 173-351-700. A successful demonstration allows or authorizes an activity authorized for the life of the facility unless an alternative time period is approved by the jurisdictional health department.

"Department" means the department of ecology.

"Disease vectors." See WAC 173-351-200 (3)(b).

"Displacement." See WAC 173-351-130 (5)(b)(ii).

"Disposal" or "deposition" means the discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water.

"Establish" means to construct a new or laterally expanded MSWLF unit.

"Existing MSWLF unit" means any municipal solid waste landfill unit that is receiving solid waste as of the appropriate dates specified in WAC 173-351-010 (2)(c). Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good waste management practices, including operating plans approved under chapter 173-304 WAC. For the purposes of this rule, any existing horizontal expansion approved by the jurisdictional health department for which as-built plans documenting construction prior to the effective date of this chapter, have been prepared and submitted to the jurisdictional health department shall be considered an existing MSWLF unit.

"Fault." See WAC 173-351-130 (5)(b)(i).

"Facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

"Flood plain." See WAC 173-351-130 (3)(b)(i).

"Free liquids." See WAC 173-351-200(9).

"Gas condensate." See WAC 173-351-200 (9)(c)(ii).

"Ground water" means water below the land surface in a zone of saturation.

"Holocene." See WAC 173-351-130 (5)(b)(iii).

"Household waste" means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including household hazardous waste) (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). This term does not include commercial, industrial, inert and demolition waste, or wood waste.

Note: Sanitary waste in septic tanks that is not disposed of in a MSWLF unit is subject to other state and federal rules.

"Hydrostratigraphic unit" means any water-bearing geologic unit or units hydraulically connected or grouped together on the basis of similar hydraulic conductivity which can be reasonably monitored; several geologic formations or part of a geologic formation may be grouped into a single hydrostratigraphic unit; perched sand lenses may be considered a hydrostratigraphic unit or part of a hydrostratigraphic unit, for example.

Note: 'Hydraulically connected' denotes water-bearing units which can transmit water to other transmissive units.

"Inert waste" means noncombustible, nondangerous solid wastes that are likely to retain their physical and chemical structure under expected conditions of disposal, including resistance to biological attack and chemical attack from acidic rain water.

"Industrial solid wastes" means solid waste or waste byproducts generated by manufacturing or industrial processes such as scraps, trimmings, packing, pallets, and other discarded materials not otherwise designated as dangerous waste under chapter 173-303 WAC, the Dangerous waste regulations. This term does not include commercial, inert, demolition, construction, woodwaste, mining waste, or oil and gas waste but does include lunch room, office, or other similar waste generated by employees at the industrial facility.

"Jurisdictional health department" means city, county, city-county, or district public health department as defined in chapters 70.05, 70.08, and 70.46 RCW.

"Landfill." See "Facility."

"Lateral expansion" means a horizontal expansion of the waste boundaries of an existing MSWLF unit that is not an existing horizontal expansion. (See also definition of "existing MSWLF unit.")

"Leachate" means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

"Lithified earth material." See WAC 173-351-200 (6)(b)(iii).

"Liquid waste." See WAC 173-351-200 (9)(c)(i).

"Lower explosive limit." See WAC 173-351-200 (4)(d).

"Maximum horizontal acceleration in lithified earth material." See WAC 173-351-200 (6)(b)(ii).

"Modification" means a substantial change in the design or operational plans including removal of a design element of a MSWLF unit previously set forth in a permit application or a disposal or processing activity that is not approved in the permit. To be considered a substantial change, a modification must be reasonably related to a specific requirement of this rule. Lateral expansions, a fifty percent increase or greater in design volume capacity or changes resulting in significant adverse environmental impacts that have lead a responsible official to issue a declaration of significance under WAC 197-11-736 shall not be considered a modification but would require permit reissuance under these rules.

"Municipal sewage sludge" means a semisolid substance consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from a publicly owned wastewater treatment plant. For the purposes of this rule sewage sludge generated from publicly owned leachate waste treatment works that receive sewage from on-site sanitary facilities shall not be considered to be municipal sewage sludge.

"Municipal solid waste landfill unit (MSWLF unit)" means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under chapter 173-304 WAC, the Minimum functional standards for solid waste handling or chapter 173-218 WAC, Underground injection control program. A MSWLF unit also may receive other types of RCRA subtitle D wastes, such as commercial solid waste, nonhazardous sludge, conditionally-exempt small quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion.

"New MSWLF unit" means any municipal solid waste landfill unit that has not received waste prior to the effective date of this regulation.

"Nonarid" means locations in the state of Washington having equal to or more than twelve inches (30 centimeters) of precipitation annually.

"Nuisance" means unlawfully doing an act, or omitting to perform a duty, which act or omission either annoys, injures, or endangers the comfort, repose, health or safety of others, offends decency, or unlawfully interferes with, obstructs or tends to obstruct, any lake or navigable river, bay, stream, canal, or basin, or any public park, square, street or highway; or in any way renders other persons insecure in life, or in the use of property.

"100-year flood." See WAC 173-351-130 (3)(b)(ii).

"Open burning" means the combustion of solid waste without:

Control of combustion air to maintain adequate temperature for efficient combustion;

Containment of the combustion reaction in an enclosed device so as to provide sufficient residence time and mixing for complete combustion; and

Control of the emission of the combustion products.

"Operator" means the person(s) responsible for the overall operation of a facility or part of a facility.

"Operation" means those actions taken by an owner or operator of a facility or MSWLF unit beginning with waste acceptance at a facility or MSWLF unit up to and including closure of the facility or MSWLF unit.

"Owner" means the person(s) who owns a facility or part of a facility.

"Point of compliance" means the point located on land owned by the owner of the MSWLF unit, and is no more than one hundred fifty meters (four hundred ninety-two feet) from the waste management unit boundary; see also WAC 173-351-300 (2)(c).

"Poor foundation conditions." See WAC 173-351-130 (7)(b)(ii).

"Post-closure" means those actions taken by an owner or operator of a facility or MSWLF unit after closure.

"Purchase" means execution of a long term lease, securing of options to purchase or execution of agreements to purchase.

"Qualified ground-water scientist." See WAC 173-351-400(2).

"Random inspection." See WAC 173-351-200 (1)(b)(ii).

"Regulated dangerous waste." See WAC 173-351-200 (1)(b)(i).

"Runoff" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

"Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

"Saturated zone" means that part of the earth's crust in which all voids are filled with water.

"Seismic impact zone." See WAC 173-351-130 (6)(b)(i).

"Sewage sludge" means a semisolid substance consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from a wastewater treatment system, that does not meet the requirements of chapter 70.95J RCW.

"Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

"Sole source aquifer." See WAC 173-351-140 (1)(b)(vii).

"Solid waste" means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to garbage, rubbish, ashes, industrial wastes, commercial waste, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, discarded commodities and recyclable materials.

"Structural components." See WAC 173-351-130 (7)(b)(ii).

"Unstable area." See WAC 173-351-130 (7)(b)(i).

"Vadose zone" means that portion of a geologic formation in which soil pores contain some water, the pressure of that water is less than atmospheric, and the formation occurs above the zone of saturation.

"Vulnerability." See WAC 173-351-140 (1)(b).

"Waste management unit" means a MSWLF unit.

"Waste management unit boundary" means a vertical surface located at the hydraulically down gradient limit of the unit. This vertical surface extends down into the hydrostratigraphic unit(s) identified in the hydrogeologic report.

"Waters of the state" means lakes, rivers, ponds, streams, inland waters, underground waters, salt water, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

"Wetlands." See WAC 173-351-130 (4)(b).

"Woodwaste" means solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, handling and storage of raw materials and trees and stumps.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-100, filed 10/26/93, effective 11/26/93.]

WAC 173-351-120 Consideration of other local, state, and federal laws. The owner or operator of a munici-

pal solid waste landfill unit must comply with any other applicable federal, state, and local rules, laws, regulations, or other requirements.

Note: Except for 40 CFR Part 258.60(f) and 258.60(g) set forth in WAC 173-351-010 (2)(b)(ii), 40 CFR Part 258 is not an applicable federal rule for purposes of this section.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-120, filed 10/26/93, effective 11/26/93.]

WAC 173-351-130 Location restrictions. (1) Applicability.

(a) On and after the effective date of this chapter, all MSWLF units shall meet the locational restrictions of this section unless otherwise specified.

(b) Existing MSWLF units that cannot make the demonstration specified in subsection (2)(a) of this section, pertaining to airports, subsection (3)(a) of this section, pertaining to flood plains, subsection (7)(a) of this section, pertaining to unstable areas, must close by October 9, 1996, and conduct post-closure in accordance with WAC 173-351-500, Closure and post-closure care.

(c) The deadline for closure required by (b) of this subsection may be extended up to two years if the owner or operator demonstrates to the jurisdictional health department during the permitting process of WAC 173-351-700 that:

(i) There is no available alternative disposal capacity; and

(ii) There is no immediate threat to human health and the environment.

Note: Owners or operators of MSWLFs should be aware that the state department of health has adopted a state wellhead protection program in accordance with section 1428 of the Safe Drinking Water Act. Owners and operators should also be aware of locational restrictions which may exist through the process of designating and implementing Ground Water Management Areas, under chapter 173-100 WAC, and through the Special Protection Areas of chapter 173-200 WAC.

(2) Airport safety.

(a) Owners or operators of new MSWLF units, existing MSWLF units, and/or lateral expansions that are located within ten thousand feet (three thousand forty-eight meters) of any airport runway end used by turbojet aircraft or within five thousand feet (one thousand twenty-four meters) of any airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF unit does not pose a bird hazard to aircraft.

(b) Owners or operators proposing to site new MSWLF units and/or lateral expansions within a five-mile (eight kilometer) radius of any airport runway end used by turbojet or piston-type aircraft must notify the effected airport and the Federal Aviation Administration (FAA).

(c) The owner or operator must place the demonstration required by (a) of this subsection in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department.

(d) For purposes of this subsection:

(i) "Airport" means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(ii) "Bird hazard" means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

(3) Flood plains.

(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in 100-year flood plains must demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the flood plain, or result in washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department.

(b) For purposes of this subsection:

(i) "Flood plain" means the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.

(ii) "100-year flood" or "base flood" means a flood that has a one-percent or less chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in one hundred years on the average over a significantly long period.

(iii) "Washout" means the carrying away of solid waste by waters of the base flood.

(4) Wetlands.

(a) New MSWLF units and lateral expansions shall not be located in wetlands, unless the owner or operator can make the following demonstrations during the permit process of WAC 173-351-700:

(i) The construction and operation of the MSWLF unit will not:

(A) Cause or contribute to violations of chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington and chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington;

(B) Violate any applicable toxic effluent standard or prohibition under Section 307 of the Federal Clean Water Act or chapter 173-220 WAC, the National Pollutant discharge elimination system permit program;

(C) Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Federal Endangered Species Act of 1973; and

(D) Violate any requirement under the Federal Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary;

(ii) The MSWLF unit will not cause or contribute to significant degradation of wetlands. The owner or operator must demonstrate during the permit process of WAC 173-351-700 the integrity of the MSWLF unit and its ability to protect ecological resources by addressing the following factors:

(A) Erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the MSWLF unit;

(B) Erosion, stability, and migration potential of dredged and fill materials used to support the MSWLF unit;

(C) The volume and chemical nature of the waste managed in the MSWLF unit;

(D) Impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(E) The potential effects of catastrophic release of solid waste to the wetland and the resulting impacts on the environment; and

(F) Any additional factors, as necessary, to demonstrate during the permit process of WAC 173-351-700 that ecological resources in the wetland are sufficiently protected.

(iii) Where applicable under Section 404 of the Federal Clean Water Act or applicable state wetlands laws and regulations (e.g. chapter 173-22 WAC, Adoption of designations of wetlands associated with shorelines of the state), the presumption that a practicable alternative to the proposed landfill is available which does not involve wetlands is clearly rebutted;

(iv) To the extent required under Section 404 of the Federal Clean Water Act steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by:

(A) Avoiding impacts to wetlands to the maximum extent practicable as required by (a)(iii) of this subsection;

(B) Minimizing unavoidable impacts to the maximum extent practicable; and

(C) Finally offsetting remaining unavoidable wetlands impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration and maintenance of existing degraded wetlands or creation of man-made wetlands);

(v) Sufficient information is available to make a reasonable determination with respect to these demonstrations.

(b) For purposes of this subsection, "wetlands" means those areas that are defined in 40 CFR 232.2(r): Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include, but are not limited to, swamps, marshes, bogs, and similar areas.

(5) Fault areas.

(a) New MSWLF units and lateral expansions shall not be located within two hundred feet (sixty meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates during the permit process of WAC 173-351-700 that an alternative setback distance of less than two hundred feet (sixty meters) will prevent damage to the structural integrity of the MSWLF unit and will be protective of human health and the environment.

(b) For the purposes of this subsection:

(i) "Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

(ii) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(iii) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.

(6) Seismic impact zones.

(a) New MSWLF units and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates during the permit process of WAC 173-351-700 to the jurisdictional health department that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department.

(b) For the purposes of this subsection:

(i) "Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in two hundred fifty years.

(ii) "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a ninety percent or greater probability that the acceleration will not be exceeded in two hundred fifty years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

(iii) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

(7) Unstable areas.

(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in an unstable area must demonstrate that engineering measures have been incorporated into the MSWLF unit's design to ensure that the integrity of the structural components of the MSWLF units will not be disrupted. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department. The owner or operator must consider the following factors, at a minimum, when determining whether an area is unstable:

(i) On-site or local soil conditions that may result in significant differential settling;

(ii) On-site or local geologic or geomorphologic features; and

(iii) On-site or local human-made features or events (both surface and subsurface).

(b) For purposes of this subsection:

(i) "Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, and areas susceptible to mass movements.

(ii) "Structural components" means liners, leachate collection systems, final covers, run-on/runoff systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment.

(iii) "Poor foundation conditions" means those areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of a MSWLF unit.

(iv) "Areas susceptible to mass movement" means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the MSWLF unit, because of natural or human-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluction, block sliding, and rock fall.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-130, filed 10/26/93, effective 11/26/93.]

WAC 173-351-140 Other location restrictions. (1) Ground water.

(a) Liner separation. No new MSWLF unit or lateral expansion shall be located at a site where the bottom of the lowest liner is any less than ten feet (three meters) above the seasonal high level of ground water in any water bearing unit which is horizontally and vertically extensive, hydraulically recharged and volumetrically significant as to harm or endanger the integrity of the liner at any time, unless a demonstration during the permit process of WAC 173-351-700 can be made that a hydraulic gradient control system or the equivalent can be installed to control ground water fluctuations and maintain a five foot (1.5 meter) separation between the controlled seasonal high level of ground water in the identified water-bearing unit and the bottom of the lowest liner. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department. This demonstration must include:

(i) A hydrogeologic report required in WAC 173-351-490 including a discussion showing the effects from subsoil settlement, changes in surrounding land uses affecting ground water levels, liner leakage or other impacts will not bring any hydrostratigraphic unit to within five feet (1.5 meters) of the bottom of the lowest liner during the active life, closure and post-closure of the MSWLF unit;

(ii) Any currently available ground/surface water quality data for aquifers, springs, or streams in direct hydrologic contact with landfill's active area;

(iii) A showing that any gradient-control discharges to ground water will not adversely impact existing ground water/surface water users or the instream flow of surface waters in direct hydrologic contact or continuity with the landfill's hydraulic gradient control system;

(iv) Conceptual engineering drawings of the proposed MSWLF unit and discussion as to how the hydraulic gradient control system will not affect the structural integrity nor performance of the liner;

(v) Design specifications for the proposed ground and surface water monitoring systems; and

(vi) Preliminary engineering drawings of the hydraulic gradient control system (if applicable).

(b) Sole source aquifers. No new MSWLF unit or lateral expansion shall be located over a designated sole source aquifer unless the owner or operator can demonstrate during the permit process of WAC 173-351-700 that the sole source aquifer is not vulnerable to potential ground water contamination from the active area. Vulnerability is defined as the propensity or likelihood of a sole source aquifer to become contaminated should the integrity of the engineering control (including liners) fail; it is a measure of the propensity to deteriorate the water quality of a sole source aquifer, and takes into account an assessment of the physical barriers, the physical movement of contaminants, the hydraulic properties of the subsurface lithology; the rate of a contaminant plume movement; the physical and chemical characteristics of contaminants; and it also includes an assessment of the likelihood and ease for contaminant removal or clean-up, or the arrest of contamination, so as to not impact any further portion of the designated sole source aquifer. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department. Such a vulnerability demonstration must include the submission of a hydrogeologic report as required in WAC 173-351-490 and additionally must meet the following performance criteria:

(i) Demonstrates the presence of confining units or other lithology that will prevent the migration of ground water contamination;

(ii) Addresses the fate and transport of contaminants, including interactions in the lithologic framework, hydrogeochemical facies, contaminant travel times;

(iii) Defines and summarizes the ground water budgets for the active area and the sole source aquifer including recharge and discharge areas and includes flow net diagrams;

(iv) Provides a contingency and ground water assessment plan for the immediate arrest of any ground water contamination and steps to assess the extent of contamination;

(v) Design specifications for the proposed ground and surface water monitoring systems;

(vi) Is prepared by a hydrogeologist or other professional ground water scientist in accordance with WAC 173-351-400(2); and

(vii) "Sole source aquifer" means an aquifer designated by the Environmental Protection Agency pursuant to Section 1424e of the Safe Drinking Water Act (PL 93-523).

(c) Drinking water supply wells. No new MSWLF unit or lateral expansion active area shall be located closer than one thousand feet (three hundred meters) to any drinking water supply well, in use and existing at the time of the purchase of the property containing the active area unless the owner or operator can demonstrate during the permit process of WAC 173-351-700 that the active area is no less than a ninety-day hydraulic travel time to the nearest down-gradient drinking water supply well in the first useable aquifer. The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be issued a solid waste permit by the jurisdictional health department. Such a demonstration must include:

(i) A hydrogeologic report required in WAC 173-351-490; and the necessary calculations for showing compliance with the ninety-day travel time; the ninety-day travel time shall be based on the peak or full pumping capacity of installed nearby wells and include potentiometric surface maps showing well capture zones and radius of influence;

(ii) Any currently available ground/surface water quality data for aquifers, springs, or streams in direct hydrologic contact with landfill's active area;

(iii) The waste management unit boundaries at facility closure;

(iv) Design specifications for the proposed ground and surface water monitoring systems; and

(v) A statement that the demonstration has been prepared by a hydrogeologist or qualified ground water scientist in accordance with 173-351-400(2).

(2) Surface water. No new MSWLF unit or lateral expansion active area shall be located within two hundred feet (sixty-one meters) measured horizontally from the ordinary high water mark, of a shoreline of the state as defined in RCW 90.58.030 (which includes some wetlands associated with waters of the state), nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 246-290-450.

See also wetlands in WAC 173-351-130(4). Local wetlands protection ordinances should be consulted to determine if greater setbacks are required.

(3) Land use. No new MSWLF unit or lateral expansion shall be located:

(a) In areas designated by the United States Fish and Wildlife Service or the department of wildlife as critical habitat for endangered or threatened species of plants, fish, or wildlife;

(b) So that the active area is any closer than one hundred feet (thirty meters) to the facility property line for land zoned as nonresidential or for unzoned lands, except that the active area shall be no closer than two hundred fifty feet (seventy-six meters) to the property line of adjacent land zoned as residential, existing at the time of the purchase of the property containing the active area.

(c) So as to be at variance with any locally-adopted land use plan or zoning requirement unless otherwise provided by local law or ordinance; and

(d) So that the active area is any closer than one thousand feet (three hundred meters) to any state or national park.

(4) Toxic air emissions. See WAC 173-351-200 (5)(a).

(5) Cover material. See WAC 173-351-200 (2)(a).

(6) Capacity. See WAC 173-351-010 (2)(c).

(7) Climatic factors. See WAC 173-351-300 (2)(b) for climatic factors.

(8) Natural soils. See WAC 173-351-300(2) for soil liner standards.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-140, filed 10/26/93, effective 11/26/93.]

WAC 173-351-200 Operating criteria. (1) Procedures for excluding the receipt of dangerous waste.

(a) Owners or operators of all MSWLF units must implement a program at the facility for detecting and preventing the disposal of regulated dangerous wastes including polychlorinated biphenyls (PCB) waste as defined in chapter 173-303 WAC, the Dangerous waste regulations. This program must include, at a minimum:

(i) Random inspections of incoming loads unless the owner or operator takes other steps (for example, instituting source controls and restricting the type of waste received) to ensure that incoming loads do not contain regulated dangerous waste or PCB wastes;

(ii) Records of any inspections;

(iii) Training of facility personnel to recognize regulated dangerous waste and PCB wastes; and

(iv) Immediate notification of the department and the jurisdictional health department if a regulated dangerous waste or PCB waste is discovered at the facility.

(b) For purposes of this subsection:

(i) "Regulated dangerous waste" means a solid waste that is a dangerous waste as defined in WAC 173-303-070, Designation of dangerous waste, including asbestos not managed in accordance to 40 CFR Part 61, that is not excluded from regulation as a dangerous waste under WAC 173-303-071 or was not generated by an exempted small quantity generator as defined in WAC 173-303-070; and

(ii) "Random inspection" means:

(A) Discharging a random waste load onto a suitable surface. A suitable surface shall be chosen to avoid interference with operations so that sorted waste can be distinguished from other loads of uninspected waste, so as to avoid litter and to contain runoff;

(B) Viewing the contents prior to actual disposal of the waste; and

(C) Allowing the facility owner or operator to return excluded wastes to the hauler, arrange for disposal of excluded wastes at a facility permitted to manage dangerous waste, or take other measures to prevent disposal of the excluded wastes at the facility.

(2) Cover material requirements.

(a) Except as provided in (b) of this subsection, the owners or operators of all MSWLF units must cover disposed solid waste with six inches (fifteen centimeters) of earthen material, i.e., soils, at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.

(b) Alternative materials of an alternative thickness other than at least six inches (15 centimeters) of earthen material may be approved by the jurisdictional health department if the owner or operator demonstrates during the permit process of WAC 173-351-700 that the alternative material and thickness control disease vectors, fires, odors, blowing litter, provides adequate access for heavy vehicles, will not adversely affect gas or leachate composition and controls and scavenging without presenting a threat to human health and the environment.

(c) The jurisdictional health department may grant a temporary waiver not to exceed three months from the requirement of (a) and (b) of this subsection if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical.

(3) Disease vector control.

(a) Owners or operators of all MSWLF units must prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment.

(b) For purposes of this subsection, "disease vectors" means any rodents, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans.

(4) Explosive gases control.

(a) Owners or operators of all MSWLF units must ensure that:

(i) The concentration of methane gas generated by the facility does not exceed twenty-five percent of the lower explosive limit for methane in facility structures (excluding gas control or recovery system components);

(ii) The concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary or beyond; and

(iii) The concentration of methane gases does not exceed one hundred parts per million by volume of methane in off-site structures.

(b) Owners or operators of all MSWLF units must implement a routine methane monitoring program to ensure that the standards of (a)(i) and (ii) of this subsection are met.

(i) The type and frequency of monitoring must be determined based on the following factors:

(A) Soil conditions;

(B) The hydrogeologic conditions surrounding the facility;

(C) The hydraulic conditions surrounding the facility; and

(D) The location of facility structures and property boundaries.

(ii) The minimum frequency of monitoring shall be quarterly.

Note: All gas monitoring wells shall be constructed and decommissioned to ensure protection of the ground water and to prevent ground water contamination and follow the requirements of chapter 173-160 WAC, Minimum standards for construction and maintenance of wells, unless otherwise approved by the jurisdictional health department.

(c) If methane gas levels exceeding the limits specified in subsection (4)(a)(i) or (ii) of this section are detected, the owner or operator must:

(i) Immediately take all necessary steps to ensure protection of human health including:

(A) Notifying the jurisdictional health department;

(B) Where subsection (4)(a)(ii) of this section is exceeded, monitoring of off-site structures for compliance with subsection (4)(a)(iii) of this section;

(C) Daily monitoring of methane gas levels unless otherwise authorized by the jurisdictional health department; and

(D) Evacuation of buildings affected by landfill gas shall be determined by the jurisdictional health department and fire department.

(ii) Within seven calendar days of detection, place in the operating record, the methane gas levels detected and a description of the steps taken to protect human health; and

(iii) Within sixty days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, and notify the jurisdictional health department that the plan has been implemented. The plan shall describe the nature and extent of the problem and the remedy.

(iv) The jurisdictional health department may establish alternative schedules for demonstrating compliance with (c)(ii) and (iii) of this subsection.

(d) For purposes of this subsection, "lower explosive limit" means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at twenty-five degrees C and atmospheric pressure.

(5) Air criteria.

(a) Owners or operators of all MSWLF units must ensure that the units not violate any applicable requirements developed under the Washington state implementation plan approved or promulgated by the Federal Environmental Protection Agency pursuant to Section 110 of the Federal Clean Air Act, as amended.

(b) Open burning of solid waste is prohibited at all MSWLF units, except: For the infrequent burning of agricultural wastes, silvicultural wastes, landclearing debris, diseased trees or debris from emergency cleanup operations, provided that such open burning is not inconsistent with policies, regulations, and permits administered by the jurisdictional air pollution control agency or the department under the Washington Clean Air Act, chapter 70.94 RCW. Household waste shall not be open burned.

(6) Access requirements. Owners or operators of all MSWLF units must control public access and prevent unauthorized vehicular traffic, illegal dumping of wastes, and controls to keep animals out by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment. A lockable gate shall be required at each entry to the facility.

(7) Run-on/runoff control systems.

(a) Owners or operators of all MSWLF units must design, construct, and maintain:

(i) A run-on control system to prevent flow onto the active portion of the landfill during the peak discharge from a twenty-five year storm;

(ii) A runoff control system from the active portion of the landfill to collect and control at least the water volume resulting from a twenty-four hour, twenty-five year storm.

(b) Runoff from the active portion of the landfill unit must be handled in accordance with WAC 173-351-200(8).

(8) Surface water requirements. MSWLF units shall not:

(a) Cause a discharge of pollutants into waters of the state, including wetlands, that violates any requirements of chapter 90.48 RCW, Water pollution control, including, but not limited to, chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington, chapter 173-220 RCW, the National pollutant discharge elimination system permit program and chapter 173-216 WAC, State waste discharge permit program.

(b) Cause the discharge of a nonpoint source of pollution to waters of the state, including wetlands, that violates any requirement of an area-wide or statewide water quality management plan that has been approved under Section 208 or 319 of the Federal Clean Water Act, as amended.

(9) Liquids restrictions.

(a) Bulk or noncontainerized liquid waste may not be placed in MSWLF units unless:

(i) The waste is household waste other than septic waste; or

(ii) The waste is leachate or gas condensate derived from the MSWLF unit, or water added in a controlled fashion and necessary for enhancing decomposition of solid waste, as approved during the permitting process of WAC 173-351-700, whether it is a new or existing MSWLF, or lateral expansion and the MSWLF unit:

(A) Is designed with a leachate collection system and composite liner as described in WAC 173-351-300 (2)(a)(i) and (ii) or (iii); and

(B) Is accepting leachate, condensate or water resulting from an emergency in disposing of such liquids.

The owner or operator must place the demonstration in the application for a permit under WAC 173-351-700 and be

issued a solid waste permit by the jurisdictional health department.

Note: Condensate and leachate are subject to designation to determine whether either is a dangerous waste under chapter 173-303 WAC.

(b) Containers holding liquid waste may not be placed in a MSWLF unit unless:

(i) The container is a small container similar in size to that normally found in household waste;

(ii) The container is designed to hold liquids for use other than storage; or

(iii) The waste is household waste.

(c) For purposes of this subsection:

(i) "Liquid waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," SW-846.

(ii) "Gas condensate" means the liquid generated as a result of gas recovery processes at the MSWLF unit.

(10) Recordkeeping requirements.

(a) The owner or operator of a MSWLF unit must record and retain the required information as it becomes available. The operating record must be retained at or near the facility in an operating record or in an alternative location approved by the jurisdictional health department during the permitting process of WAC 173-351-700. The required information includes:

(i) Copies of all initial, renewal, reissued and modified permit applications including all demonstrations, and issued permits;

(ii) Inspection records, training procedures, and notification procedures required in subsection (1) of this section, Procedures for excluding the receipt of hazardous waste, and inspection documents associated with the plan of operation, WAC 173-351-210 (1)(b).

(iii) Gas monitoring results from monitoring and any remediation plans required by WAC 173-351-200(4);

(iv) Any demonstration, certification, declaration of construction, finding, monitoring, testing, or analytical data as required by WAC 173-351-400 (Ground water monitoring systems and corrective action);

(v) Major deviations from the plan of operation required in WAC 173-351-210; and

(vi) Daily records of weights or volumes of solid waste and, if available, types of waste received at the facility.

(b) The owner or operator must notify the jurisdictional health department when the documents from (a) of this subsection have been placed in or added to the operating record, unless:

(i) Such documents have been made a part of a permit application under this regulation;

(ii) Notification occurs under the renewal application requirements of WAC 173-351-730 (3)(b)(iv); or

(iii) The documents are daily records of weights or volumes specified in WAC 173-351-200 (10)(a)(vi).

(c) The jurisdictional health department can set alternative schedules during the permitting process of WAC 173-351-700 for recordkeeping and notification requirements as specified in (a) and (b) of this subsection, except for the notification requirements in WAC 173-351-130 (2)(b), the Federal Aviation Administration and in WAC 173-351-440 (6)(c), notification of land owners under assessment monitoring.

(d) All information contained in the operating record must be furnished upon request to the jurisdictional health department or be made available at all reasonable times for inspection by the jurisdictional health department and the department.

(11) Annual reports. Each owner or operator shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1 of each year. The annual report shall:

(a) Include information on facility activities during the previous year;

(b) Be on forms supplied by the department; and

(c) Include the following information:

(i) Facility location;

(ii) Facility contact;

(iii) Operational and/or post-closure information;

(iv) Permit status;

(v) Compliance information;

(vi) Facility capacity information;

(vii) Information on ground water monitoring as required in WAC 173-351-415(1) except, prior to the effective date of the ground water monitoring requirements of WAC 173-351-400, ground water monitoring information and existing summaries collected under ground water monitoring systems installed according to chapter 173-304 WAC.

(viii) Information on violation of ambient standards for surface water and explosive gases whose monitoring is required by chapter 173-351 WAC or performed as part of the permit issued under WAC 173-351-700; and

(ix) Other information as required.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-200, filed 10/26/93, effective 11/26/93.]

WAC 173-351-210 Plan of operation. Each owner or operator shall develop, keep, and abide by a plan of operation approved as part of the permitting process in WAC 173-351-700. The plan of operation shall describe the facilities' operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health officer. The facility must be operated in accordance with the plan of operation or the plan must be so modified with the approval of the jurisdictional health department.

Each plan of operation shall include:

(1) How solid wastes are to be handled on-site during its active life including transportation, routine filling, grading, cover, and housekeeping;

(2) How inspections are conducted and their frequency;

(3) Actions to take if there is a fire or explosion;

(4) Actions to take for sudden releases (e.g., failure of runoff containment system);

(5) How equipment such as leachate collection and gas collection equipment are to be operated and maintained;

(6) A safety plan or procedure; and

(7) Other such details as required by the jurisdictional health department.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-210, filed 10/26/93, effective 11/26/93.]

WAC 173-351-220 Additional operating criteria. All owners or operators of MSWLF units shall operate the facility so as to:

(1) Control road dust;

Note: Operators should carefully select dust suppressants approved by the jurisdictional health departments that do not pose a threat to surface or ground water quality.

(2) Collect scattered litter as necessary to prevent vector harborage, a fire hazard, an aesthetic nuisance, or adversely affect wildlife or its habitat;

(3) Prohibit scavenging;

(4) Landfill personnel. All landfills shall:

(a) Ensure that at least two landfill personnel are on-site with one person at the active portion when the site is open to the public for landfills with a permitted capacity of greater than fifty thousand cubic yards per year; and

(b) Comply with the certification requirements of chapter 173-300 WAC, Certification of operators of solid waste incinerator and landfill facilities.

Note: The definition of operators in chapter 173-300 WAC is not the same as the definition of operator in this rule.

(5) Ensure that reserve operational equipment shall be available to maintain and meet these standards;

(6) Clearly mark the active area boundaries authorized in the permit, with permanent posts or using equivalent method clearly visible for inspection purposes;

(7) Thoroughly compact the solid waste before succeeding layers are added except for the first lift over a liner;

(8) Maintain the monitoring system required in WAC 173-351-400, Ground water monitoring systems and corrective action, WAC 173-351-200(4), explosive gas monitoring of this regulation and any other monitoring specified in the permit issued in WAC 173-351-700.

(9) Require recycling.

(a) All owners and operators shall provide the opportunity for the general public to conveniently recycle cans, bottles, paper, and other material brought to the landfill site and for which a market exists or as required according to the most recently adopted county comprehensive solid waste management plan:

(i) During the normal hours of operation; and

(ii) In facilities convenient to the public (i.e., near entrance to the gate).

(b) Owners or operators shall conduct recycling activities in an orderly, sanitary manner and in a way that does not interfere with MSWLF operations.

(c) Owners or operators may demonstrate during the permit process of WAC 173-351-700 alternative means to providing an opportunity to the general public to recycle household solid waste including other conveniently located facilities which offer recycling opportunities.

(10) Prohibiting disposal of municipal sewage sludge or biosolids in MSWLF units.

(a) The disposal of municipal sewage sludge or biosolids or any material containing municipal sewage sludge or biosolids in a MSWLF unit is prohibited unless the municipal sewage sludge or biosolids or material containing municipal sewage sludge or biosolids is not a liquid as defined in this rule, and such disposal is specifically approved as part of a valid NPDES permit, or a valid permit issued in accordance with chapter 70.95J RCW and rules promulgated under that authority.

(b) Notwithstanding WAC 173-351-220 (10)(a), the jurisdictional health department may allow disposal of municipal sewage sludge or biosolids, or any material containing municipal sewage sludge or biosolids in a landfill on a temporary basis if the jurisdictional health department determines that a potentially unhealthful circumstance exists and other management options are unavailable or would pose a threat to human health or the environment.

(c) In accordance with (b) of this subsection upon determination that a potentially unhealthful circumstance exists, the jurisdictional health department shall notify the department in writing, of its findings and basis for its determination. In its notification, the jurisdictional health department shall state the date on which disposal is approved to commence, any conditions and the date after which continued disposal shall be prohibited.

(d) For the purposes of this regulation, the use of sewage sludge or biosolids or any material containing sewage sludge or biosolids, which is subject to regulation under 40 CFR Part 503 and or chapter 70.95J RCW, as daily cover or as an amendment to daily cover shall be considered disposal.

(11) Disposal of dangerous waste prohibited. Owners or operators of landfills shall not knowingly dispose, treat, store, or otherwise handle dangerous waste unless the requirements of the Dangerous waste regulation, chapter 173-303 WAC are met.

(12) Jurisdictional health department inspection of activities. In accordance with RCW 70.95.190, employees of the jurisdictional health department or their agents may enter upon, inspect, sample, and move freely about the premises of any MSWLF, after presentation of credentials.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-220, filed 10/26/93, effective 11/26/93.]

WAC 173-351-300 Design criteria. (1) Applicability. Existing MSWLF units are not subject to this section. Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management, including operating plans approved under chapter 173-304 WAC.

(2) New MSWLF units and lateral expansions shall be constructed:

(a) For nonarid landfills, in accordance with a standard design as follows:

(i) A composite liner as defined in (a)(ii) of this subsection and a leachate collection system that is designed and constructed to maintain less than a 1 foot (30 cm) depth of leachate over the liner.

Note: Leachate head in leachate pump sump areas, only, shall not be allowed to exceed two feet (60 cm).

(ii) For purpose of this section, "composite liner" means a system consisting of two components; the upper component must consist of a minimum of 60 mil thickness high density polyethylene (HDPE) geomembrane. The lower component must consist of at least a two-foot (60 cm) layer of compacted

soil with a hydraulic conductivity of no more than $1X10^{-7}$ cm/sec. The geomembrane must be installed in direct and uniform contact with the compacted soil component. Thinner geomembranes of other than high density polyethylene may be used provided that a demonstration can be made that the alternative has equivalent mechanical strength, permeability, chemical resistance and other factors under conditions of construction and use. Minimum thickness of geomembranes other than high density polyethylene shall be 30 mils.

(iii) Equivalent liner designs and liner materials may be used provided a demonstration during the permitting process of WAC 173-351-700 can be made that the liner is equivalent to the composite liner design:

(A) With respect to hydraulic effectiveness as shown by the use of the hydraulic evaluation of landfill performance (HELP) model or other approved models or methods;

(B) With respect to mechanical strength;

(C) With respect to chemical resistance;

(D) With respect to potential physical damage during construction and operation;

(E) With respect to attenuative capacity; and

(F) And other factors identified by the jurisdictional health department and the department on a case-by-case basis.

(b) For arid landfills, in accordance with a design that ensures that the maximum contaminant levels listed in Table 1 of this section will not be exceeded in the hydrostratigraphic unit(s) identified in the hydrogeologic characterization/report at the relevant point of compliance as specified during the permitting process in WAC 173-351-700. When approving a design that complies with the arid landfill design of (b) of this subsection, the jurisdictional health department shall consider at least the following factors:

(i) The hydrogeologic characteristics of the facility and surrounding land;

(ii) The climatic factors of the area; and

(iii) The volume, physical and chemical characteristics of the leachate.

Note: When determining the need for a liner in arid settings and its ability to meet the performance standard of this section, considering (b)(i), (ii), and (iii) of this subsection, the owner or operator may use:

(A) Existing information such as vadose zone, ground water monitoring, or leachate characterization that has previously been conducted at the facility;

(B) Contaminant transport modeling in accordance with the requirements of WAC 173-351-480; and/or

(C) Other information determined as appropriate and relevant by the jurisdictional health department.

(c) The relevant point of compliance approved during the permitting process in WAC 173-351-700, shall be no more than one hundred fifty meters (four hundred ninety-two feet) from the waste management unit boundary and shall be located on land owned by the owner of the MSWLF unit. In approving the relevant point of compliance the jurisdictional health department shall consider at least the following factors:

(i) The hydrogeologic characteristics of the facility and surrounding land;

(ii) The volume, and physical/chemical characteristics of the leachate;

(iii) The quantity and quality, and direction, of flow of ground water;

(iv) The proximity and withdrawal rate of the ground water users;

(v) The availability of alternative drinking water supplies;

(vi) The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water, and whether the ground water is currently used or reasonably expected to be used for drinking water;

(vii) Public health, safety, and welfare effects; and

(viii) Practical capability of the owner or operator.

TABLE 1

CHEMICAL	Maximum Contaminant Levels (MCL (mg/l))
ARSENIC	0.00005
BARIUM	1.0
BENZENE	0.001
CADMIUM	0.01
CARBON TETRACHLORIDE	0.0003
CHROMIUM (HEXAVALENT)	0.05
2,4-DICHLOROPHENOXY ACETIC ACID	0.1
1,4-DICHLOROBENZENE	0.004
1,2-DICHLOROETHANE	0.0005
1,1 DICHLOROETHYLENE	0.007
ENDRIN	0.0002
FLUORIDE	4
LINDANE	0.00006
LEAD	0.05
MERCURY	0.002
METHOXYCHLOR	0.1
NITRATE	10
SELENIUM	0.01
SILVER	0.05
TOXAPHENE	0.00008
1,1,1-TRICHLOROETHANE	0.20
TRICHLOROETHYLENE	0.003
2,4,5-TRICHLOROPHENOXY ACETIC ACID	0.01
VINYL CHLORIDE	0.00002

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-300, filed 10/26/93, effective 11/26/93.]

WAC 173-351-400 Ground water monitoring systems and corrective action. (1) Applicability.

(a) The requirements of WAC 173-351-400 through WAC 173-351-490 apply to MSWLF units whose owners and operators are required to perform ground water monitoring under chapter 173-351 WAC.

(b) Owners and operators of MSWLF units must comply with the ground water monitoring requirements of this regulation according to the following schedule:

(i) Existing MSWLF units and lateral expansions less than one mile (1.6 kilometers) from a drinking water intake (surface or subsurface) must be in compliance with the ground water monitoring requirements specified in WAC 173-351-400 through 173-351-450, and 173-351-490 by October 9, 1994;

Note: A drinking water intake is any surface water or ground water intake that is used for the purposes of drinking water i.e., water supply wells.

(ii) Existing MSWLF units and lateral expansions greater than one mile (1.6 kilometers) from a drinking water intake (surface or subsurface) must be in compliance with the ground water monitoring requirements specified in WAC 173-351-400 through 173-351-450, and 173-351-490 by October 9, 1995;

(iii) New MSWLF and lateral expansions units must be in compliance with the ground water monitoring requirements specified in WAC 173-351-400 through 173-351-450, and 173-351-490 before waste can be placed in the MSWLF unit.

(c) Existing MSWLF units and lateral expansions with ground water contamination as defined under WAC 173-304-100 and chapter 173-200 WAC must begin an assessment ground water monitoring program under WAC 173-351-440 by October 9, 1994.

(d) Interim ground water monitoring programs. Prior to the compliance schedules in (b) of this subsection, all existing MSWLF units and lateral expansions must either:

(i) Continue to monitor under WAC 173-304-490; or

(ii) Begin to monitor under this section.

(e) All MSWLF units closed in accordance with chapter 173-304 WAC must continue to monitor ground water in accordance with chapter 173-304 WAC.

(2) Personnel qualifications. For the purposes of this regulation, a "qualified ground water scientist" must be a hydrogeologist, geologist, engineer, or other scientist who meets all of the following criteria:

(a) Has received a baccalaureate or post-graduate degree in the natural sciences or engineering; and

(b) Has sufficient training and experience in ground water hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgments regarding ground water monitoring, contaminant fate and transport, and corrective action.

(3) A qualified ground water scientist is required to prepare the following reports, demonstrations and information:

(a) The hydrogeologic report(s) of WAC 173-351-490;

(b) The ground water monitoring program(s) including the ground water monitoring system design and well placement of WAC 173-351-405; the ground water sampling and analysis plan of WAC 173-351-410; the detection monitoring program(s) of WAC 173-351-430; and the assessment monitoring program(s) of WAC 173-351-440;

(c) Any demonstration(s) under WAC 173-351-430 (4)(c) or 173-351-440 (6)(e), or 173-351-140(1);

(d) Any modification(s) proposals/requests to the approved ground water monitoring program in accordance with WAC 173-351-450; and

(e) Any ground water modeling demonstrations made under WAC 173-351-480.

Note: A hydrogeologist or other qualified ground water scientist is **NOT** required for the actual ground water sampling.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-400, filed 10/26/93, effective 11/26/93.]

WAC 173-351-405 Performance standards for ground water monitoring system designs. Ground water monitoring well placement.

The ground water monitoring system design shall meet the following performance criteria:

(1) A sufficient number of wells must be installed at appropriate locations and depths to yield representative ground water samples from those hydrostratigraphic units which have been identified as the earliest target hydraulic pathways and conduits of flow for ground water and contaminant movement, and storage.

(2) The number, spacing, and depths of monitoring wells must be based on the site characteristics including the area of the MSWLF unit and the hydrogeological characterization of WAC 173-351-490, and requires a demonstration based on all of the following information:

(a) A ground water flow path analysis which supports why the chosen hydrostratigraphic unit best serves the installation of a detection or assessment ground water monitoring well system capable of providing early warning detection of any ground water contamination.

(b) Documentation and calculations of all of the following information:

(i) Hydrostratigraphic unit thicknesses including confining units and transmissive units;

(ii) Vertical and horizontal ground water flow directions including seasonal, man-made, or other short term fluctuations in ground water flow;

(iii) Stratigraphy and lithology;

(iv) Hydraulic conductivity; and

(v) Porosity and effective porosity.

(3) Hydraulically placed upgradient wells (background wells) must meet the following performance criteria:

(a) Must be installed in ground water that has not been affected by leakage from a MSWLF unit; or

(b) If hydrogeologic conditions do not allow for the determination of a hydraulically placed upgradient well then sampling at other monitoring wells which provide representative background ground water quality may be allowed; and

(4) Hydraulically placed down-gradient wells (compliance wells) must meet the following performance criteria:

(a) Represent the quality of ground water passing the relevant point of compliance specified by the jurisdictional health department. The downgradient monitoring system must be installed at the relevant point of compliance specified by the jurisdictional health department during the permitting process of WAC 173-351-700. Additional wells may be required by the jurisdictional health department based upon areal extent of the MSWLF unit, complex hydrogeologic settings or to define the extent of contamination under WAC 173-351-440 and 173-351-450.

(b) When physical obstacles preclude installation of ground water monitoring wells at the relevant point of compliance at existing units, the downgradient monitoring system may be installed at the closest practicable distance hydraulically down gradient from the relevant point of compliance that ensures detection of ground water contamination in the chosen hydrostratigraphic unit.

(5) All monitoring wells must be cased in a manner that maintains the integrity of the bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of samples. The annular space between the bore hole and well casing above the sampling depth must be sealed to prevent contamination of samples

and ground water. All wells must be constructed in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of water wells and chapter 173-162 WAC, Regulation and licensing of well contractors and operators. All wells must be clearly labeled, capped, and locked.

(6) The owner or operator must apply for a permit modification under WAC 173-351-720(5) or must apply during the renewal process of WAC 173-351-720 (1)(i), for any proposed changes to the design, installation, development, and decommission of any monitoring wells, piezometers, and other measurement, sampling, and analytical devices. Upon completing changes, all documentation, including date of change, new well location maps, boring logs, and well diagrams must be submitted to the jurisdictional health department and must be placed in the operating record of WAC 173-351-200(10).

(7) All monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

(8) The ground water monitoring system and hydrogeologic report including any changes to the ground water monitoring system shall be prepared by a hydrogeologist or other qualified ground water scientist and include a statement of personnel qualifications.

(9) The prepared ground water monitoring system design and hydrogeologic report must be made a part of the permit application in accordance with WAC 173-351-730 (1)(b)(iii).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-405, filed 10/26/93, effective 11/26/93.]

WAC 173-351-410 Ground water sampling and analysis requirements. (1) The ground water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground water quality at the background and downgradient wells installed in compliance with WAC 173-351-400 and with this section. The owner or operator must submit the sampling and analysis program documentation as a part of the permit application in accordance with WAC 173-351-730 (1)(b)(iii). The program must include procedures and techniques for:

(a) Sample collection and handling;

(b) Sample preservation and shipment;

(c) Analytical procedures;

(d) Chain-of-custody control;

(e) Quality assurance and quality control;

(f) Decontamination of drilling and sampling equipment;

(g) Procedures to ensure employee health and safety during well installation and monitoring; and

(h) Well operation and maintenance procedures.

(2) The ground water monitoring program must include sampling and analytical methods that are appropriate for ground water sampling and that accurately measure hazardous constituents and other monitoring parameters in ground water samples or reflect an acceptable practical quantitation limit (PQL). Ground water samples shall not be field-filtered for organic constituents prior to laboratory analysis. All analyses must be sent to an accredited laboratory in accordance with chapter 173-50 WAC, Accreditation of environmental laboratories.

(3) Ground water elevations must be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator must determine the rate and direction of ground water flow each time ground water is sampled. Ground water elevations in wells which monitor the same MSWLF unit must be measured within a period of time short enough to avoid any ground water fluctuations which could preclude the accurate determination of ground water flow rate and direction. All ground water elevations must be determined:

(a) By a method that ensures measurement to the 0.01 (one/one hundredth) of a foot (3mm) relative to the top of the well casing; and

(b) The orthometric elevation of the top of the well casing is related to a vertical benchmark based on the national geodetic vertical datum of 1929 (NGVD 29) and be established to 3rd order classification standards per federal geodetic control committee, or its successor, as specified in WAC 332-130-060.

(4) The owner or operator must establish background ground water quality in hydraulically placed upgradient or background well(s) for each of the monitoring parameters or constituents required in the particular ground water monitoring program that applies to the MSWLF unit, as determined under this section. Background ground water quality may be established at wells that are not located hydraulically upgradient from the MSWLF unit if it meets the requirements of WAC 173-351-400 through 173-351-490.

(5) The number of samples collected to establish water quality data must be consistent with the appropriate statistical procedures determined pursuant to WAC 173-351-420. The sampling procedures shall be those specified under WAC 173-351-430 for detection monitoring, WAC 173-351-440 for assessment monitoring, and WAC 173-351-440(6) of corrective action.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-410, filed 10/26/93, effective 11/26/93.]

WAC 173-351-415 Ground water reporting. (1) The annual report shall be included with the facility annual report as required in WAC 173-351-200(11) and shall be on forms developed by the department which will request the following information:

(a) A brief summary of statistical results and/or any statistical trends including any findings of any statistical increases for the year;

(b) A brief summary of ground water flow rate and direction for the year, noting any trends or changes;

(c) A Xerox copy of all potentiometric surface maps developed for each quarter or approved semi-annual period; and

(d) A summary geochemical evaluation noting any changes or trends in the cation-anion balances, Trilinear diagrams and general water chemistry for each well.

(2) A quarterly ground water report shall be submitted to the jurisdictional health department and the department no later than sixty days after the receipt of the quarterly analytical data and shall include all of the following:

(a) All ground water monitoring data for the sampling period;

(b) All statistical calculations and summaries;

(c) Notification of any statistical increase and concentrations above MCL's;

(d) Static water level readings for each monitoring well for each sampling event;

(e) Potentiometric surface elevation maps depicting ground water flow rate and direction;

(f) Cation-anion balances and Trilinear diagrams; and

(g) Leachate analyses.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-415, filed 10/26/93, effective 11/26/93.]

WAC 173-351-420 Statistical methods for ground water monitoring. (1) The owner or operator must calculate and evaluate all of the following statistics using background ground water quality data:

(a) The background mean;

(b) The background variance;

(c) The standard deviation of the background data;

(d) The coefficient of variation of the background data;

(e) The standard error of the background data; and

(f) Other statistics testing for homogeneity of variance and the normality of the background data.

(2) The owner or operator must specify in the permit application in accordance with WAC 173-351-730 (1)(b)(iii) one of the following statistical methods to be used in evaluating ground water monitoring data for each hazardous constituent. The statistical test chosen shall be conducted separately for each hazardous constituent in each well. The statistical methods to be used are:

(a) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit;

(b) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent;

(c) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent;

(d) A control chart approach that gives control limits for each constituent; or

(e) Another statistical test method that meets the performance standards of this section. The owner or operator must place a justification for this alternative in the permit application in accordance with WAC 173-351-730 (1)(b)(iii). The justification must demonstrate that the alternative method meets the performance standards of this section.

(3) Any statistical method chosen under this section shall comply with the following performance standards, as appropriate:

(a) The statistical method used to evaluate ground water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data must be evaluated to determine if nonnormal conditions are due to laboratory or sampling error, poor well construction, seasonal or spatial variability, or actual site conditions. Transformed or a distribution-free theory test may be used, upon a determination of why nonnormal conditions exist. If the distributions for the constituents differ, more than one statistical method may be needed.

(b) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparison procedure is used, the Type I experiment wise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(c) If a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values shall be protective of human health and the environment. The parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(d) If a tolerance interval or a predictional interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(e) The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (PQL) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

(f) If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(4) The owner or operator must determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular ground water monitoring program that applies to the MSWLF unit after each sampling event and as determined under this section.

(a) In determining whether a statistically significant increase has occurred, the owner or operator must compare the ground water quality of each parameter or constituent at each monitoring well designated pursuant to WAC 173-351-430 or 173-351-440 to the background value of that constitu-

ent, according to the statistical procedures and performance standards specified under this section.

(b) Within thirty days after receipt of the analytical data, the owner or operator must determine whether there has been a statistically significant increase over background at each monitoring well (at all hydraulically placed upgradient and downgradient wells).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-420, filed 10/26/93, effective 11/26/93.]

WAC 173-351-430 Detection monitoring program. (1) Detection monitoring is required at MSWLF units at all ground water monitoring wells defined under WAC 173-351-405. At a minimum, a detection monitoring program must include the monitoring for the constituents listed in Appendix I and II of this regulation.

(2) Background data development.

(a) A minimum of eight independent samples shall be collected for each well (background and downgradient) and must be collected and analyzed for the Appendix I constituents for the first year of ground water monitoring.

(b) Each independent sampling event shall be no less than one month apart from the previous independent sampling event.

(c) Sampling for Appendix II parameters shall be done quarterly.

(d) MSWLF units which have previously developed background for those constituents listed in Appendix I will be waived from (a) of this subsection on a parameter by parameter basis providing all performance criteria of WAC 173-351-400 are met.

(3) Foreground data development. The monitoring frequency for all constituents listed in Appendix I and II shall be quarterly during the active life of the MSWLF unit including closure and the post-closure period and begins after the first year of background data development, for all monitoring wells (upgradient and downgradient).

Note: Foreground denotes the period of time following the development of the back ground data set, for all monitoring wells (upgradient and downgradient).

(4) If the owner or operator determines, pursuant to WAC 173-351-420, that there is a statistically significant increase over background for one or more of the constituents listed in Appendix I, at any monitoring well at the boundary specified under WAC 173-351-405, the owner or operator:

(a) Must, within fourteen days of this finding, place a notice in the operating record indicating which constituents have shown statistically significant changes from background levels, and send the same notice to the jurisdictional health department and the department;

(b) Must establish an assessment monitoring program meeting the requirements of WAC-173-351-440 within ninety days except as provided for in (c) of this subsection;

(c) May demonstrate that a source other than a MSWLF unit caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be prepared by a hydrogeologist or other qualified ground water scientist and approved by the jurisdictional health department and be placed in the operating record. If a successful demonstration is made and documented, the owner or operator may continue detection monitoring as specified in this section. If, after ninety days, a successful demonstration is not made, the owner or operator must initiate an assessment monitoring program as required in WAC 173-351-440; and

(d) Must submit the assessment monitoring program to the jurisdictional health department at the end of ninety days as provided in (b) of this subsection.

(5) A geochemical evaluation of Appendix II parameters shall be conducted at each well on a quarterly basis and include all of the following methods:

(a) A cation-anion balance evaluating the difference between the cation and anion sums expressed in milliequivalents per liter; if a greater than a five to ten percent difference occurs then the owner or operator shall provide a summary explanation and examine whether the difference is due to a laboratory error, poor well conditions, or other ions not accounted for in natural or impacted ground water conditions; if the total cation-anion sums are less than 5.0 meq/liter then a ten percent difference threshold, may be used.

(b) A plot of cations and anions for each well on a trilinear diagram, as recommended in hydrogeologic texts and/or the department guidance documents.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-430, filed 10/26/93, effective 11/26/93.]

WAC 173-351-440 Assessment monitoring program. (1) Assessment monitoring is required whenever a statistically significant increase over background has been detected for one or more of the constituents listed in the Appendix I or in the alternative list approved in accordance with WAC 173-351-450, Alternative ground water monitoring programs.

(2) Within ninety days of triggering into an assessment monitoring program, and quarterly thereafter, the owner or operator must sample and analyze the ground water for all constituents identified in Appendix III of this part. A minimum of one sample from each downgradient well must be collected and analyzed during each sampling event. For any constituent detected in the downgradient wells as a result of the complete Appendix III analysis, a minimum of four independent samples from each well (background and downgradient) must be collected within a time period of one hundred eighty days, and analyzed to establish background for the constituents. Each independent sample shall be collected no less than one month apart from the previous sampling event.

(3) After obtaining the results from the initial or subsequent sampling events required in subsection (2) of this section, the owner or operator must:

(a) Within fourteen days, notify the jurisdictional health department of the increase, identifying the Appendix III constituent(s) that have been detected and place this notice in the operating record;

(b) Within ninety days, and on a quarterly basis thereafter, resample all wells, conduct analyses for all constituents in Appendix I and II, and, for those constituents in Appendix III that are detected in response to subsection (2) of this section, record their concentrations in the facility operating record and notify the jurisdictional health department. At least one sample from each well (background and downgrad-

ient) must be collected and analyzed during these sampling events;

(c) Establish background concentrations for any constituents detected pursuant to subsection (2) of this section;

(d) Establish ground water protection standards for all constituents detected pursuant to subsection (2) or (3) of this section. The ground water protection standards shall be established in accordance with subsection (7) of this section; and

(e) Continue performing geochemical evaluations in accordance with WAC 173-351-430(5) on a quarterly basis.

(4) If the concentrations of all Appendix III constituents are shown to be at or below background values, using the statistical procedures in WAC 173-351-420, for two consecutive sampling events, and before returning to detection monitoring the owner or operator must:

(a) Notify the jurisdictional health department of this finding;

(b) Receive approval in writing from the jurisdictional health department; and

(c) Place the notice and the approval in (a) and (b) of this subsection in the operating record of WAC 173-351-200(10).

(5) If the concentrations of any Appendix III constituents are above background values, but all concentrations are below the ground water protection standard established under subsection (7) of this section, using the statistical procedures in WAC 173-351-420, the owner or operator must continue assessment monitoring in accordance with this section.

(6) If one or more Appendix III constituents are detected at statistically significant levels above the ground water protection standard established under subsection (7) of this section in any sampling event, the owner or operator must, within fourteen days of this finding, notify the jurisdictional health department, the department and all appropriate local government officials of the increase and place a notice in the operating record identifying the Appendix III constituents that have exceeded the ground water protection standard. The owner or operator also:

(a) Must characterize the chemical composition of the release, the contaminant fate and transport characteristics; the rate and extent of contamination in all ground water flow paths by installing additional monitoring wells;

(b) Must install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with subsection (2) of this section;

(c) Must notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site if indicated by sampling of wells in accordance with subsection (6) of this section; and

(d) Must initiate an assessment, selection, and implementation of corrective measures as required by chapter 173-340 WAC, the Model Toxics Control Act regulation; or

(e) May demonstrate that a source other than a MSWLF unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be prepared by a hydrogeologist or other qualified ground water scientist and approved by the jurisdictional health department and placed in the operating record. If a successful demonstration is made the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this section, and may return to detection monitoring if the Appendix III constituents are at or below background as specified in subsection (4) of this section. Until a successful demonstration is made, the owner or operator must comply with this subsection (6) including initiating an assessment of corrective measures.

(7) The owner or operator:

(a) Must establish a ground water protection standard using the ground water quality criteria of chapter 173-200 WAC; and

(b) For constituents for which the background level is higher than the protection standard identified under (a) of this subsection, must use the background concentration for the constituents established from wells in accordance with WAC 173-351-405 through 173-351-430.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-440, filed 10/26/93, effective 11/26/93.]

WAC 173-351-450 Alternate ground water monitoring programs. (1) The owner or operator may propose changes and/or alternate ground water monitoring programs for detection after the second year of ground water monitoring under WAC 173-351-430, or the assessment monitoring program of WAC 173-351-440 as follows:

(a) An alternate ground water monitoring frequency for sampling and analysis of Appendix I and II constituents of no less than semiannual monitoring;

(b) A deletion or alternate ground water monitoring constituents for Appendix I, II and III;

(c) An appropriate subset of wells to be sampled and analyzed for Appendix III under WAC 173-351-440(2).

(2) All proposed changes in ground water monitoring frequency must be no less than semiannually for detection ground water monitoring and no less than quarterly for assessment monitoring. The owner or operator must apply for a permit modification under WAC 173-351-720(5) or must apply during the renewal process of WAC 173-351-720 (1)(i) for changes in ground water monitoring frequency making a demonstration based on the following information:

(a) A characterization of the hydrostratigraphic unit(s) including the unsaturated zone, transmissive and confining units and include all of the following:

(i) Hydraulic conductivity; and

(ii) Ground water flow rates.

(b) Minimum distance between upgradient edge of the MSWLF unit and downgradient monitoring wells (minimum distance of travel); and

(c) Contaminant fate and transport characteristics.

(3) The owner or operator must apply for a permit modification under WAC 173-351-720(5) or must apply during the renewal process of WAC 173-351-720 (1)(i) for all proposed deletions or changes to ground water monitoring constituents of Appendix I, II, and III based on all of the following information:

Verification that the removed constituents are not reasonably expected to be in or derived from the waste contained in the unit, by:

(a) Leachate monitoring results consisting of those parameters listed in Appendix IV; all leachate monitoring

shall be quarterly unless otherwise approved by the jurisdictional health department and the department;

(b) The types, quantities, and concentrations of constituents in wastes managed at the MSWLF unit;

(c) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the MSWLF unit;

(d) The detectability of indicator parameters, waste constituents, and reaction products in the ground water; and

(e) The concentration or values and coefficients of variation of monitoring parameters or constituents in the ground water background.

(4) Multiunit ground water monitoring systems.

An owner or operator may propose during the permitting process of WAC 173-351-700 a multiunit ground water monitoring system instead of separate ground water monitoring systems for each MSWLF unit, including MSWLF units which were closed in accordance with chapter 173-351, 173-304, or 173-301 WAC when the facility has several MSWLF units, provided the multiunit system meets all of the requirements of WAC 173-351-400 through WAC 173-351-490 and will be as protective of human health and environment as individual ground water monitoring systems for each MSWLF unit. Permit approval for multiunit ground water monitoring systems and programs will be based on the ability to provide early warning detection of any contaminant releases including:

(a) Number, spacing, and orientation of units;

(b) Hydrogeologic setting;

(c) Site history;

(d) Engineering design of the MSWLF units;

(e) Type of waste accepted at the MSWLF units; and

(f) Leachate analysis as referenced in subsection (3)(a) of this section.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-450, filed 10/26/93, effective 11/26/93.]

WAC 173-351-460 Role of jurisdictional health department in corrective action. The jurisdictional health department:

(1) May participate in all negotiations, meetings, and correspondence between the owner and operator and the department in implementing the model toxics control action;

(2) May comment upon and participate in all decisions made by the department in assessing, choosing, and implementing a corrective action program;

(3) Shall require the owner or operator to continue closure and post-closure activities as appropriate under these rules, after corrective action measures are completed; and

(4) Shall continue to regulate all MSWLF units during construction, operation, closure and post-closure, that are not directly impacted by Model Toxics Control Act.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-460, filed 10/26/93, effective 11/26/93.]

WAC 173-351-465 Role of department of ecology in corrective action. The department shall carry out all the responsibilities assigned to it under the Model Toxics Control Act (MTCA), chapter 70.105D RCW, during the corrective action process.

Note: Ecology encourages and will support owners or operators who perform independent corrective action(s) consistent with MTCA.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-465, filed 10/26/93, effective 11/26/93.]

WAC 173-351-480 Ground water modeling. All ground water and contaminant fate and transport modeling must meet the following performance standards:

(1) The model shall have supporting documentation that establishes its ability to represent ground water flow and contaminant transport and any history of previous applications;

(2) The set of equations representing ground water movement and contaminant transport must be theoretically sound and well documented;

(3) The numerical solution methods must be based upon sound mathematical principles and be supported by verification and checking techniques;

(4) The model must be calibrated against site-specific field data;

(5) A sensitivity analysis shall be conducted to measure the model's responses to changes in the values assigned to major parameters, specified tolerances, and numerically assigned space and time discretizations;

(6) Mass balance calculations on selected elements in the model shall be performed to verify physical validity. Where the model does not prescribe the amount of mass entering the system as a boundary condition, this step may be ignored;

(7) The values of the model's parameters requiring site specific data shall be based upon actual field or laboratory measurements; and

(8) The values of the model's parameters which do not require site specific data shall be supported by laboratory test results or equivalent methods documenting the validity of the chosen parameter values.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-480, filed 10/26/93, effective 11/26/93.]

WAC 173-351-490 The hydrogeologic report contents. (1) The hydrogeologic report shall meet all of the following performance standards as follows:

(a) Examine existing site conditions for compliance with ground water and surface water location restrictions under WAC 173-351-130 and 173-351-140;

(b) Determine existing or background ground water quality conditions, including any ground water contamination; and

(c) Define a detection ground water monitoring program capable of immediate and early warning detection for potential contamination as required in WAC 173-351-400 and the information required in subsection (2) of this section.

(2) The hydrogeologic report contents shall include the following information:

(a) A summary of local and regional geology and hydrology, including faults, zones of joint concentrations, unstable slopes and subsidence areas on site; areas of ground water recharge and discharge; stratigraphy; erosional and depositional environments and facies interpretation(s);

(b) A borehole program which identifies all performance criteria of WAC 173-351-405 including lithology, soil/bedrock types and properties, preferential ground water

flow paths or zones of higher hydraulic conductivity, the presence of confining unit(s) and geologic features such as fault zones, cross-cutting structures etc., and the target hydrostratigraphic unit(s) to be monitored.

(i) A minimum of twenty subsurface borings is required for MSWLF sites which are 50 acres or less in aerial extent. For sites greater than fifty acres, twenty borings, plus three borings for each additional ten acres thereafter, is required. Soil borings shall be established in a grid pattern with a boring in each major geomorphic feature such as topographic divides and lowlands;

(ii) Each boring will be of sufficient depth below the proposed grade of the bottom liner as to identify soil, bedrock and hydrostratigraphic unit(s) conditions as required in WAC 173-351-405.

(iii) The jurisdictional health department and the department may approve alternate methods including geophysical techniques, either surface or downhole including electric logging, some sonic logging, nuclear logging, seismic profiling, electromagnetic profiling and resistivity profiling in lieu of some of the number of borings required in the subsurface borehole program of (b)(i) of this subsection, provided sufficient hydrogeological site characterization can be accomplished and prior approval is obtained.

(iv) At each boring samples shall be collected from each lithologic unit and tested for all of the following:

(A) Particle size distribution by both sieve and hydrometer analyses in accordance with approved ASTM methods (D422 and D1120);

(B) Atterburg limits following approved ASTM methods (D4318); and

(C) Classification under the unified soil classification system, following ASTM standard D2487-85.

(iv) Each lithologic unit on site will be analyzed for:

(A) Moisture content, following approved ASTM methods (D2216); and

(B) Hydraulic conductivity by an in-situ field method or laboratory method approved by the jurisdictional health department and the department. All samples collected for the determination of permeability shall be collected by standard ASTM procedures.

(v) All boring logs shall be submitted with the following information:

(A) Soil and rock descriptions and classifications;

(B) Method of sampling;

(C) Sample depth;

(D) Date of boring;

(E) Water level measurements;

(F) Soil test data;

(G) Boring location; and

(H) Standard penetration number of ASTM standard D1586-67.

(vi) All borings not converted to monitoring wells or piezometers shall be carefully backfilled, plugged and recorded in accordance with WAC 173-160-420.

(vii) During the borehole drilling program, any on-site drilling and lithologic unit identification must be performed by a hydrogeologist, geologist or other qualified ground water scientist who is trained to sample and identify soils and bedrock lithology.

(c) Depths to ground water and hydrostratigraphic unit(s) including transmissive and confining units;

(d) Potentiometric surface elevations and contour maps; direction and rate of horizontal and vertical ground water flow;

(e) A description of regional ground water trends including vertical and horizontal flow directions and rates;

(f) All elevations and top of well casings shall be related to the national geodetic vertical datum of 1929 (NGVD 29) and the horizontal datum shall be in accordance with chapter 58.20 RCW, Washington Coordinate System and as amended per chapter 332-130 WAC.

(g) Quantity, location, and construction (where available) of private and public wells within a two thousand foot (six hundred ten meter) radius of site;

(h) Tabulation of all water rights for ground water and surface water within a two thousand foot (six hundred ten meter) radius of the site;

(i) Identification and description of all surface waters within a one-mile (1.6 kilometer) radius of the site;

(j) A summary of all previously collected ground water and surface water analytical data, and for expanded facilities, identification of impacts of existing facility of the applicant to date upon ground and surface waters from landfill leachate discharges;

(k) Calculation of a site water balance;

(l) Conceptual design of a ground water and surface water monitoring system, including proposed installation methods for these devices and where applicable a vadose zone monitoring plan, including well construction diagrams;

(m) Land use in the area, including nearby residences; and

(n) A topographic map of the site and drainage patterns; an outline of the waste management area and MSWLF units, property boundary, the proposed location of ground water monitoring wells;

(o) Geologic cross-sections.

(3) Ground water flow path analysis. The hydrogeologic report shall include a summary ground water flow path analysis which includes all supportive documentation, and calculations of the performance criteria of WAC 173-351-405.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-490, filed 10/26/93, effective 11/26/93.]

WAC 173-351-500 Closure and post-closure care. (1) Closure criteria.

(a) Nonarid areas. Owners or operators of all MSWLF units located in areas having mean annual precipitation of equal to or greater than twelve inches, must install a final cover system that is designed to minimize infiltration and erosion.

(i) The final cover system must be designed and constructed to:

(A) Minimize infiltration through the closed MSWLF by the use of an anti-infiltration layer that contains a composite layer as defined in (a)(i)(B) of this subsection;

(B) For the purpose of this section, "composite layer" means a system consisting of two components; the upper component must consist of a minimum of 30 mil (0.76 mm) thickness of geomembrane (60 mils (1.5 mm) for high density polyethylene geomembranes). The lower component

must consist of at least a two-foot (60 cm) layer of compacted soil with a hydraulic conductivity of no more than $1X10^{-5}$ cm/sec. The geomembrane must be installed in direct and uniform contact with the compacted soil component;

(C) Minimize erosion of the final cover by use of an anti-erosion layer that contains a minimum of a one-foot (30 cm) layer of earthen material of which at least six inches (15 cm) of the uppermost layer is capable of sustaining native plant growth; and

(D) Address anticipated settlement (with a goal of achieving no less than two to five percent slopes after settlement), drainage and/or the need for drainage layers, gas generation and/or the need for gas layers, freeze-thaw, desiccation and stability and mechanical strength of the design.

(ii) The jurisdictional health department may approve an alternative final cover design equivalent to that specified in (a)(i) of this subsection that includes:

(A) An anti-infiltration layer that achieves an equivalent reduction in infiltration as the anti-infiltration layer specified in (a)(i)(A) and (B) of this subsection;

(B) An anti-erosion layer that provides equivalent protection from wind and water erosion as the anti-erosion layer specified in (a)(i)(C) of this subsection; and

(C) The additional design features of (a)(i)(D) of this subsection.

(b) Arid areas. Owners or operators of all MSWLF units located in arid areas must install a final cover system that is designed to minimize infiltration and erosion.

(i) The final cover system must be designed and constructed to:

(A) Minimize infiltration through the closed MSWLF by the use of an anti-infiltration layer that contains at least a two-foot (60 cm) layer of compacted soil with a hydraulic conductivity of no more than $1X10^{-5}$ cm/sec;

(B) Minimize erosion of the final cover by use of an anti-erosion layer that contains a minimum of one-foot (30 cm) layer of earthen material of which at least six inches (15 cm) of the uppermost layer is capable of sustaining native plant growth; and

(C) Address anticipated settlement (with a goal of reaching two to five percent slopes after settlement), drainage and/or the need for drainage layers, gas generation and/or the need for gas layers, freeze-thaw, desiccation and stability and mechanical strength of the design.

(ii) The jurisdictional health department may approve an alternative final cover design to that specified in (b)(i) of this subsection that includes:

(A) An anti-infiltration layer that achieves an equivalent reduction in infiltration as the anti-infiltration layer specified in (b)(i)(A) of this subsection;

(B) An anti-erosion layer that provides equivalent protection from wind and water erosion as the anti-erosion layer specified in (b)(i)(B) of this subsection; and

(C) The additional design features of (b)(i)(C) of this subsection.

(c) The owner or operator must prepare a written closure plan that describes the steps necessary to close all MSWLF units at any point during its active life. The closure plan must be approved by the jurisdictional health department during the permit process of Section 700 and, at a minimum, must include the following information:

(i) A description of the final cover, designed in accordance with (a) or (b) of this subsection and the methods and procedures to be used to install the cover;

(ii) An estimate of the largest area of the MSWLF unit or all MSWLF units ever requiring a final cover as required under (a) or (b) of this subsection at any time during the active life;

(iii) An estimate of the maximum inventory of wastes ever on-site over the active life of the facility; and

(iv) A schedule for completing all activities necessary to satisfy the closure criteria in this subsection (1), Closure criteria including sequencing of each MSWLF unit and the use of intermediate cover.

(d) The owner or operator of existing MSWLF units must no later than the effective date of this chapter:

(i) Prepare a closure plan;

(ii) Place the closure plan in the operating record; and

(iii) Notify the jurisdictional health department that (d)(i) and (ii) of this subsection have occurred.

(e) One hundred eighty days (but no sooner than the effective date of this chapter) prior to beginning closure activities of each MSWLF unit or all MSWLF units as specified in (f) of this subsection, the owner or operator must:

(i) Notify the jurisdictional health department and the financial assurance trustee and/or insurer of the intent to close the MSWLF unit or all MSWLF units according to the approved closure plan; and

(ii) Submit final engineering closure plans for review, comment, and approval by the jurisdictional health department.

(f) The owner or operator must begin closure activities of each MSWLF unit or all MSWLF units no later than thirty days after the date on which the MSWLF unit or all MSWLF units receives the known final receipt of wastes or, if the MSWLF unit or all MSWLF units has remaining capacity and there is a reasonable likelihood that the MSWLF unit or all MSWLF units will receive additional wastes, no later than one year after the most recent receipt of wastes. Extensions beyond the one-year deadline for beginning closure may be granted by the jurisdictional health department if the owner or operator demonstrates during the permit process of WAC 173-351-700 that the MSWLF unit or all MSWLF units has the capacity to receive additional waste and the owner or operator has taken and will continue to take all steps including the application of intermediate cover necessary to prevent threats to human health and the environment from the unclosed MSWLF unit or all MSWLF units.

(g) The owner or operator of all MSWLF units must complete closure activities of each MSWLF unit or all MSWLF units in accordance with the closure plan within one hundred eighty days following the beginning of closure as specified in (f) of this subsection. Extensions of the closure period may be granted by the jurisdictional health department if the owner or operator demonstrates that closure will, of necessity, take longer than one hundred eighty days and he/she has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed MSWLF unit.

(h) Following closure of each MSWLF unit or all MSWLF units, the owner or operator must submit to the jurisdictional health department a certification or declaration

of construction signed by an independent registered professional engineer verifying that closure has been completed in accordance with the approved final engineering plans and the closure plan.

(i) Notation on the deed.

(i) Following closure of all MSWLF units, the owner or operator must record a notation on the deed to the facility property, and send a copy of the notation as recorded to the jurisdictional health department.

(ii) The notation on the deed must in perpetuity notify any potential purchaser of the property that:

(A) The land has been used as a landfill facility; and

(B) Its use is restricted under subsection (2)(c)(iii) of this section.

(j) The owner or operator may request permission from the jurisdictional health department to remove the notation from the deed if all wastes (including any contaminated ground water and soils) are removed from the facility.

(2) Post-closure care requirements.

(a) Following closure of each MSWLF unit or all MSWLF units, the owner or operator must conduct post-closure care. Post-closure care must be conducted for thirty years, except as provided under (b) of this subsection and consist of at least the following:

(i) Maintaining the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, maintaining the vegetative cover (including cutting of vegetation when needed) or other events, and preventing run-on and runoff from eroding or otherwise damaging the final cover;

(ii) Maintaining and operating the leachate collection system in accordance with the requirements in WAC 173-351-300 if applicable. The jurisdictional health department may recommend to the department and the department under its authority in chapter 90.48 RCW, the Water Pollution Control Act, may allow the owner or operator to stop managing leachate if the owner or operator demonstrates that leachate no longer poses a threat to human health and the environment;

(iii) Monitoring the ground water in accordance with the requirements of WAC 173-351-400, Ground water monitoring systems and corrective action and maintaining the ground water monitoring system, if applicable; and

(iv) Maintaining and operating the gas monitoring system in accordance with the requirements of WAC 173-351-200(4).

(b) The length of the post-closure care period may be:

(i) Decreased by the jurisdictional health department if the owner or operator demonstrates that the reduced period is sufficient to protect human health and the environment and this demonstration is approved by the jurisdictional health department; or

(ii) Increased by the jurisdictional health department if the jurisdictional health department determines that the lengthened period is necessary to protect human health and the environment.

(c) The owner or operator of all MSWLF units must prepare a written post-closure plan that is approved by the jurisdictional health department during the permit process of Section 700 and that includes, at a minimum, the following information:

(i) A description of the monitoring and maintenance activities required in (a) of this subsection for each MSWLF unit or all MSWLF units, and the frequency at which these activities will be performed;

(ii) Name, address, and telephone number of the person or office to contact about the facility during the post-closure period; and

(iii) A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements of this regulation. The jurisdictional health department may approve any other disturbance if the owner or operator demonstrates that disturbance of the final cover, liner or other component of the containment system, including any removal of waste, will not increase the potential threat to human health or the environment.

(d) The owner or operator of existing MSWLF units must notify the jurisdictional health department that a post-closure plan has been prepared and placed in the operating record no later than the effective date of this regulation.

(e) Following completion of the post-closure care period for each MSWLF unit or all MSWLF units, the owner or operator must submit to the jurisdictional health department and the financial assurance trustee and/or insurer a certification or declaration of construction signed by an independent registered professional engineer verifying that post-closure has been completed in accordance with the post-closure plan.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-500, filed 10/26/93, effective 11/26/93.]

WAC 173-351-600 Financial assurance criteria. (1) Applicability and effective date.

(a) The requirements of this section apply to owners and operators of all MSWLF units.

(b) The requirements of this section are effective on the effective date of this rule, except as provided herein.

(2) Financial assurance for closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of hiring a third party to close the largest area of all MSWLF units ever requiring a final cover as required under WAC 173-351-500(1), Closure criteria, at any time during the active life in accordance with the closure plan. The owner or operator must place the detailed written estimate in the application for a permit under WAC 173-351-700 in order for the jurisdictional health department to determine whether a solid waste permit should be issued.

(i) The cost estimate must equal the cost of closing the largest area of the MSWLF unit or MSWLF units ever requiring a final cover at any time during the active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan see WAC 173-351-500 (1)(c)(ii).

(ii) During the active life of the MSWLF unit or MSWLF units, the owner or operator must annually adjust the closure cost estimate for inflation.

(iii) The owner or operator must increase the closure cost estimate and the amount of financial assurance provided under (b) of this subsection if changes to the closure plan or MSWLF unit conditions increase the maximum cost of closure at any time during the remaining active life.

(iv) The owner or operator may reduce the closure cost estimate and the amount of financial assurance provided under (b) of this subsection if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the MSWLF unit or all MSWL units. The owner or operator must submit justification for the reduction of the closure cost estimate and the amount of financial assurance to the jurisdictional health department for approval as a condition of the solid waste permit.

(b) The owner or operator of each MSWLF unit or all MSWLF units must establish financial assurance for closure of the MSWLF unit or all MSWLF units in compliance with WAC 173-351-600(5), Allowable mechanisms. The owner or operator must provide continuous coverage for closure until released from financial assurance requirements by demonstrating compliance with WAC 173-351-500 (1)(h) and (i).

(3) Financial assurance for post-closure care.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the MSWLF unit or all MSWLF units in compliance with the post-closure plan developed under WAC 173-351-500(2). The post-closure cost estimate used to demonstrate, during the permit process of WAC 173-351-700, financial assurance in (b) of this subsection must account for the total costs of conducting post-closure care, including annual and periodic costs as described in the post-closure plan over the entire post-closure care period. The owner or operator must place the detailed written estimate in the application for a permit under WAC 173-351-700 in order for the jurisdictional health department to determine whether a solid waste permit should be issued.

(i) The cost estimate for post-closure care must be based on the most expensive costs of post-closure care during the post-closure care period.

(ii) During the active life of the MSWLF unit or all MSWLF units and during the post-closure care period, the owner or operator must annually adjust the post-closure cost estimate for inflation.

(iii) The owner or operator must increase the post-closure care cost estimate and the amount of financial assurance provided under (b) of this subsection if changes in the post-closure plan or MSWLF unit conditions increase the maximum costs of post-closure care.

(iv) The owner or operator may reduce the post-closure cost estimate and the amount of financial assurance provided under (b) of this subsection if the cost estimate exceeds the maximum costs of post-closure care remaining over the post-closure care period. The owner or operator must submit justification for the reduction of the post-closure cost estimate and the amount of financial assurance to the jurisdictional health department for approval as a condition of the solid waste permit.

(b) The owner or operator of each MSWLF unit or all MSWLF units must establish, in a manner in accordance with subsection (5) of this section, financial assurance for the costs of post-closure care as required under WAC 173-351-500(2). The owner or operator must provide continuous coverage for post-closure care until released from financial assurance requirements for post-closure care by demonstrating compliance with WAC 173-351-500 (2)(e).

(4) Financial assurance for corrective action.

(a) An owner or operator of a MSWLF unit or all MSWLF units required to undertake a corrective action program under WAC 173-351-440(6) must have a detailed written estimate, in current dollars, of the cost of hiring a third party to perform the corrective action in accordance with the program required under WAC 173-351-440(6). The corrective action cost estimate must account for the total costs of corrective action activities as described in the corrective action plan for the entire corrective action period. The owner or operator must submit the corrective action cost estimate to the jurisdictional health department for approval.

(i) The owner or operator must annually adjust the estimate for inflation until the corrective action program is completed in accordance with WAC 173-351-440(6).

(ii) The owner or operator must increase the corrective action cost estimate and the amount of financial assurance provided under (b) of this subsection if changes in the corrective action program or MSWLF unit conditions increase the maximum costs of corrective action.

(iii) The owner or operator may reduce the amount of the corrective action cost estimate and the amount of financial assurance provided under (b) of this subsection if the cost estimate exceeds the maximum remaining costs of corrective action. The owner or operator must submit justification for the reduction of the corrective action cost estimate and the amount of financial assurance to the jurisdictional health department for approval.

(b) The owner or operator of each MSWLF unit or all MSWLF units required to undertake a corrective action program under WAC 173-351-440(6), must establish, in a manner in accordance with subsection (5) of this section, financial assurance for the most recent corrective action program. The owner or operator must provide continuous coverage for corrective action until released from financial assurance requirements for corrective action under the Model Toxics Control Act regulation, chapter 173-340 WAC.

(c) The requirements of this subsection become effective April 9, 1994.

(5) Allowable mechanisms. The mechanisms used to demonstrate financial assurance under WAC 173-351-600 must ensure that the funds necessary to meet the costs of closure, post-closure care, and corrective action for known releases will be available whenever they are needed. Except as otherwise provided herein, owners and operators of MSWLF units must use the financial mechanisms specified in (a) or (b) of this subsection.

(a) For MSWLF units owned or operated by municipal corporations, the closure, post-closure, and corrective action reserve account shall be handled in one of the following ways:

(i) Reserve account. Cash and investments accumulated and restricted for closure, post-closure, and corrective action for known releases with an equivalent amount of fund balance reserved in the fund accounting for solid waste activity; or

(ii) The cash and investments held in a nonexpendable trust fund as specified in (c) of this subsection.

(b) For MSWLF units owned by private disposal companies, the closure, post-closure, and corrective action for known releases financial assurance account shall be a trust account as spelled out in (c) of this subsection, except that established financial assurance accounts shall not constitute an asset of the facility owner or operator.

(c) Trust fund.

An owner or operator may satisfy the requirements of this section by establishing a trust fund which conforms to the requirements of (c)(i) through (xi) of this subsection.

(i) The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. The owner or operator must place a copy of the trust agreement in the application for a permit under WAC 173-351-700 in order for the jurisdictional health department to determine whether a solid waste permit should be issued.

(ii) Payments into the trust fund must be made annually by the owner or operator over the duration (as defined in WAC 173-351-750) of the initial permit or over the remaining life of the MSWLF unit or all MSWLF units, whichever is shorter, in the case of a trust fund for closure or post-closure care, or over one-half of the estimated length of the corrective action program in the case of corrective action for known releases. This period is referred to as the pay-in period.

(iii) For a trust fund used to demonstrate financial assurance for closure and post-closure care, the first payment into each fund must be at least equal to the current cost estimate for closure or post-closure care, except as provided in (d) of this subsection, divided by the number of years in the pay-in period as defined in (c) of this subsection. The amount of subsequent payments must be determined by the following formula:

$$\textit{Next Payment} = \frac{CE\text{-}CV}{Y}$$

where CE is the current cost estimate for closure or post-closure care (updated for inflation or other changes), CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(iv) For a trust fund used to demonstrate financial assurance for corrective action, the first payment into the trust fund must be at least equal to one-half of the current cost estimate for corrective action, except as provided in (d) of this subsection, divided by the number of years in the corrective action pay-in period as defined in (c)(ii) of this subsection. The amount of subsequent payments must be determined by the following formula:

$$\textit{Next Payment} = \frac{RB\text{-}CV}{Y}$$

where RB is the most recent estimate of the required trust fund balance for corrective action (i.e., the total costs that will be incurred during the second half of the corrective action period), CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(v) The initial payment into the trust fund must be made before the initial receipt of waste or before the effective date of this section, whichever is later, in the case of closure and post-closure care, or no later than one hundred twenty days after the corrective action remedy has been selected in accordance with the requirements of WAC 173-351-480 (6) and (7).

(vi) If a municipal corporation owning or operating MSWLF units establishes a trust fund after having used cash and investments held in a nonexpendable reserve account specified in (a)(i) of this subsection, the initial payment into the trust fund must be at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to the specifications of this paragraph and (c) of this subsection as applicable.

(vii) The owner or operator, or other person authorized to conduct closure, post-closure care, or corrective action activities may request reimbursement from the trustee for these expenditures. Requests for reimbursement will be granted by the trustee only if:

(A) Sufficient funds are remaining in the trust fund to cover the remaining costs of closure, post-closure care, or corrective action;

(B) If justification and documentation of the cost is submitted to the jurisdictional health department for review and approval; and

(C) The owner or operator has a post-closure permit in effect according to WAC 173-351-730 (4)(c).

(viii) The trust fund may be terminated by the owner or operator only if:

(ix) In the case of a municipal corporation owning or operating MSWLF units, the municipal corporation substitutes a reserve account as specified in (a)(i) of this subsection; or

(x) Any owner or operator is no longer required to demonstrate financial responsibility in accordance with the requirements of subsection (2)(b), (3)(b), or (4)(b) of this section.

(d) Use of multiple financial mechanisms. A municipal corporation owning or operating MSWLF units may satisfy the requirements of this section by establishing more than one financial mechanism per facility. The mechanisms must be as specified in (a) and (b) of this subsection, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current cost estimate for closure, post-closure care or corrective action, whichever is applicable.

(e) For MSWLF units undergoing corrective action, allowable financial assurance mechanisms include:

(i) Any method approved by EPA under 40 CFR 258.74(f);

(ii) An interlocal agreement entered into under the Interlocal Cooperation Act, chapter 39.34 RCW, obligating the participating local governments to pay for the corrective action.

(f) The language of the mechanisms listed in (a) and (b) of this subsection must ensure that the instruments satisfy the following criteria:

(i) The financial assurance mechanisms must ensure that the amount of funds assured is sufficient to cover the costs of

closure, post-closure care, and corrective action for known releases when needed;

(ii) The financial assurance mechanisms must ensure that funds will be available in a timely fashion when needed;

(iii) The financial assurance mechanisms must be obtained by the owner or operator by the effective date of these requirements or prior to the initial receipt of solid waste, whichever is later, in the case of closure and post-closure care, and no later than one hundred twenty days after the corrective action remedy has been selected in accordance with the requirements of WAC 173-351-460, until the owner or operator is released from the financial assurance requirements under subsection (2)(b), (3)(b), or (4)(b) of this section.

(g) The financial assurance mechanisms must be legally valid, binding, and enforceable under state and federal law.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-600, filed 10/26/93, effective 11/26/93.]

WAC 173-351-700 Permitting requirements. (1) WAC 173-351-700 through 173-351-750 shall constitute the permitting requirements of chapter 173-351 WAC, Criteria for municipal solid waste landfills. Except as provided for in subsection (5) of this section, no owner or operator shall construct, operate, close, or perform post-closure activity with respect to a facility except in conformance with a valid MSWLF permit issued pursuant to this chapter.

(2) Transition rules for existing MSWLF units. The following constitute the transition rules for this section:

(a) Existing MSWLF units with valid chapter 173-304 WAC permits expiring before the effective date of this chapter. Owners or operators of existing MSWLF units having valid permits expiring before the effective date of this chapter, must apply for a valid MSWLF permit no later than ninety days after promulgation of this regulation, to continue operation under the terms of this regulation. Each valid chapter 173-304 WAC permit expiring before the effective date of this chapter, is hereby continued until the valid MSWLF permit is issued under these rules. For these transition rules, the owner or operator shall prepare applications according to WAC 173-351-730(4), Reissuance/transition applications. Upon issuance of a valid MSWLF permit, the owner or operator must comply with the requirements of this regulation.

Note: MSWLF units that do not accept waste on or after the effective date of this chapter, and close under chapter 173-304 WAC, Minimum functional standards for solid waste handling, and the federal rules for closure under 40 CFR Part 258.60 would continue to be permitted under chapter 173-304 WAC unless such MSWLF units are part of a multiunit ground water monitoring system according to WAC 173-351-450(4).

(b) Existing MSWLF units with valid chapter 173-304 WAC permits expiring on or after the effective date of this chapter. Each valid chapter 173-304 WAC permit (for existing MSWLF units) expiring on or after the effective date of this rule, is hereby continued until the expiration date set forth in the permit. Owners and operators must comply with the conditions of the permit and the regulations of chapter 173-304 WAC, in effect on October 8, 1993, for the duration of that permit. Owners or operators of existing MSWLF units with valid chapter 173-304 WAC permits expiring on or after the effective date of this chapter, must apply for a valid MSWLF permit no later than ninety days after promulgation of this regulation. For these transition rules, the owner or operator shall prepare applications according to WAC 173-351-730(4), Reissuance/transition applications. Upon issuance of a valid MSWLF permit, the owner or operator must comply with the requirements of this regulation.

Note: See also WAC 173-351-720 (6)(a), filing for reissuance.

(3) New and laterally expanded MSWLF units. New and laterally expanded MSWLF units receiving waste after the effective date of this chapter, shall meet the requirements of this section before construction has begun and before waste is accepted to the MSWLF unit or lateral expansion.

Note: Any owner or operator planning to incorporate a 50 percent increase or greater in design volume capacity not previously authorized in permit, or unpermitted changes resulting in significant adverse environmental impacts that have lead a responsible official to issue a declaration of significance under WAC 197-11-736 shall meet the requirements of this section before construction has begun and before waste is accepted to the MSWLF unit, or lateral expansion.

(4) Exemptions. The MSWLF units identified in this subsection are exempt from this section:

(a) MSWLF units that are excluded under WAC 173-351-010 (2)(b);

(b) Single family residences and single family farms dumping or depositing solid waste resulting from their own domestic, on-site activities onto or under the surface of land owned or leased by them when such action does not create a nuisance, violate any other statutes, ordinances, regulations, or this regulation, provided that such facilities:

(i) Are fenced or otherwise protected by natural barriers from unauthorized entry by the general public and large animal scavengers; and

(ii) Have placed a monthly soil cover to allow no visible solid waste.

(c) Corrective actions at a MSWLF unit performed by the state and/or in conjunction with the United States Environmental Protection Agency to implement the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), the Model Toxics Control Act or corrective actions taken by others to comply with a state and/or federal cleanup order provided that:

(i) The action results in an overall improvement of the environmental impact of the site;

(ii) The action does not require or result in additional waste being delivered to the facility or increase the amount of waste or contamination present at the facility;

(iii) The facility standards of WAC 173-351-300, 173-351-320, and 173-351-500 are met; and

(iv) The jurisdictional health department is informed of the actions to be taken and is given the opportunity to review and comment upon the proposed corrective action plans.

Note: MSWLF units not covered under corrective action are not exempted from permitting under this section.

(5) Renewal required. The owner or operator of a facility shall apply for renewal of the facility's permit annually, except for that year that a permit has been or will be reissued under WAC 173-351-720(6).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-700, filed 10/26/93, effective 11/26/93.]

WAC 173-351-720 Permit application procedures. (1) Initial procedures.

(a) Forms and complete application. An application for any permit under this regulation must be submitted on a form prescribed by the department. In order to be determined complete:

(i) Two or more copies (as determined by the jurisdictional health department) of the application must have been signed by the owner and operator and received by the jurisdictional health department;

(ii) The application must include evidence of compliance with the State Environmental Policy Act (SEPA) rules, chapter 197-11 WAC; and

(iii) The application must include the plans, reports, and other supporting information required by this regulation.

(b) Notice. Once the jurisdictional health department determines that an application for a permit is factually complete, it shall:

(i) Refer one copy to the appropriate regional office of the department for review and comment;

(ii) For all permits except renewal, modified and transition permits give notice of its receipt of a proposed complete permit application to the public and to interested persons for public comment for thirty days after the publication date of the notice;

(iii) For all permits except renewal, modified and transition permits perform the following additional public notification requirements:

(A) Mail the notice to persons who have requested notice in writing;

(B) Mail the notice to state agencies and local governments with a regulatory interest in the proposal;

(C) Include in the public notice a statement that any person may express their views in writing to the jurisdictional health department within thirty days of the last date of publication;

(D) Mail a copy of the MSWLF permit decision to any person who has made written request for such decision; and

(E) Add the name of any person, upon request, to a mailing list to receive copies of notices for all applications, within the state or within a geographical area.

(c) Standards for approval. The jurisdictional health department shall investigate every application to determine whether the facility meets all applicable laws and regulations, conforms with the most recently adopted comprehensive solid waste management plan in effect at the time of application and complies with all zoning requirements. A land use permit or letter from the jurisdictional zoning authority shall be sufficient demonstration of compliance with zoning requirements.

(d) Fees. The jurisdictional health department may establish reasonable fees for permits and renewal of permits. All permit fees collected by the health department shall be deposited in the account from which the jurisdictional health department's operating expenses are paid.

(e) Department's findings. The department shall report to the jurisdictional health department its findings on each permit application within forty-five days of receipt of a complete application or inform the jurisdictional health department as to the status of the application and when it expects its findings will be transmitted to the jurisdictional health department. Additionally, the department shall recommend for or against the issuance of each permit by the jurisdictional health department.

(f) Permit approval. When the jurisdictional health department has evaluated all information in the public record, it shall issue or deny a permit. Every completed solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department or the owner or operator shall be informed as to the status of the application with a schedule for final determination.

(g) Permit format. Every permit issued by a jurisdictional health department shall be on a format prescribed by the department and shall contain specific requirements necessary for the proper operation of the facility including the requirement that final engineering plans and specifications be submitted for approval to the jurisdictional health department.

(h) Filing permits with the department. The jurisdictional health department shall mail all issued permits to the department no more than seven days after the date of issuance. The department shall review and may appeal the permit as set forth in RCW 70.95.185 and 70.95.190.

(i) Renewal procedures. The owner or operator of a facility shall apply for renewal of the MSWLF permit annually, except for that year that a permit has been or will be reissued under subsection (6) of this section. The owner or operator is authorized to continue all activities authorized under the currently expired permit, if the jurisdictional health department has not rendered a decision on renewal by the yearly renewal date of the current permit. The jurisdictional health department shall annually:

(A) Review the original application and such additional information as required in WAC 173-351-730 (3)(b) for compliance with these regulations:

(B) Collect the renewal fee if the jurisdictional health department so chooses;

(C) If the requirements of (b)(i)(A) of this subsection are met, renew the permit; and

(D) File the renewed permit with the department no more than seven days after the date of renewal. The department shall review and may appeal the renewal as set forth in RCW 70.95.185 and 70.95.190. See also reissuance under subsection (6) of this section.

(2) SEPA review. The State Environmental Policy Act (SEPA), the SEPA rules and the local SEPA rules apply to permit decisions made pursuant to this chapter.

(3) Preapplication meetings. Preapplication meetings between the jurisdictional health department and the owner or operator are encouraged to address, among other things, the development of a complete application pertaining to the owner's or operator's prospective project.

(4) Activities authorized in permits, generally.

(a) Construction. Issuance of a valid MSWLF permit entitles the permittee to construct the MSWLF unit or MSWLF units, subject to any appropriate conditions the jurisdictional health department may impose. If the facility is to be constructed in several or more MSWLF units, the initial

application must contain the conceptual design for the entire facility and the information of WAC 173-351-730 (1)(b) for the initial MSWLF unit. In addition, information of WAC 173-351-730 (1)(b) may be submitted covering all other MSWLF units that will be constructed up to the first ten years of facility operation. The permit will identify the extent of each permitted MSWLF unit and the specific time frames for the first MSWLF unit and estimated time frames for subsequent MSWLF units within which construction activities must begin and end for each MSWLF unit. Authorization to construct each subsequent MSWLF unit must, as to that MSWLF unit, contain the detailed construction plans as specified in this regulation, and those plans and the construction of that MSWLF unit must comply with all requirements of the SEPA and of this regulation and other regulations applicable at the time jurisdictional health department approval is granted.

(b) Operation. Except for MSWLF units governed by the transition rules of WAC 173-351-700(2), the jurisdictional health department's approval to accept solid waste will not be given until the permittee has demonstrated to the jurisdictional health department's satisfaction that the MSWLF unit has been constructed in accordance with the approved plans and specifications for that MSWLF unit. If a facility is to be constructed in several or more MSWLF units, the jurisdictional health department must determine that each specific MSWLF unit has been constructed in accordance with the approved permit before operation will be permitted in that specific MSWLF unit.

(c) Post-closure activities. The jurisdictional health department's approval for post-closure activities will not be given until the permittee has demonstrated to the jurisdictional health department's satisfaction that the MSWLF unit or all the MSWLF units have been closed in accordance with the final engineering plans WAC 173-351-500 (1)(e)(ii) and the approved closure plan.

Note: Failure to obtain approval for post-closure activities may prevent reimbursement under post-closure financial assurance in WAC 173-351-600.

(5) Permit modifications.

(a) Any owner or operator intending to modify a valid MSWLF permit must file a modification application at least thirty days before the intended modification. A modification application must be made on forms authorized by the jurisdictional health department and the department, and the forms must include information identified in WAC 173-351-730 (3)(a).

(b) The jurisdictional health department shall follow the procedures of subsection (1) of this section in issuing a permit modification except for the following:

(i) Subsection (1)(b)(ii) and (iii) of this section, public notice; and

(ii) Subsection (1)(i) of this section, renewal procedures.

(c) In order to allow for permit modifications to be authorized at the time of permit renewal, any owner or operator may combine the application required for a permit modification in WAC 173-351-730 (3)(a) with the application required for a renewal permit in WAC 173-351-730 (3)(b), at the time of permit renewal.

(6) Permit reissuance. Except for permits during transition under subsection (2) of this section, any owner or operator intending to continue construction, operation or post-closure beyond the permitted duration of a valid MSWLF permit must file a reissuance application at least ninety days before the existing permit expires. Reissuance applications are subject to the public notification process of subsection (1)(b) of this section. A reissuance application must be made on forms authorized by the jurisdictional health department and the department, and must include information identified in WAC 173-351-730(4).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-720, filed 10/26/93, effective 11/26/93.]

WAC 173-351-730 Contents of applications. (1) Applications for MSWLF permits and level of detail, generally.

(a) General requirements for MSWLF permit applications and level of detail.

(i) An application for an MSWLF permit to construct, operate, and conduct post-closure activities at a facility must include all applicable information identified in this section pertaining to the facility for which the permit is being sought.

(ii) The information in every application submitted under this regulation must be of sufficient detail so as to allow the jurisdictional health department to fulfill its responsibilities under SEPA and this regulation by:

(A) Having detail sufficient to be readily understood by the persons using the documents contained in the application to enable them to determine how the facility will be constructed, operated, and closed and how it will be monitored and maintained after closure;

(B) Providing the jurisdictional health department with sufficient detail to ascertain the environmental impact of the proposed project; and

(C) Providing sufficient detail to demonstrate that the location, design, construction, operation, closure, and post-closure monitoring and maintenance of the MSWLF will be capable of compliance with the applicable requirements of this regulation.

(b) Specific requirements for permit applications. In addition to other requirements set forth in this section, complete applications for MSWLF permits must contain the following:

(i) Engineering plans that set forth the proposed facility's location, property boundaries, adjacent land uses, and detailed construction plans pursuant to subsection (5)(a) of this section;

(ii) How the facility will meet the location standards of WAC 173-351-130 and 173-351-140 including demonstrations;

(iii) A hydrogeologic report and water quality monitoring plan prepared in accordance with the provisions of WAC 173-351-400 (including all demonstrations);

(iv) The plan of operation that prescribes how the facility will fulfill the operating requirements set forth in WAC 173-351-200, 173-351-210, and 173-351-220, including the demonstrations of this regulation;

(v) An engineering report comprehensively describing the existing site conditions and an analysis of the facility,

including closure, post-closure criteria, and any necessary demonstrations with subsection (5)(b) of this section;

(vi) A construction quality assurance and quality control plan prepared in accordance with subsection (6) of this section;

(vii) The closure and post-closure plans required by WAC 173-351-500, including the schedule of WAC 173-351-500 (1)(c)(iv) and for the submission of final engineering plans for closure six months prior to closure of the facility or the MSWLF unit. See WAC 173-351-500 (1)(e)(ii);

(viii) Either a legal document (contract, local permit, a signed permit application etc.) certifying acceptance of leachate by the operator of a wastewater treatment facility for the discharge of leachate to that facility, or an application for a National Discharge Elimination System (NPDES) permit pursuant to chapter 173-220 WAC or a state discharge permit (for solar evaporation ponds having no surface water discharge) pursuant to chapter 173-216 WAC or other necessary environmental permit applications (including air quality permit applications) for otherwise managing leachate;

(ix) For small landfills, the demonstration of WAC 173-351-010 (2)(c);

(x) A demonstration of how the MSWLF conforms with the approved local comprehensive solid waste management plan in place at the time of application.

(2) Combined applications. Owners or operators may file a combined application for MSWLF units and other solid waste handling facilities, such as surface impoundments, composting facilities, storage piles, and MSWLF units closed under and/or regulated by chapter 173-304 WAC, Minimum functional standards for solid waste handling or other rules promulgated under the authority of chapter 70.95 RCW, including this regulation. The combined application must contain information required by each applicable regulation.

(3) Modification and renewal applications.

(a) Modification applications. An application on forms specified by the jurisdictional health department and the department to modify a valid MSWLF permit issued pursuant to WAC 173-351-700 must include, and address, the following at a minimum:

(i) A description of the proposed modification;

(ii) The reasons for the proposed modification;

(iii) A description of the impacts from the proposed modification upon the MSWLF unit or the facility as presently permitted; and

(iv) A showing that, as modified, the MSWLF unit will be capable of compliance with the applicable requirements of this regulation.

(b) Renewal applications. An application on forms specified by the jurisdictional health department and the department to renew a permit issued pursuant to WAC 173-351-700 must include and address the following at a minimum:

(i) Any changes in operating methods, closure cost or post-closure costs or other changes not falling under the definition of a permit modification;

(ii) Any changes as revealed by inspections, or complaints;

(iii) Evidence that the annual report of WAC 173-351-200(11) has been submitted;

(iv) A list of documents added to the operating record according to WAC 173-351-200(10); and

(v) Evidence that all MSWLF unit operators have continued to comply with the certification requirements of chapter 173-300 WAC, Certification of operators of solid waste incinerator and landfill facilities.

(4) Reissuance/transition applications. An application to reissue a permit previously issued pursuant to this regulation or to convert a chapter 173-304 WAC permit to a valid MSWLF permit under the transition permit rules of WAC 173-351-700(2) must, at a minimum, include and address the following:

(a) Review the original application and permit for compliance with these regulations and submit such additional information as follows:

(i) A compliance summary showing how the facility's construction, operation, closure and post-closure activities, as applicable, have been undertaken either in compliance or not in compliance with the terms and conditions of the expiring permit;

(ii) Specifying any changes proposed by the owner or operator to, and detailing any changes in circumstance that may affect, the design, construction, operation, closure, or post-closure care of the facility and describing how compliance with the applicable requirements of this regulation will be assured.

(b) Review of information collected from inspections, complaints, or known changes in the operations including:

(i) Results of ground water monitoring taken during the operation (including closure/post-closure) of the facility according to WAC 173-351-400 or 173-304-490 as appropriate; and

(ii) Results of surface water and methane monitoring taken during the operation (including closure/post-closure) of the facility.

(5) Engineering plans, reports, and specifications. Unless otherwise specified in chapter 173-351 WAC, all engineering plans, reports, and specifications must comply with the requirements of this subsection. Engineering plans, reports, specifications, programs, and manuals submitted to the jurisdictional health department must be prepared and certified by an individual licensed in engineering disciplines associated with landfill design and construction or with experience in landfill design and construction and to practice engineering in the state of Washington.

(a) Engineering plans. Unless otherwise specified in this chapter, the engineering plans for all MSWLF units must be submitted using the following format:

(i) The sheet size with title blocks must be twenty-two inches by thirty-four inches or twenty-four inches by thirty-six inches.

(ii) The cover sheet must include the project title, owner's and operator's name, sheet index, legend of symbols, and the engineer's name, address, signature, date of signature, and seal.

(iii) The preliminary engineering plans relating the project to its environmental setting must include:

(A) A regional plan or map (having a minimum scale of 1:62,500) and indicate directions and distances to airports within five miles (eight kilometers) of the facility;

(B) A vicinity plan or map (having a minimum scale of 1:24,000) that must show the area within one mile (1.6 kilometers) of the property boundaries of the facility in terms of,

the existing and proposed zoning and land uses within that area; and residences, public and private water supply wells, known private water supply aquifers, sole source aquifers, ground water management areas, well-head protection zones, special protection areas and surface waters (with quality classifications), access roads, bridges, railroads, airports, historic sites, and other existing and proposed man-made or natural features relating to the facility; and

(C) An overall site plan (having a minimum scale of 1:2,400 with five foot (or one meter) minimum contour intervals) that must show the landfill's property boundaries (as certified by an individual licensed to practice land surveying in the state of Washington), offsite and onsite utilities (such as electric, gas, water, storm, and sanitary sewer systems) and right of way easements; the 100-year flood plain, wetlands, Holocene faults, unstable areas; the names and addresses of contiguous property owners; the location of soil borings, excavations, test pits, gas venting structures, wells (including down-gradient drinking water supply wells within two thousand feet (six hundred ten meters) of the property boundary), lysimeters, piezometers, environmental and facility monitoring points and devices (with each identified in accordance with a numbering system acceptable to the jurisdictional health department and whose horizontal location are accurate to the nearest 0.5 foot (0.15 meter) and all orthometric evaluations should be related to a vertical benchmark based on the national geodetic vertical datum of 1929 (NGVD29) and be established to 3rd order classification standards per federal geodetic control committee, or its successor, as specified in WAC 332-130-060 as measured from the ground surface and top of well casing), benchmarks and permanent survey markers, and onsite buildings and appurtenances, fences, gates, roads, parking areas, drainage culverts, and signs; the delineation of the total landfill area including planned staged development of the landfill's construction and operation, and the lateral and vertical limits of previously filled areas; the location and identification of the sources of cover materials; the location and identification of special waste handling areas; a wind rose; and site topography with five foot (or one meter) minimum contour intervals.

Note: All horizontal locations shall be based upon a control station related to a horizontal datum specified in chapter 58.20 RCW and chapter 332-130 WAC (NAD.83 (1991)).

(D) Detailed plans of the landfill must clearly show in plan and cross-sectional views, the original, undeveloped site topography before excavation or placement of solid waste; the existing site topography (if different from the original, undeveloped site topography) including the location and approximate thickness and nature of any existing solid waste; the seasonal high ground water table; generalized geologic units; known and interpolated bedrock elevations; the proposed limits of excavation and waste placement; the location and placement of each liner system and of each leachate collection system, locating and showing all critical grades and elevations of the collection pipe inverts and drainage envelopes, manholes, cleanouts, valves, sumps, and drainage blanket thicknesses; all berms, dikes, ditches, swales and other devices as needed to divert or collect surface water run-on or runoff; the final elevations and grades of the landfill cover system including the grading and gas venting layer, low permeability barrier, topsoil layers; the system used for monitoring and venting the decomposition gases generated within the landfill; ground water monitoring wells; geophysical and geochemical monitoring devices or structures; leachate storage, treatment and disposal systems including the collection network, sedimentation ponds and any treatment, pretreatment, or storage facilities; typical roadway sections, indicating the pavement type, dimensions, slopes and profiles; the building floor plans, elevations, appurtenances; and plans detailing the landfill entrance area including gates, fences, and signs.

(b) Engineering reports. The engineering reports for a facility must:

(i) Contain a cover sheet, stating the project title and location, the owner's or operator's name, and the engineer's name, address, signature, date of signature, and seal.

(ii) Have its text printed on 8 1/2" by 11" pages (paginated consecutively);

(iii) Contain a table of contents or index describing the body of the report and the appendices;

(iv) Include a body of report whose content is described by (c) of this subsection; and

(v) Include all appendices.

(c) An engineering report containing a description of the existing site conditions and, at a minimum, an analysis of the proposed facility that must:

(i) Describe current operating practices, expected life and any pending litigation or corrective actions relating to the existing or past facilities;

(ii) Specify the proposed design capacity of the MSWLF unit for which approval is being sought, describing the number, types, and the minimum specifications of all the necessary machinery and equipment needed to effectively operate the landfill at the proposed design capacity;

(iii) Contain a site analysis of the proposed action including:

(A) The location of the closest population centers;

(B) A comprehensive description of the primary transportation systems and routes in the facility service area (i.e., highways, airports, railways, etc.);

(C) An analysis of the existing topography, surface water and subsurface geological conditions in accordance with the hydrogeologic report requirements of WAC 173-351-490;

(D) A description of the materials and construction methods used for the placement of each monitoring well pursuant to the requirements of WAC 173-351-400; all gas venting systems; each liner and leachate collection and removal system; leachate storage, treatment, and disposal systems; and cover systems to demonstrate conformance with the design requirements found in WAC 173-351-300, 173-351-320, and 173-351-500. This description also must include a discussion of provisions to be taken to prevent frost action upon each liner system in areas where refuse has not been placed;

(E) An estimate of the expected quantity of leachate to be generated, including:

(I) An annual water budget that estimates leachate generation quantities during initial operation, upon application of intermediate cover, and following MSWLF unit or all MSWLF units closure. At a minimum, the following factors must be considered in the preparation of the water budget to

determine the amount of leachate generated as a result of precipitation infiltration into the MSWLF unit or all the MSWLF units: Average monthly temperature, average monthly precipitation, evaporation, evapotranspiration which considers the vegetation type and root zone depth, surface/cover soil conditions and their relation to precipitation runoff which must account for the surface conditions and soil moisture holding capacity and all other sources of moisture contribution to the landfill;

(II) Liner and leachate collection system efficiencies that must be calculated using an appropriate analytical or numerical assessment. The factors to be considered in the calculation of collection system efficiency must include, at a minimum, the saturated hydraulic conductivity of the liner, the liner thickness, the saturated hydraulic conductivity of the leachate collection system, the leachate collection system porosity, the base slope of the liner and leachate collection and removal system interface, the maximum flow distance across the liner and leachate collection and removal system interface to the nearest leachate collection pipe, the estimated leachate generation quantity as computed in accordance with the requirements of (c)(iii)(E)(I) of this subsection; and

(III) Predictions of the static head of leachate on the liners, volume of leachate to be collected, and the volume of leachate that may permeate through the entire liner system, all on a monthly basis. Information gained from the collection efficiency calculations required in (c)(iii)(E)(I) and (II) of this subsection must be used to make these predictions. This assessment also must address the amount of leachate expected to pass through the liner system in gallons per acre per day (liters per square meter per day).

(d) Discuss the closure and post-closure maintenance and operation of the facility which must include, but not be limited to:

(i) A closure design consistent with the requirements of WAC 173-351-500;

(ii) A post-closure water quality monitoring program consistent with the requirements of WAC 173-351-400 and 173-351-500;

(iii) An operation and closure plan for the leachate collection, treatment, and storage facilities consistent with the requirements of this regulation and WAC 173-304-430; and

(iv) A discussion of the future use of the facility, including the specific proposed or alternative uses during the post-closure period. Future uses must not adversely affect the final cover system. See WAC 173-351-500 (2)(c)(iii).

(e) Appendices submitted as part of an engineering report submitted with an application to construct a new or laterally expanded MSWLF unit must contain:

(i) Appropriate charts and graphs;

(ii) Copies of record forms used at the MSWLF unit;

(iii) Test pit logs, soil boring logs, and geological information (such as stratigraphic sections, geophysical and geochemical surveys, and water quality analyses);

(iv) Engineering calculations (including the raw data from which they were made);

(v) Other supporting data, including literature citations.

(6) Construction quality assurance and construction quality control plans.

The construction quality assurance (QA) and construction quality control (QC) plan must address the construction of the MSWLF unit according to the designs set forth in chapter 173-351 WAC. (Construction QA and construction QC are defined in WAC 173-351-100.) The owner or operator may submit separate construction QA plans and construction QC plans. For each specified phase of construction, these plans must include, but not be limited to:

(a) A delineation of the responsibilities for the QA management organization and the QC management organization, including the chain of command of the QA inspectors and contractors and the QC inspectors and contractors; quality assurance shall be performed by a third party organization that is independent of the landfill owner/operator/contractor.

(b) A description of the required level of experience and training for the contractor, his/her crew, and QA and QC inspectors for every major phase of construction in sufficient detail to demonstrate that the approved installation methods and procedures will be properly implemented; and

(c) A description of the QA and QC testing protocols for every major phase of construction, which must include, at a minimum, the frequency of inspection, field testing, sampling for laboratory testing, the sampling and field testing procedures and equipment to be utilized, the calibration of field testing equipment, the frequency of performance audits, the sampling size, the laboratory procedures to be utilized, the calibration of laboratory equipment and QA/QC of laboratory procedures, the limits for test failure, and a description of the corrective procedures to be used upon test failure.

Note: It is intended that owners or operators will select and pay for the independent third party construction quality assurance firm, who will report to the owner or operator.

(7) Signature and verification of applications.

(a) All applications for permits must be accompanied by evidence of authority to sign the application and must be signed by the owner or operator as follows:

(i) In the case of corporations, by a duly authorized principal executive officer of at least the level of vice-president; in the case of a partnership or limited partnership, by:

(ii) A general partner;

(iii) Proprietor; or

(iv) In the case of a sole proprietorship, by the proprietor;

(v) In the case of a municipal, state, or other governmental entity, by a duly authorized principal executive officer or elected official.

(b) Applications must be sworn to by, or on behalf of, the owner or operator, in respect to the veracity all statements therein; or must bear an executed statement by, or on behalf of, the owner or operator to the effect that false statements made therein are made under penalty of perjury.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-730, filed 10/26/93, effective 11/26/93.]

WAC 173-351-740 Permit issuance criteria. The jurisdictional health department may issue, reissue, or modify a MSWLF permit to a facility, only if:

(1) The application's engineering and hydrogeological data and construction plans and specifications required by this regulation pertaining to such a MSWLF unit or MSWLF units substantiate that the proposed MSWLF unit or MSWLF units meets the requirements of this regulation;

(2) The application demonstrates the facility's ability to operate and close in accordance with the requirements of this regulation;

(3) The application demonstrates the facility's ability to conduct post-closure activities in accordance with the requirements of this regulation; and a form of surety or financial responsibility for post-closure activities has been filed with the jurisdictional health department; and

(4) The application demonstrates the facility's consistency with the local solid waste management plan in effect at the time of application.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-740, filed 10/26/93, effective 11/26/93.]

WAC 173-351-750 Permit provisions. (1) Mitigation of adverse impacts. The jurisdictional health department may impose conditions in each permit, to assure mitigation of adverse environmental impacts pursuant to SEPA, chapter 43.21C RCW and to insure compliance with the requirements identified in WAC 173-351-130 through 173-351-600, with the applicable sections pertaining to such a MSWLF unit or all MSWLF units, and with other applicable laws and regulations.

(2) Transferability.

(a) All permits issued pursuant to this regulation are transferable only upon prior written approval of the jurisdictional health department and a demonstration that the prospective transferee will be able to comply with applicable laws and regulations, permit conditions, and other requirements to which the prospective transferor is subject.

(b) Upon transfer of ownership of all or part of a facility, a provision must be included in the property deed indicating the period of time during which the facility has been disposing of solid waste, a description of the solid waste contained within, and the fact that the records for the facility have been filed with the jurisdictional health department. The deed also must reference a map, which must be filed with the county clerk, showing the limits of the active areas as defined in WAC 173-351-100.

(3) Duration of permits. The jurisdictional health department must specify the duration of the MSWLF permit not to exceed ten years. Permits must be renewed annually according to WAC 173-351-730(3), and reissued according to WAC 173-351-720(6).

(4) Preconstruction review condition. The jurisdictional health department shall include in each permit for a new MSWLF unit or lateral expansion a condition requiring the owner or operator, to submit the following documents sixty days prior to beginning construction, and to obtain the jurisdictional health department's approval that the following documents conform with the engineering report and with the requirements of this chapter:

(a) Final design drawings;

(b) Construction specifications; and

(c) A construction quality assurance manual for the following MSWLF components:

(i) Bottom liner;

(ii) Leachate collection and removal system;

(iii) Landfill gas control system;

(iv) Leachate and landfill gas condensate treatment and disposal system; and

(v) Final cover system.

(5) Supervision and certification or declaration of construction. The construction of a MSWLF unit must be undertaken:

(a) Under the supervision of an individual licensed to practice engineering in the state of Washington; and

(b) In conformance with the construction quality assurance plan of WAC 173-351-730(6).

(6) Preoperation review conditions. Each permit issued under this chapter for a new MSWLF unit or lateral expansion shall contain a condition requiring that upon completion of construction, the licensed engineered who supervised construction shall certify or declare in writing that the construction is in accordance with the terms of the applicable permit and tested in accordance with construction quality assurance plans of WAC 173-351-730(6). Except as specified elsewhere in this regulation, this certification or declaration must be submitted to the jurisdictional health department within three months after completion of construction and must include recorded construction drawings and specifications. The operator must notify the jurisdictional health department, in writing, of the date when solid waste will be first received at the MSWLF unit.

(7) Cessation of construction or operation activities. If construction or operation activities started under a permit issued pursuant to this chapter cease for a period of twelve consecutive months, the jurisdictional health department may in its discretion revoke the permit. The jurisdictional health department shall provide notice to the owner or operator in writing explaining the reasons for revocation. The jurisdictional health department shall not revoke a permit where the cessation of construction or operation is caused by factors beyond the reasonable control of the permittee or when such cessation is in accordance with the provisions of the permit.

(8) Design volume capacity. Every MSWLF permit must set forth the facility's approved design volume capacity.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-750, filed 10/26/93, effective 11/26/93.]

WAC 173-351-760 Appeals. Whenever the jurisdictional health department denies a permit or suspends a permit for a solid waste disposal site, it shall, upon request of the application or holder of the permit, grant a hearing on such denial or suspension within thirty days after the request therefor is made. Notice of the hearing shall be given to all interested parties including the county or city having jurisdiction over the site and the department. Within thirty days after the hearing the health officer shall notify the applicant or the holder of the permit in writing of his determination thereof. Any party aggrieved by such determination may appeal to the pollution control hearings board by filing with the hearings board a notice of appeal within thirty days after receipt of notice of the determination of the health officer. The hearings board shall hold a hearing in accordance with the provisions of the Administrative Procedure Act, chapter 34.05 RCW, as now or hereafter amended.

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-760, filed 10/26/93, effective 11/26/93.]

WAC 173-351-990 Appendices.

APPENDIX I[1]
Appendix I - Constituents for Detection Monitoring

	COMMON NAME[2]	CAS RN[3]
Inorganic Constituents		
1)	Antimony	(Dissolved)
2)	Arsenic	(Dissolved)
3)	Barium	(Dissolved)
4)	Beryllium	(Dissolved)
5)	Cadmium	(Dissolved)
6)	Chromium	(Dissolved)
7)	Cobalt	(Dissolved)
8)	Copper	(Dissolved)
9)	Lead	(Dissolved)
10)	Nickel	(Dissolved)
11)	Selenium	(Dissolved)
12)	Silver	(Dissolved)
13)	Thallium	(Dissolved)
14)	Vanadium	(Dissolved)
15)	Zinc	(Dissolved)
16)	Nitrate	
Organic Constituents		
17)	Acetone	67-64-1
18)	Acrylonitrile	107-13-1
19)	Benzene	71-43-2
20)	Bromochloromethane	74-97-5
21)	Bromodichloromethane	75-27-4
22)	Bromoform; Tribromomethane	75-25-2
23)	Carbon disulfide	75-15-0
24)	Carbon tetrachloride	56-23-5
25)	Chlorobenzene	108-90-7
26)	Chloroethane; Ethyl chloride	75-00-3
27)	Chloroform; Trichloromethane	67-66-3
28)	Dibromochloromethane; Chlorodibromomethane	124-48-1
29)	1,2-Dibromo-3-chloropropane; DBCP	96-12-8
30)	1,2-Dibromoethane; Ethylene dibromide; EDB	106-93-4
31)	o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1
32)	p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7
33)	trans-1,4-Dichloro-2-butene	110-57-6
34)	1,1-Dichloroethane; Ethylidene chloride	75-34-3
35)	1,2-Dichloroethane; Ethylene dichloride	107-06-2
36)	1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride	75-35-4
37)	cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene	156-59-2
38)	trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene	156-60-5
39)	1,2-Dichloropropane; Propylene dichloride	78-87-5
40)	cis-1,3-Dichloropropene	10061-01-5
41)	trans-1,3-Dichloropropene	10061-02-6
42)	Ethylbenzene	100-41-4
43)	2-Hexanone; Methyl butyl ketone	591-73-6
44)	Methyl bromide; Bromomethane	74-83-9
45)	Methyl chloride; Chloromethane	74-87-3
46)	Methylene bromide; Dibromomethane	74-95-3
47)	Methylene chloride; Dichloromethane	75-09-2
48)	Methyl ethyl ketone; MEK; 2-Butanone	78-93-3
49)	Methyl iodide; Iodomethane	74-88-4
50)	4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1
51)	Styrene	100-42-5
52)	1,1,1,2-Tetrachloroethane	630-20-6
53)	1,1,2,2-Tetrachloroethane	79-34-5
54)	Tetrachloroethylene; Tetrachloroethene; Perchloroethylene	127-18-4
55)	Toluene	108-88-3
56)	1,1,1-Trichloroethane; Methyl chloroform	71-55-6
57)	1,1,2-Trichloroethane	79-00-5
58)	Trichloroethylene; Trichloroethene	79-01-6
59)	Trichlorofluoromethane; CFC-11	75-69-4
60)	1,2,3-Trichloropropane	96-18-4
61)	Vinyl acetate	108-05-4
62)	vinyl chloride	75-01-4
63)	Xylenes	1330-20-7

[1] This list contains 47 volatile organics for which possible analytical procedures provided in EPA Report SW-846 "Test Methods for Evaluating Solid Waste," third edition, November 1986, as revised December 1987, includes Method 8260; and 15 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods.

[2] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3] Chemical Abstracts Service registry number.

APPENDIX II
GROUND WATER QUALITY PARAMETERS

Field Parameters

pH
specific conductance
temperature
static water level

Geochemical Indicator Parameters

Calcium (Ca)	Sodium (Na)
Bicarbonate (HCO_3)	Chloride (Cl)
Magnesium (Mg)	Potassium (K)
Sulfate (SO_4)	Alkalinity (as Ca CO_3)
	Iron (Fe)
	Manganese (Mn)

Leachate Indicators

Ammonia (NH_3-N)
Total Organic Carbon (TOC)
Total Dissolved Solids (TDS)

APPENDIX III
List of Hazardous Inorganic and Organic Constituents.[1]

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-	8100	200
			8270	10
Acenaphthylene	208-96-8	Acenaphthylene	8100	200
			8270	10
Acetone	67-64-1	2-Propanone	8260	100
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015	100
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270	10
2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-	8270	20
Acrolein	107-02-8	2-Propenal	8030	5
			8260	100
Acrylonitrile	107-13-1	2-Propenenitrile	8030	5
			8260	200
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4, 4a,5,8,8a-hexahydro- (1α,4α, 4aβ,5α,8α,8aβ)-	8080	0.05
			8270	10
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010	5
			8260	10
4-Aminobiphenyl	92-67-1	[1,1 1 -Biphenyl]-4-amine	8270	20
Anthracene	120-12-7	Anthracene	8100	200
			8270	10
Antimony	(Dissolved)	Antimony	6010	300
			7040	2000
			7041	30
Arsenic	(Dissolved)	Arsenic	6010	500
			7060	10
			7061	20
Barium	(Dissolved)	Barium	6010	20
			7080	1000
Benzene	71-43-2	Benzene	8020	2
			8021	0.1
			8260	5
Benzo[a]anthracene; Benzanthracene	56-55-3	Benz[a]anthracene	8100	200
			8270	10
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene	8100	200
			8270	10
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene	8100	200
			8270	10
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene	8100	200
			8270	10
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene	8100	200
			8270	10
Benzyl alcohol	100-51-6	Benzenemethanol	8270	20
Beryllium	(Dissolved)	Beryllium	6010	3
			7090	50
			7091	2
alpha-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6- hexachloro-, (1α,2α,3β,4α,5β,6β)-	8080	0.05
			8270	10
beta-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6- hexachloro-, (1α,2β,3α,4β,5α,6β)-	8080	0.05
			8270	20
delta-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6- hexachloro-, (1α,2α,3α,4β,5α,6β)-	8080	0.1
			8270	20
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6- hexachloro-, (1α,2α,3β,4α,5α,6β)-	8080	0.05
			8270	20
Bis(2-chloroethoxy)methane	111-91-1	Ethane, 1,1 1 - [methylenebis(oxy)]bis[2-chloro-	8110	5
			8270	10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Bis(2-chloroethyl) ether; Dichloroethyl ether	111-44-4	Ethane, 1,1 1 -oxybis[2-chloro-	8110	3
			8270	10
Bis-(2-chloro-1-methylethyl) ether; 2,2 1 - Dichlorodiisopropyl ether; DCIP, See note 7	108-60-1	Propane, 2,2 1 -oxybis[1-chloro-	8110	10
			8270	10
Bis(2-ethylhexyl) phthalate	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	8060	20
Bromochloromethane; Chlorobromomethane	74-97-5	Methane, bromochloro-	8021	0.1
			8260	5
Bromodichloromethane; Dibromochloromethane	75-27-4	Methane, bromodichloro-	8010	1
			8021	0.2
			8260	5
Bromoform; Tribromomethane	75-25-2	Methane, tribromo-	8010	2
			8021	15
			8260	5
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-	8110	25
			8270	10
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	8060	5
			8270	10
Cadmium	(Dissolved)	Cadmium	6010	40
			7130	50
			7131	1
Carbon disulfide	75-15-0	Carbon disulfide	8260	100
Carbon tetrachloride	56-23-5	Methane, tetrachloro-	8010	1
			8021	0.1
			8260	10
Chlordane	See Note 8	4,7-Methano-1H-indene, 1,2,4,5, 6,7,8,8-octachloro-2,3,3a,4,7, 7a-hexahydro-	8080	0.1
			8270	50
p-Chloroaniline	106-47-8	Benzenamine, 4-chloro-	8270	20
Chlorobenzene	108-90-7	Benzene, chloro-	8010	2
			8020	2
			8021	0.1
			8260	5
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	8270	10
p-Chloro-m-cresol; 4-Chloro-3-methylphenol	59-50-7	Phenol, 4-chloro-3-methyl-	8040	5
			8270	20
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-	8010	5
			8021	1
			8260	10
Chloroform; Trichloromethane	67-66-3	Methane, trichloro-	8010	0.5
			8021	0.2
			8260	5
2-Chloronaphthalene	91-58-7	Naphthalene, 2-chloro-	8120	10
			8270	10
2-Chlorophenol	95-57-8	Phenol, 2-chloro-	8040	5
			8270	10
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-	8110	40
			8270	10
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-	8010	50
			8260	20
Chromium	(Dissolved)	Chromium	6010	70
			7190	500
			7191	10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Chrysene	218-01-9	Chrysene	8100	200
			8270	10
Cobalt	(Dissolved)	Cobalt	6010	70
			7200	500
			7201	10
Copper	(Dissolved)	Copper	6010	60
			7210	200
			7211	10
m-Cresol; 3-methylphenol	108-39-4	Phenol, 3-methyl-	8270	10
o-Cresol; 2-methylphenol	95-48-7	Phenol, 2-methyl-	8270	10
p-Cresol; 4-methylphenol	106-44-5	Phenol, 4-methyl-	8270	10
Cyanide	57-12-5	Cyanide	9010	200
2,4-D; 2,4-Dichlorophenoxyacetic acid	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-	8150	10
4,4 1 -DDD	72-54-8	Benzene 1,1 1 -(2,2-dichloroethylidene)bis[4-chloro-	8080	0.1
			8270	10
4,4 1 -DDE	72-55-9	Benzene, 1,1 1 -(dichloroethyenylidene)bis[4-chloro-	8080	0.05
			8270	10
4,4 1 -DDT	50-29-3	Benzene, 1,1 1 -(2,2,2-trichloroethylidene)bis[4-chloro-	8080	0.1
			8270	10
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-,S-(2,3-dichloro-2-propenyl) ester	8270	10
Dibenz[a,h]anthracene	53-70-3	Dibenz[a,h]anthracene	8100	200
			8270	10
Dibenzofuran	132-64-9	Dibenzofuran	8270	10
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, dibromochloro-	8010	1
			8021	0.3
			8260	5
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibrome-3-chloro-	8011	0.1
			8021	30
			8260	25
1,2-Dibromoethane; Ethylene dribromide; EDB	106-93-4	Ethane, 1,2-dibromo-	8011	0.1
			8021	10
			8260	5
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	8060	5
			8270	10
o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010	2
			8020	5
			8021	0.5
			8120	10
			8260	5
			8270	10
m-Dichlorobenzene; 1,3-Dichlorobenzene	541-73-1	Benzene, 1,3-Dichloro-	8010	5
			8020	5
			8021	0.2
			8120	10
			8260	5
			8270	10
p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010	2
			8020	5
			8021	0.1
			8120	15
			8260	5
			8270	10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
3,3 1 -Dichlorobenzidine	91-94-1	[1,1 1 -Biphenyl]-4,4 1 -diamine, 3,3 1 -dichloro-	8270	20
trans-1,4-Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-	8260	100
Dichlorodifluoromethane; CFC 12;	75-71-8	Methane, dichlorodifluoro-	8021 8260	0.5 5
1,1-Dichloroethane; Ethyldidene chloride	75-34-3	Ethane, 1,1-dichloro-	8010 8021 8260	1 0.5 5
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,1-dichloro-	8010 8021 8260	0.5 0.3 5
1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro-	8010 8021 8260	1 0.5 5
cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene	156-59-2	Ethene, 1,2-dichloro-, (Z)-	8021 8260	0.2 5
trans-1,2-Dichloroethylene trans-1,2-Dichloroethene	156-60-5	Ethene, 1,2-dichloro-, (E)-	8010 8021 8260	1 0.5 5
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040 8270	5 10
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	10
1,2-Dichloropropane; Propylene dichloride	78-87-5	Propane, 1,2-dichloro-	8010 8021 8260	0.5 0.05 5
1,3-Dichloropropane; Trimethylene dichloride	142-28-9	Propane, 1,3-dichloro-	8021 8260	0.3 5
2,2-Dichloropropane; Isopropylidene chloride	594-20-7	Propane, 2,2-dichloro-	8021 8260	0.5 15
1,1-Dichloropropene	563-58-6	1-Propene, 1,1-dichloro-	8021 8260	0.2 5
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-	8010 8260	20 10
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-, (E)-	8010 8260	5 10
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexa, chloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β, 6aα,7β,7aα)-	8080 8270	0.05 10
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	8060 8270	5 10
0,0-Diethyl 0-2-pyrazinyl phosphorothioate; Thionazin	297-97-2	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester	8141 8270	5 20
Dimethoate	60-51-5	Phosphorodithioic acid, 0,0-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	8141 8270	3 20
p-(Dimethylamino)azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	8270	10
7,12-Dimethylbenz[a]anthracene	57-97-6	Benz[a]anthracene, 7,12-dimethyl-	8270	10
3,3 1 -Dimethylbenzidine	119-93-7	[1,1 1 -Biphenyl]-4,4 1 -diamine, 3,3 1 -dimethyl-	8270	10
2,4-Dimethylphenol; m-Xylenol	105-67-9	Phenol, 2,4-dimethyl-	8040 8270	5 10
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	8060 8270	5 10
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-	8270	20

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
4,6-Dinitro-o-cresol 4,6-Dinitro-2-methylphenol	534-52-1	Phenol, 2-methyl-4,6-dinitro	8040 8270	150 50
2,4-Dinitrophenol;	51-28-5	Phenol, 2,4-dinitro-	8040 8270	150 50
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4-dinitro-	8090 8270	0.2 10
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3-dinitro-	8090 8270	0.1 10
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	8150 8270	1 20
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	8060 8270	30 10
Diphenylamine	122-39-4	Benzenamine, N-phenyl-	8270	10
Disulfoton	298-04-4	Phosphorodithioic acid, 0,0-diethyl S-[2-(ethylthio)ethyl] ester	8140 8141 8270	2 0.5 10
Endosulfan I	959-98-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexa-chloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide,	8080 8270	0.1 20
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10, 10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα, 6β,9β,9aα)-	8080 8270	0.05 20
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10, 10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-,3-3-dioxide	8080 8270	0.5 10
Endrin	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα, 2β,2aβ,3α,6α, 6aβ,7β,7aα)-	8080 8270	0.1 20
Endrin aldehyde	7421-93-4	1,2,4-Methenocyclopenta[cd]pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro-, (1α,2β, 2aβ,4β,4aβ,5β,6aβ,6bβ,7R*)-	8080 8270	0.2 10
Ethylbenzene	100-41-4	Benzene, ethyl-	8020 8221 8260	2 0.05 5
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	8015 8260 8270	5 10 10
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester	8270	20
Famphur	52-85-7	Phosphorothioic acid, 0-[4-[(dimethylamino)sulfonyl]phenyl] 0,0-dimethyl ester	8270	20
Fluoranthene	206-44-0	Fluoranthene	8100 8270	200 10
Fluorene	86-73-7	9H-Fluorene	8100 8270	200 10
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	8080 8270	0.05 10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα, 1bβ, 2α, 5α, 5aβ, 6β, 6aα)	8080 8270	1 10
Hexachlorobenzene	118-74-1	Benzene, hexachloro-	8120 8270	0.5 10
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8021 8120 8260 8270	0.5 5 10 10
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	8120 8270	5 10
Hexachloroethane	67-72-1	Ethane, hexachloro-	8120 8260 8270	0.5 10 10
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	8270	10
2-Hexanone; Methyl butyl ketone	591-78-6	2-Hexanone	8260	50
Indeno(1,2,3-cd)pyrene	193-39-5	Indeno(1,2,3-cd)pyrene	8100 8270	200 10
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-	8015 8240	50 100
Isodrin	465-73-6	1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10- hexachloro-1,4,4a,5,8,8a hexahydro- (1α,4α,4aβ,5β,8β,8aβ)-	8270 8260	20 10
Isophorone	78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-	8090 8270	60 10
Isosafrole	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	8270	10
Kepone	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	8270	20
Lead	(Dissolved)	Lead	6010 7420 7421	400 1000 10
Mercury	(Total)	Mercury	7470	2
Methacrylonitrile	126-98-7	2-Propenenitrile, 2-methyl-	8015 8260	5 100
Methapyrilene	91-80-5	1,2-Ethanediamine, N.N-dimethyl-N 1 -2-pyridinyl-N1/2-thienylmethyl)-	8270	100
Methoxychlor	72-43-5	Benzene,1,1 1 -(2,2,2,trichloroethylidene)bis[4-methoxy-	8080 8270	2 10
Methyl bromide; Bromomethane	74-83-9	Methane, bromo-	8010 8021	20 10
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010 8021	1 0.3
3-Methylcholanthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	8270	10
Methyl ethyl ketone; MEK; 2-Butanone	78-93-3	2-Butanone	8015 8260	10 100
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010 8260	40 10
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	8015 8260	2 30
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester	8270	10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-	8270	10
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, 0,0-dimethyl	8140	0.5
			8141	1
			8270	10
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl-	8015	5
			8260	100
Methylene bromide; Dibromomethane	74-95-3	Methane, dibromo-	8010	15
			8021	20
			8260	10
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-	8010	5
			8021	0.2
			8260	10
Naphthalene	91-20-3	Naphthalene	8021	0.5
			8100	200
			8260	5
			8270	10
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione	8270	10
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	10
2-Naphthylamine	91-59-8	2-Naphthalenamine	8270	10
Nickel	(Total)	Nickel	6010	150
			7520	400
o-Nitroaniline; 2-Nitroaniline	88-74-4	Benzenamine, 2-nitro-	8270	50
m-Nitroaniline; 3-Nitroanile	99-09-2	Benzenamine, 3-nitro-	8270	50
p-Nitroaniline; 4-Nitroaniline	100-01-6	Benzenamine, 4-nitro	8270	20
Nitrobenzene	98-95-3	Benzene, nitro-	8090	40
			8270	10
o-Nitrophenol; 2-Nitrophenol	88-75-5	Phenol, 2-nitro-	8040	5
			8270	10
p-Nitrophenol; 4-Nitrophenol	100-02-7	Phenol, 4-nitro-	8040	10
			8270	50
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso-	8270	10
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso-	8270	20
N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-	8070	2
N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8070	5
N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8070	10
N-Nitrosomethylethalamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosopiperidine	100-75-4	Piperidine, 1-nitroso-	8270	20
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-	8270	40
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2-methyl-5-nitro-	8270	10
Parathion	56-38-2	Phosphorothioic acid, 0,0-diethyl 0-(4-nitrophenyl) ester	8141	0.5
			8270	10
Pentachlorobenzene	608-93-5	Benzene, pentachloro-	8270	10
Pentachloronitrobenzene	82-68-8	Benzene, pentachloronitro-	8270	20
Pentachlorophenol	87-86-5	Phenol, pentachloro-	8040	5
			8270	50
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenl)	8270	20
Phenanthrene	85-01-8	Phenanthrene	8100	200
			8270	10
Phenol	108-95-2	Phenol	8040	1
p-Phenylenediamine	106-50-3	1,4-Benzenediamine	8270	10
Phorate	298-02-2	Phosphorodithioic acid, 0,0-diethyl S-[(ethylthio)methyl] ester	8140	2
			8141	0.5
			8270	10
Polychlorinated biphenyls; PCBs; Aroclors	See Note 9	1,1'-Biphenyl, chloro derivatives	8080	50
			8270	200
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	8270	10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015	60
			8260	150
Pyrene	129-00-0	Pyrene	8100	200
			8270	10
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	10
Selenium	(Dissolved)	Selenium	6010	750
			7740	20
			7741	20
Silver	(Dissolved)	Silver	6010	70
			7760	100
			7761	10
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	8150	2
Styrene	100-42-5	Benzene, ethenyl-	8020	1
			8021	0.1
			8260	10
Sulfide	18496-25-8	Sulfide	9030	4000
2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	2
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	10
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-	8010	5
			8021	0.05
			8260	5
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-	8010	0.5
			8021	0.1
			8260	5
Tetrachloroethylene; Tetrachloroethene; Perchloroethylene	127-18-4	Ethene, tetrachloro-	8010	0.5
			8021	0.5
			8260	5
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-	8270	10
Thallium	(Dissolved)	Thallium	6010	400
			7840	1000
			7841	10
Tin	(Dissolved)	Tin	6010	40
Toluene	108-88-3	Benzene, methyl-	8020	2
			8021	0.1
			8260	5
o-Toluidine	95-53-4	Benzenamine, 2-methyl-	8270	10
Toxaphene	See Note 10	Toxaphene	8080	2
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-	8021	0.3
			8120	0.5
			8260	10
			8270	10
1,1,1-Trichloroethane; Methylchloroform	71-55-6	Ethane, 1,1,1-trichloro-	8010	0.3
			8021	0.3
			8260	5
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-	8010	0.2
			8260	5
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010	1
			8021	0.2
			8260	5
Trichlorofluoromethane; CFC-11	75-69-4	Methane, trichlorofluoro-	8010	10
			8021	0.3
			8260	5
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5-trichloro-	8270	10
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040	5
			8270	10

Common Name[2] (mg/L)[6]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-	8010	10
			8021	5
			8260	15
0,0,0-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, 0,0,0-triethyl-ester	8270	10
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro-	8270	10
Vanadium	(Dissolved)	Vanadium	6010	80
			7910	2000
			7911	40
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8260	50
Vinyl chloride; Chloroethene	75-01-4	Ethene, chloro-	8010	2
			8021	0.4
			8260	10
Xylene (total)	See Note 11	Benzene, dimethyl-	8020	5
			8021	0.2
			8260	5
Zinc	(Dissolved)	Zinc	6010	20
			7950	50
			7951	0.5

Notes:

1 The regulatory requirements pertain only to the list of substances; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnotes 5 and 6. Also, note that the state ground water quality criteria, chapter 173-200 WAC, takes precedence over these recommended PQL's.

2 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

3 Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

4 CAS index are those used in the 9th Collective Index.

5 Suggested Methods refer to analytical procedure numbers used in EPA Report SW-846 "Test Methods for Evaluating Solid Waste", third edition, November 1986, as revised, December 1987. Analytical details can be found in SW-846 and in documentation on file at the agency. CAUTION: The methods listed are representative SW-846 procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

6 Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in ground waters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 mL samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

7 This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2"-oxybis[2-chloro- (CAS RN 39638-32-9).

8 Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6). PQL shown is for technical chlordane. PQLs of specific isomers are about 20 µg/L by method 8270.

9 Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor 1016 (CAS RN 12674-11-2), Aroclor 1221 (CAS RN 11104-28-2), Aroclor 1232 (CAS RN 11141-16-5), Aroclor 1242 (CAS RN 53469-21-9), Aroclor 1248 (CAS RN 12672-29-6), Aroclor 1254 (CAS RN 11097-69-1), and Aroclor 1260 (CAS RN 11096-82-5). The PQL shown is an average value for PCB congeners.

10 Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

11 Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7). PQLs for method 8021 are 0.2 for o-xylene and 0.1 for m-or p-xylene. The PQL for m-xylene is 2.0 µg/L by method 8020 or 8260.

APPENDIX IV
PARAMETERS FOR LEACHATE ANALYSIS

Appendix I[1] Parameters
Appendix II Parameters
Nitrite
Total Colliform
COD
BOD
Cyanide

1_ All metals analysis should be for total recoverable metals, for the leachate analysis only.

Important Note: All other appendices require dissolved metals (field-filtration for metals).

[Statutory Authority: Chapter 70.95 RCW and 40 CFR 258. 93-22-016, § 173-351-990, filed 10/26/93, effective 11/26/93.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

Chapter 173-360 WAC
UNDERGROUND STORAGE TANK REGULATIONS

WAC

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173-360-640 Types of licenses. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-640, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-650 Examination and licensing of tank services supervisors. [Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-650, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-650, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-655 Examination and licensing of persons who perform inspections. [Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-655, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-655, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-660 Study guide fees. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-660, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-680 Reciprocity with other states. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-680, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-690 Appeals. [Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-690, filed 11/28/90, effective 12/29/90.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

173-360-695 Inactive license. [Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-695, filed 10/29/91, effective 11/29/91.] Repealed by 95-04-102, filed 2/1/95, effective 3/4/95. Statutory Authority: Chapter 90.76 RCW.

PART I
PROGRAM SCOPE, ADMINISTRATION, AND ENFORCEMENT

WAC 173-360-100 Purpose and authority. (1) The purpose of this chapter is to address the serious threat posed to human health and the environment by leaking underground storage systems containing petroleum and other regulated substances.

(2) The department of ecology is directed by chapter 90.76 RCW to establish an underground storage tank program designed, operated and enforced in a manner that, at a minimum, meets the requirements for delegation of the Federal Underground Storage Tank Program of the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. Section 6901, et seq.). The legislative intent is that statewide requirements for underground storage tanks adopted by the department be consistent with and no less stringent than the objectives outlined in the federal regulations. Because certain areas of the state possess physical characteristics that make them especially vulnerable to threats from leaking underground storage tanks, local requirements more stringent than the statewide requirements may apply in these environmentally sensitive areas.

(Note: All codes, standards, rules, or regulations cited in this chapter are available for inspection at the Department of Ecology, P.O. Box 47655, Olympia, WA 98504-7655.)

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-100, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-100, filed 11/28/90, effective 12/29/90.]

WAC 173-360-105 Intergovernmental agreements. In order to fully implement this chapter, and to protect surface and ground water resources that may cross jurisdictional boundaries, the department and delegated agencies may negotiate and enter into cooperative agreements with Indian tribal governments, adjacent states, and Canadian governmental agencies when agencies are delegated responsibility for carrying out all or a portion of the underground storage tank program contiguous with or affecting lands under tribal, state, or Canadian government jurisdiction. Such cooperative agreements shall not affect the regulatory jurisdiction of any party thereto with regard to any civil or criminal matters otherwise exercised by any party. Intergovernmental agreements shall further the purpose of this chapter, and shall serve to establish a framework for intergovernmental coordination and cooperation, and shall serve to minimize duplication and efficiently utilize program resources to manage underground storage tanks and protect surface and ground water resources.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-105, filed 11/28/90, effective 12/29/90.]

WAC 173-360-110 Applicability, exemptions, and deferrals. (1) The requirements of this chapter apply to all owners and operators of an underground storage tank (UST) system as defined in WAC 173-360-120 except as otherwise provided in subsections (2) and (3) of this section. It is the responsibility of owners and operators to ensure that any UST supervisors they employ are properly certified in accordance with WAC 173-360-600 through 173-360-630.

(2) Exemptions. The following UST systems, including any piping connected thereto, are exempt from the requirements of this chapter:

(a) Any UST system holding hazardous wastes subject to Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances.

(b) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act.

(c) Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks.

(d) Any UST system whose capacity is one hundred ten gallons or less.

(e) Any UST system that has never contained more than a de minimis concentration of regulated substances as defined in WAC 173-360-120.

(f) Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

(g) Farm or residential UST systems of one thousand one hundred gallons or less capacity used for storing motor fuel for noncommercial purposes (see definition of "farm" and "residential");

(h) UST systems used for storing heating oil for consumptive use on the premises where stored; except that such systems which store in excess of one thousand one hundred gallons are subject to the release reporting requirements of WAC 173-360-372;

(i) Septic tanks;

(j) Any pipeline facility (including gathering lines) regulated under:

(i) The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.); or

(ii) The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.); or

(iii) Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of the law referred to in (j) (i) or (ii) of this subsection;

(k) Surface impoundments, pits, ponds, or lagoons;

(l) Storm water or wastewater collection systems;

(m) Flow-through process tanks;

(n) Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; or

(o) Storage tanks situated in an underground area (such as a basement, cellar, vault, mineworking drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

(3) Deferrals. The following UST systems are subject only to the requirements of WAC 173-360-130, 173-360-140, 173-360-160, 173-360-170, 173-360-190, 173-360-200, 173-360-372, 173-360-385 and 173-360-390. Any new deferred UST systems shall also be subject to the performance standards of WAC 173-360-300:

(a) Wastewater treatment tank systems not regulated under section 307(b) or 402 of the Clean Water Act;

(b) Any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.);

(c) Any UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR Part 50 Appendix A;

(d) Airport hydrant fuel distribution systems;

(e) UST systems with field-constructed tanks.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-110, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-110, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-110, filed 11/28/90, effective 12/29/90.]

WAC 173-360-120 Definitions. For the purposes of this chapter, the following definitions shall apply:

"Abandoned" means left unused indefinitely, without being substantially emptied or permanently altered structurally to prevent reuse.

"Aboveground release" means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the above-ground portion of an UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system.

"Accidental release" means any sudden or nonsudden release of petroleum from an underground storage tank that results in a need for corrective action and/or compensation for bodily injury or property damage neither expected nor intended by the tank owner or operator.

"Ancillary equipment" means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of regulated substances to and from an UST.

"Belowground release" means any release to the subsurface of the land and/or to ground water. This includes, but is not limited to, releases from the belowground portions of an underground storage tank system and belowground releases associated with overfills and transfer operations as the regulated substance moves to or from an underground storage tank.

"Beneath the surface of the ground" means beneath the ground surface or otherwise covered with earthen materials.

"Bodily injury" shall have the meaning given to this term by applicable state law; however, this term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for bodily injury.

"Cathodic protection" means a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

"Certified UST supervisor" means a person certified by the International Fire Code Institute or another nationally recognized organization, as approved by the department. Washington registered professional engineers who are competent, by means of examination, experience, or education, to perform site assessments, are not required to be certified for site assessment work.

"Closure" means to take an underground storage tank out of operation, either temporarily or permanently, in accordance with WAC 173-360-380 or 173-360-385. The term is synonymous with "decommissioning."

"Compatible" means the ability of two or more substances or materials to maintain their respective physical and chemical properties upon contact with one another such that the stored substance will not pass through the wall or lining of the tank and connected piping for the design life of the tank system under conditions likely to be encountered in the UST.

"Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.

"Consumptive use" with respect to heating oil means consumed on the premises.

"Controlling interest" means direct ownership of at least fifty percent of the voting stock of another entity.

"Corrosion expert" means a person who possesses a thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, and is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

"Decommissioning" means to take an underground storage tank out of operation, either temporarily or permanently, in accordance with WAC 173-360-380 or 173-360-385. The term is synonymous with "closure."

"Deferral" means a category of UST systems which are subject to certain, but not all, of the requirements of this chapter as specified in WAC 173-360-110(3).

"Delegated agency" means a state or local government agency which has been delegated responsibility by the department for administering any portion of an UST program.

"De minimis concentration" means either less than one inch of regulated substance, or less than a reportable quantity, as defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

"Department" means the department of ecology.

"Dielectric material" means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate UST systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the UST system (e.g., tank from piping).

"Director" means the director of the department of ecology.

"Electrical equipment" means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

"Emergency power generator" means an engine that uses fuel to produce auxiliary electrical or mechanical energy for use in emergencies.

"Emergency power generator tank" means a tank that stores fuel solely for use by an emergency power generator.

"Excavation zone" means the volume containing the UST system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

"Existing UST system" means an UST system used to contain an accumulation of regulated substances or for which installation had commenced on or before December 22, 1988. Installation is considered to have commenced if: The owner or operator had obtained all federal, state, and local approvals

or permits necessary to begin physical construction of the site or installation of the tank system; and if

Either a continuous on-site physical construction or installation program had begun; or

The owner or operator had entered into contractual obligations—which cannot be cancelled or modified without substantial loss—for physical construction at the site or installation of the tank system to be completed within a reasonable time.

"False alarm" means indicating that an UST system is leaking when in fact it is tight.

"Farm tank" is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank must be located on the farm property and used for farm purposes. "Farm" includes fish hatcheries, rangeland, and nurseries with growing operations. It does not include laboratories where animals are raised, land used to grow timber, pesticide aviation operations, retail stores or garden centers where nursery products are marketed but not grown, cemeteries, golf courses, or other facilities dedicated primarily to recreation or aesthetics, or other nonagricultural activities.

"Field-constructed tank" means an underground storage tank that is constructed in the field rather than factory built because of its large size.

"Financial reporting year" means the latest consecutive twelve-month period for which any of the following reports used to support a financial test is prepared: A 10-K report submitted to the SEC; an annual report of tangible net worth submitted to Dun and Bradstreet; or annual reports submitted to the Energy Information Administration or the Rural Electrification Administration. "Financial reporting year" may thus comprise a fiscal or a calendar year period.

"Firm" means any business, including but not limited to corporations, limited partnerships, and sole proprietorships, engaged in performing tank services.

"Flow-through process tank" is a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

"Free product" refers to a regulated substance that is present as a nonaqueous phase liquid (e.g., liquid not dissolved in water).

"Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"Hazardous substance UST system" means an underground storage tank system that contains a hazardous substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C) or any mixture of such substances and petroleum, and which is not a petroleum UST system.

"Heating oil" means petroleum that is No. 1, No. 2, No. 4—light, No. 4—heavy, No. 5—light, No. 5—heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.

"Hydraulic lift tank" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

"Immiscible" means largely incapable of blending or mixing.

"Installation" means the activity of placing an underground storage tank system or any part thereof in the ground and preparing it to be placed in service.

"Legal defense cost" is any expense that an owner or operator or provider of financial assurance incurs in defending against claims or actions brought: By the United States Environmental Protection Agency (EPA) or a state to require corrective action or to recover the costs of corrective action; by or on behalf of a third party for bodily injury or property damage caused by an accidental release; or by any person to enforce the terms of a financial assurance mechanism.

"Liquid trap" means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

"Maintenance" means the normal operational upkeep to prevent an underground storage tank system from releasing a regulated substance.

"Motor fuel" means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any grade of gasohol, and is typically used in the operation of a motor engine.

"New UST system" means a tank system that will be used to contain an accumulation of regulated substances and for which installation commenced after December 22, 1988. (See also "existing tank system.")

"Noncommercial purposes" with respect to motor fuel means not for resale.

"Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in a release from an underground storage tank.

Note: This definition is intended to assist in the understanding of WAC 173-360-400 through 173-360-499 and is not intended either to limit the meaning of "occurrence" in a way that conflicts with standard insurance usage or to prevent the use of other standard insurance terms in place of "occurrence."

"On the premises where stored" with respect to heating oil means UST systems located on the same property where the stored heating oil is used.

"Operational life" refers to the period beginning when installation of the tank system has commenced until the time the tank system is properly closed under WAC 173-360-380 through 173- 360-398.

"Operator" means any person in control of, or having responsibility for, the daily operation of the UST system.

"Overfill release" is a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment.

"Owner" means: In the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who owns an UST system used for storage, use, or dispensing of regulated substances; and in the case of any UST system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use. In the event that the owner of an UST system cannot be physically located, the owner shall be the person who owns the property where the UST system is located, except any lien holder and any agency of the state or unit of local government which acquired ownership or control involuntarily through bankruptcy, tax delinquency, abandonment, or circumstances in which the government involuntarily acquires title. This exclusion does not apply to an agency of the state or unit of local government which has caused or contributed to a release or threatened release of a regulated substance from the UST system.

"Owner or operator," means, for the purposes of WAC 173-360-400 through 173-360-499, when the owner or operator are separate parties, the party that is responsible for obtaining or has obtained financial assurances.

"Party" means a person or group concerned or having or taking part in any affair, matter, transaction, or proceeding.

"Permanently closed" means: (1) In the case of an UST system taken out of operation before December 22, 1988, the UST system was substantially emptied of regulated substances or permanently altered structurally to prevent reuse; (2) in the case of an UST system taken out of operation after December 21, 1988, and before the effective date of this chapter, the UST system was closed in accordance with 40 CFR 280; and (3) in the case of an UST system taken out of operation on or after the effective date of this chapter, the UST system was closed in accordance with WAC 173-360-385.

"Person" means an individual, trust, firm, joint stock company, federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body. "Person" also includes a consortium, a joint venture, a commercial entity, and the United States government.

"Petroleum marketing facilities" include all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public.

"Petroleum marketing firms" are all firms owning petroleum marketing facilities. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms.

"Petroleum UST system" means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

"Pipe" or "piping" means a hollow cylinder or tubular conduit that is constructed of nonearthen materials.

"Pipeline facilities (including gathering lines)" are new and existing pipe rights-of-way and any associated equipment, facilities, or buildings.

"Property damage" shall have the meaning given this term by applicable state law. This term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for property damage. However, such exclusions for property damage shall not include corrective action associated with releases from tanks which are covered by the policy.

"Provider of financial assurance" means an entity that provides financial assurance to an owner or operator of an underground storage tank through one of the mechanisms listed in WAC 173-360-413 through 173-360-436, including a guarantor, insurer, risk retention group, surety, issuer of a letter of credit, issuer of a state-required mechanism, or a state.

"Regulated substance" means:

Any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and any other regulated substances); and

Petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (sixty degrees Fahrenheit and 14.7 pounds per square inch absolute). The term "regulated substance" includes but is not limited to petroleum and petroleum-based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils. The term "regulated substance" does not include propane or asphalt or any other petroleum product which is not liquid at standard conditions of temperature and pressure.

"Release" means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an UST system to ground water, surface water or soils.

"Release detection" means determining whether a release of a regulated substance has occurred from the UST system into the environment or into the interstitial space between the UST system and its secondary barrier or secondary containment around it.

"Repair" means to restore a tank or UST system component that has caused a release of a regulated substance from the UST system.

"Residential tank" is a tank located on property used primarily for dwelling purposes; such properties do not include dormitories, convents, mobile parks, apartments, hotels and similar facilities, unless the tank is used by the owner solely for his or her own personal use, rather than to maintain the overall facility.

"Retrofitting" means the repair or upgrading of an existing underground storage tank system including, but not limited to, installation of splash, spill and overfill protection, installing or replacing monitoring systems, adding cathodic protective systems, tank repair, replacement of piping, valves, fill pipes or vents and installing tank liners.

"Septic tank" is a water-tight covered receptacle designed and used to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

"Site assessment" means investigating an UST site for the presence of a release at the time of closure or change-in-service.

"Site check" means investigating an UST site for the presence of a release when evidence indicates that a release may have occurred.

"Stormwater or wastewater collection system" means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water runoff resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

"Structural defect" means a hole or crack in the tank portion of the UST system, which has either caused a release from the system or is being repaired to prevent a release from the system.

"Substantial business relationship" means the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued "incident to that relationship" if it arises from and depends on existing economic transactions between the guarantor and the owner or operator.

"Supervisor" means a person certified by the International Fire Code Institute, or other nationally recognized organization, operating independently or employed by a contractor, who is responsible for directing and overseeing the performance of tank services at a facility.

"Surface impoundment" is a natural topographic depression, excavation, or diked area formed primarily of earthen materials (although it may be lined with synthetic materials) that is not an injection well.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition, "assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.

"Tank" is a stationary device designed to contain an accumulation of regulated substances and constructed of non-earthen materials (e.g., concrete, steel, plastic) that provide structural support.

"Tank permit" means a tank tag, as required by RCW 90.76.020(4).

"Tank services" include underground storage tank installation, decommissioning, retrofitting, and testing.

"Termination" under WAC 173-360-476 and 173-360-480 means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.

"Testing" means applying a method to determine the integrity of an underground storage tank.

"Tightness testing" means a procedure for testing the ability of a tank system to prevent an inadvertent release of any stored substance into the environment or, intrusion of ground water into a tank system.

"Underground area" means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

"Underground release" means any below ground release.

"Underground storage tank" or "UST" means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is ten percent or more beneath the surface of the ground. This term does not include any of the exempt UST systems specified in WAC 173-360-110(2), or any piping connected thereto.

"Upgrade" means the addition or retrofit of some systems such as cathodic protection, lining, or spill and overfill controls to improve the ability of an underground storage tank system to prevent the release of regulated substances.

"UST site" or "site" means the location at which underground storage tanks are in place or will be placed. An UST site encompasses all of the property within a contiguous ownership that is associated with the use of the tanks.

"UST system" or "tank system" means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any.

"Wastewater treatment tank" means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-120, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-120, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-120, filed 11/28/90, effective 12/29/90.]

WAC 173-360-130 Tank permits and delivery of regulated substances. (1) Requirement for a permit. After July 1, 1991, no underground storage tank system, as defined in this chapter, shall be operated without a valid permit from the department or its delegated agency. However, possession of a valid permit does not preclude enforcement against the owner or operator of the underground storage tank under this or other laws.

(2) Application for a permit. Permits for UST systems shall be obtained as follows:

(a) To apply for a permit for a new UST system the owner or operator shall complete an UST notification form, as specified in WAC 173-360-200(2) and submit it with payment of the applicable annual fee, as specified in WAC 173-360-190, to the delegated agency. If no delegated agency exists, the application shall be submitted to the department.

(b) To apply for a permit for an existing UST system not previously reported to the department, the owner or operator shall complete a Washington state underground storage tank notification form, as specified in WAC 173-360-200(2), and submit it to the delegated agency with a payment of the applicable annual fee, as specified in WAC 173-360-190, including any fees which should have been paid for earlier fiscal

years if the UST system had been properly registered, but which were not paid. If no delegated agency exists, the application shall be made to the department.

(c) To apply for a permit for a tank which has been temporarily out of service, the owner or operator shall notify the department of the change in status and follow the provisions of WAC 173-360-380.

(d) Each year the department will request owners and operators of reported UST systems to certify compliance with the requirements of this chapter. UST systems which are in the department's notification data base when the department requests this certification will receive permits by July 1 of each year if:

(i) Adequate documentation of compliance, as specified by the department, is submitted to the delegated agency, or, if no delegated agency exists, to the department; and

(ii) Applicable fees have been paid.

(3) Eligibility for a permit. Tanks which are temporarily closed under WAC 173-360-380 are not eligible to receive permits. Underground storage tank systems are eligible for a permit if the following conditions are met:

(a) The owner or operator is in compliance with all requirements of this chapter, including the financial responsibility requirements, and chapter 173-340 WAC, if applicable, or the owner or operator is in conformance with a compliance schedule negotiated with and agreed to by the department;

(b) The storage tank system is not known by the owner or operator to be leaking; and

(c) All annual state tank fees and local environmentally sensitive area tank fees have been remitted.

(4) Delivery of regulated substances. Regulated substances shall not be delivered to any underground storage tank requiring a permit under this section unless a valid permit is displayed on such tank itself or the dispensing or measuring device connected thereto or, where appropriate, in the office or kiosk of the facility where the tank is located or unless otherwise authorized in writing by the department. This subsection applies only to suppliers who directly transfer regulated substances into underground storage tank systems.

(5) Waste oil tanks. Tanks used to collect and store used or waste oil regulated under this chapter shall not be pumped by a used or waste oil collector unless a valid permit is displayed on such tank itself or a device connected thereto or, where appropriate, in the office or kiosk of the facility where the tank is located. This prohibition does not apply to a one-time removal of substances from tanks which will not be used again for the storage of used or waste oil once the substances are removed; such tanks must be properly closed or undergo the procedures for a change-in-service in accordance with WAC 173-360-385. This subsection applies only to used or waste oil collectors who directly transfer regulated substances from underground storage tanks.

(6) Delivery prohibited to leaking tanks. Suppliers shall not deliver regulated substances to any underground storage tank which is known by the supplier to be leaking, or to have leaked and not been properly repaired, regardless of the permit status of the tank.

(7) Delivery of regulated substances. If a confirmed release occurs from a permitted tank, in addition to meeting the reporting requirements of WAC 173-360-372, within twenty-four hours of having knowledge of the release the owner or operator shall lock the fill pipe and remove from display the permit for the tank from which the release has occurred. At no time can the owner or operator receive regulated substances, until all the applicable requirements of this chapter and chapter 173-340 WAC have been met. If the department determines that reasonable progress is not being made in meeting these requirements it may request that the owner or operator surrender the permit, as specified in subsection (8) of this section, for the tank from which the release occurred.

(8) Permit revocation. The department may request the surrender of a permit for any tank which does not remain in compliance with the requirements of this chapter, including financial responsibility requirements and payment of fees, or for any violation of the chapter by an underground storage tank owner or operator, including refusal of access to property under WAC 173-360-140. Upon request of a representative of the department or delegated agency or upon receipt of a letter from the department or delegated agency requesting surrender of the permit, the owner or operator must return the permit to the department or delegated agency within seven days.

(9) When a tank is closed, any active permit must be returned to ecology within thirty days of the completion of the closure procedures.

(10) Appeals. The revocation of a permit may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-130, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-130, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-130, filed 11/28/90, effective 12/29/90.]

WAC 173-360-140 Investigation and access. (1) If necessary to determine compliance with the requirements of this chapter, an authorized representative of the state engaged in compliance inspections, monitoring and testing may, by request, require an owner or operator to submit relevant information or documents. The department may subpoena witnesses, documents, and other relevant information that the department deems necessary. In the case of any refusal to obey the subpoena, the superior court for any county in which the person is found, resides, or transacts business has jurisdiction to issue an order requiring the person to appear before the department and give testimony or produce documents. Any failure to obey the order of the court may be punished by the court as contempt.

(2) Any authorized representative of the state may require an owner or operator to conduct monitoring or testing.

(3) Upon reasonable notice, an authorized representative of the state may enter a premises or site subject to regulation under this chapter or in which records relevant to the operation of an underground storage tank system are kept. In the event of an emergency or in circumstances where notice would undermine the effectiveness of an inspection, notice is not required. The authorized representative may copy records, obtain samples of regulated substances, and inspect or conduct monitoring or testing of an underground storage tank system.

(4) For purposes of this section, the term "authorized representative" or "authorized representative of the state" means an enforcement officer, employee, or representative of the department or a local government that has obtained authority under RCW 90.76.030.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-140, filed 11/28/90, effective 12/29/90.]

WAC 173-360-150 Compliance monitoring. The department's compliance monitoring procedures, including procedures for recordkeeping and a program for systematic inspections, shall be consistent with and no less stringent than those required by 40 CFR 281.40 and amendments thereto.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-150, filed 11/28/90, effective 12/29/90.]

WAC 173-360-160 Enforcement. (1) The director may seek appropriate injunctive or other judicial relief by filing an action in Thurston County Superior Court or issuing such order as the director deems appropriate to:

(a) Enjoin any threatened or continuing violation of this chapter;

(b) Restrain immediately and effectively a person from engaging in unauthorized activity that results in a violation of any requirement of this chapter and is endangering or causing damage to public health or the environment;

(c) Require compliance with requests for information, access, testing, or monitoring under WAC 173-360-140; or

(d) Assess and recover civil penalties authorized under RCW 90.76.080.

(2) The department's enforcement procedures shall be consistent with and no less stringent than those required by 40 CFR 281.41 and amendments thereto.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-160, filed 11/28/90, effective 12/29/90.]

WAC 173-360-170 Penalties. (1) Any person who fails to notify the department pursuant to the notification requirements of this chapter, or who submits false information, is subject to a civil penalty not to exceed five thousand dollars per violation.

(2) Any person who violates this chapter is subject to a civil penalty not to exceed five thousand dollars for each tank per day of violation.

(3) Penalties may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-170, filed 11/28/90, effective 12/29/90.]

WAC 173-360-180 Public participation and information sharing. The department's procedures for public participation and information sharing shall be consistent with and no less stringent than those required by 40 CFR 281.42 and 281.43 and amendments thereto.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-180, filed 11/28/90, effective 12/29/90.]

WAC 173-360-190 Annual tank fees. (1) An annual tank fee of one hundred dollars per tank is effective from July 1, 1998, to June 30, 1999. Annually, beginning on July 1, 1999, and upon a finding by the department that a fee increase is necessary, the previous tank fee amount may be increased up to the fiscal growth factor for the next year. The fiscal growth factor is calculated by the office of financial management under RCW 43.135.025 for the upcoming biennium. The department shall use the fiscal growth factor to calculate the fee for the next year and shall publish the new fee by March 1st before the year for which the new fee is effective. The new tank fee is effective from July 1st to June 30th of every year. The tank fee shall be paid by every person who:

(a) Owns an underground storage tank located in this state; and

(b) Was required to provide notification to the department under the federal act.

This fee is not required of persons who have

(i) Permanently closed their tanks; and

(ii) If required, have completed corrective action in accordance with the rules adopted under this chapter.

(2) The department may authorize the imposition of additional annual local tank fees in environmentally sensitive areas designated under RCW 90.76.040. Annual local tank fees may not exceed fifty percent of the annual state tank fee.

(3) State and local tank fees collected under this section shall be deposited in the account established under RCW 90.76.100.

(4) Other than the annual local tank fee authorized for environmentally sensitive areas, no local government may levy an annual tank fee on the ownership or operation of an underground storage tank.

[Statutory Authority: Chapter 90.76 RCW. 98-15-069 (Order 98-08), § 173-360-190, filed 7/14/98, effective 7/14/98; 95-04-102, § 173-360-190, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-190, filed 11/28/90, effective 12/29/90.]

PART II
NOTIFICATION, REPORTING, AND RECORDKEEPING REQUIREMENTS

Note: Tank owners and operators may be subject to certain local requirements in addition to the state UST regulations. Permits or approval for construction activities may be required by local jurisdictions. These may include, but are not limited to, requirements to obtain grading, building or demolition permits, and requirements for compliance with local ordinances pertaining to environmental review under the state Environmental Policy Act (chapter 43.21C RCW).

WAC 173-360-200 Notification requirements. (1) Notice of intent to install a new UST system. Except in the circumstances defined in subsection (5) of this section, any owner who intends to install a new UST system shall submit a notice of such intent to the department or delegated agency at least thirty days and not more than ninety days prior to installing the UST system. Such notice shall meet the following requirements:

(a) The notice of intent shall be provided on the appropriate Washington state form, which is available from the department;

(b) Each UST system to be installed which is regulated under this chapter shall be reported;

(c) Owners may provide notice for more than one UST system using a single form, but UST systems to be installed at separate sites shall be reported on separate forms; and

(d) The completed form shall include all of the information required on the form.

(2) Notification of new UST systems in use. Within thirty days of bringing any newly installed UST system regulated under this chapter into use, the owner shall submit notice of such UST system to the department. This notice shall meet the following requirements:

(a) The notice shall be provided on the appropriate Washington state underground storage tank notification form, which is available from the department;

(b) Each tank regulated under this chapter shall be reported;

(c) Owners may provide notice for more than one tank using a single notification form, but owners who own tanks located at more than one site shall file a separate notification form for each site;

(d) Notification required under this section shall include all of the information required on the form for each tank for which notice must be given; and

(e) Notification for tanks installed after December 22, 1988, shall also certify compliance with the following requirements:

(i) Corrosion protection of steel tanks and piping under WAC 173-360-305 (1) and (2);

(ii) Financial responsibility under WAC 173-360-400 through 173-360-499; and

(iii) Release detection under WAC 173-360-335 and 173-360-340.

(3) Certification of installation. All owners and operators of new UST systems shall ensure that the methods used to install the tanks and piping comply with the requirements in WAC 173-360-305(4). Such certification shall be accomplished by completing a notification form, which is available from the department, as specified in WAC 173-360-305(5). The form must be signed by the certified UST supervisor.

(4) Notification of existing UST systems. Owners of any existing UST system regulated under this chapter which has not previously been reported to the department shall provide notification regarding such UST system immediately, following the requirements of subsection (2) (a) through (e) of this section.

Note: Owners and operators of UST systems that were in the ground on or after May 8, 1986, unless taken out of operation on or before January 1, 1974, were required to notify the department in accordance with the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, on a form published by Washington state unless notice was given pursuant to section 103(c) of CERCLA.

(5) Emergency replacement of UST systems.

(a) An exception to the thirty-day notice requirement for new installations in subsection (1) of this section is allowed when an UST system is being replaced on an emergency basis due to a release from the system being replaced. An emergency shall be regarded as a newly discovered release from an UST system which is:

(i) In operation at the time of the release;

(ii) Located at an operating facility; and

(iii) Necessary for the normal operation of the facility.

(b) Under the circumstances described in (a) of this subsection, the notice of intent to install an UST system may be provided after the installation of the new system but no more than seven days after the installation is completed. The information which must be included in the notice of intent form is the same as in subsection (1) of this section. A site assessment meeting the requirements of WAC 173-360-390 shall be completed prior to installing a tank in the excavation pit of a tank being replaced and prior to installing new piping in the piping trench of piping being replaced.

(6) Changes to UST systems. Any changes in the information initially reported in the notification form submitted under subsection (2), (4) or (5) of this section, including temporary closure of an UST system that was initially reported as being in use, shall be reported to the department or delegated agency by submitting a new notification form within thirty days after such changes occur.

(7) Beginning October 24, 1988, any person who sells a new tank which is intended to be used as an underground storage tank, or an existing UST system or property including an existing UST system which is intended to be used as an UST system, shall notify the purchaser of such tank or UST system of the owner's notification obligations under this section.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-200, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-200, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-200, filed 11/28/90, effective 12/29/90.]

WAC 173-360-210 Reporting and recordkeeping requirements. Owners and operators of UST systems shall cooperate fully with inspections, monitoring, and testing conducted by the department or delegated agency, as well as requests for document submission, testing, and monitoring by the owner or operator pursuant to RCW 90.76.060.

(1) Reporting. Owners and operators shall submit the information specified in (a) through (e) of this subsection to the department or delegated agency:

(a) Notification for all UST systems (WAC 173-360-200), which includes certification of installation for new UST systems (WAC 173-360-305(5));

(b) Reports of all suspected releases (WAC 173-360-360), confirmed releases (WAC 173-360-372), and spills and overfills (WAC 173-360-375);

(c) Reports required for corrective actions under chapter 173-340 WAC;

(d) A notification before permanent closure or change-in-service (WAC 173-360-385); and

(e) The appropriate forms, certificates of compliance, and evidence of financial responsibility (WAC 173-360-446).

(f) Checklists required for tank service activities, site checks, and site assessments shall be signed by certified UST supervisors and submitted to the department by the owner or operator.

(2) Recordkeeping. Owners and operators shall maintain the following information:

(a) Documentation of operation of corrosion protection equipment (WAC 173-360-320);

(b) Documentation of UST system repairs (WAC 173-360-325(7));

(c) Recent compliance with release detection requirements (WAC 173-360-355);

(d) Results of the site assessment conducted at permanent closure (WAC 173-360-398);

(e) Corrective action records in accordance with chapter 173-340 WAC; and

(f) Evidence of financial assurance mechanisms used to demonstrate financial responsibility (WAC 173-360-450).

(3) Availability and maintenance of records. Owners and operators shall keep the records required either:

(a) At the UST site and immediately available for inspection by the department or delegated agency; or

(b) At a readily available alternative site and be provided for inspection to the department or delegated agency upon request.

(c) In the case of permanent closure records required under WAC 173-360-398, owners and operators are also provided with the additional alternative of mailing closure records to the department or delegated agency if they cannot be kept at the site or an alternative site as indicated above.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-210, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-210, filed 11/28/90, effective 12/29/90.]

PART III
PERFORMANCE STANDARDS AND OPERATING AND CLOSURE REQUIREMENTS

WAC 173-360-300 Performance standards for deferred UST systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, no person may install a deferred UST system listed in WAC 173-360-110(3) for the purpose of storing regulated substances unless the UST system (whether of single-wall or double-wall construction):

(1) Will prevent releases due to corrosion or structural failure for the operational life of the UST system;

(2) Is cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a noncorrodible material, or designed in a manner to prevent the release or threatened release of any stored substance; and

(3) Is constructed or lined with material that is compatible with the stored substance.

Note: The provisions of WAC 173-360-305 and EPA's publication *The Interim Prohibition: Guidance for Design and Installation of Underground Storage Tanks* may be used to satisfy the requirements of this section.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-300, filed 11/28/90, effective 12/29/90.]

WAC 173-360-305 Performance standards for new UST systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, all owners and operators of new UST systems shall meet the following requirements:

(1) Tanks. Each tank shall be properly designed and constructed with material that is compatible with and impermeable to the stored substance, and any portion underground that routinely contains regulated substances shall be protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified under (a) through (d) below:

(a) The tank is constructed of fiberglass-reinforced plastic; or

Note: The following industry codes may be used to comply with subsection (1)(a) of this section: Underwriters Laboratories Standard 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products"; Underwriter's Laboratories of Canada CAN4-S615-M83, "Standard for Reinforced Plastic Underground Tanks for Petroleum Products"; or American Society of Testing and Materials Standard D4021-86, "Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks."

(b) The tank is constructed of steel and cathodically protected in the following manner:

(i) The tank is coated with a suitable dielectric material;

(ii) The tank is equipped with a factory-installed or field-installed cathodic protection system designed by a corrosion expert;

(iii) Cathodic protection systems are designed and installed to include provisions for testing to allow a determination of current operating status as required in WAC 173-360-320(2) and to facilitate testing by the department or delegated agency in accordance with WAC 173-360-325 (5) and (6); and

(iv) Cathodic protection systems are operated and maintained in accordance with WAC 173-360-320 or according to guidelines established by the department or delegated agency; or

Note: The following codes and standards may be used to comply with subsection (1)(b) of this section:

(A) Steel Tank Institute "Specification for STI-P3 System of External Corrosion Protection of Underground Steel Storage Tanks";

(B) Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks";

(C) Underwriters Laboratories of Canada CAN4-S603-M85, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," and CAN4-G03.1-M85, "Standard for Galvanic Corrosion Protection Systems for Underground Tanks for Flammable and Combustible Liquids," and CAN4-S631-M84, "Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems"; or

(D) National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and Underwriters Laboratories Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids."

(c) The tank is constructed of a steel-fiberglass-reinforced-plastic composite; or

Note: The following industry codes may be used to comply with subsection (1)(c) of this section: Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks," or the Association for Composite Tanks ACT-100, "Specification for the Fabrication of FRP Clad Underground Storage Tanks."

(d) The tank construction and corrosion protection are determined by the department or delegated agency to be

designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than subsection (1)(a) through (c) of this section.

(2) Piping. The piping that routinely contains regulated substances and is in contact with the ground shall be properly designed and constructed with material that is compatible with and impermeable to the stored substance, and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:

(a) The piping is constructed of fiberglass-reinforced plastic; or

Note: The following codes and standards may be used to comply with subsection (2)(a) of this section:

(i) Underwriters Laboratories Subject 971, "UL Listed Non-Metal Pipe";

(ii) Underwriters Laboratories Standard 567, "Pipe Connectors for Flammable and Combustible and LP Gas";

(iii) Underwriters Laboratories of Canada Guide ULC-107, "Glass Fiber Reinforced Plastic Pipe and Fittings for Flammable Liquids"; and

(iv) Underwriters Laboratories of Canada Standard CAN 4-S633-M81, "Flexible Underground Hose Connectors."

(b) The piping is constructed of steel and cathodically protected in the following manner:

(i) The piping is coated with a suitable dielectric material;

(ii) Field-installed cathodic protection systems are designed by a corrosion expert;

(iii) Cathodic protection systems are designed and installed to include provisions for testing to allow a determination of current operating status as required in WAC 173-360-320(2) and to facilitate testing by the department or delegated agency in accordance with WAC 173-360-325 (5) and (6); and

(iv) Cathodic protection systems are operated and maintained in accordance with WAC 173-360-320 or guidelines established by the department or delegated agency; or

Note: The following codes and standards may be used to comply with subsection (2)(b) of this section:

(A) National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code";

(B) American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems";

(C) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"; and

(D) National Association of Corrosion Engineers Standard RP-01-69, "Control of External Corrosion on Submerged Metallic Piping Systems."

(c) The piping construction and corrosion protection are determined by the department or delegated agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in subsection (2)(a) and (b) of this section.

(d) Metal flexible underground hose connectors shall be cathodically protected or covered with sleeves or jackets that will provide corrosion protection over the operating life of the UST system.

(3) Spill and overfill prevention equipment.

(a) Except as provided in subsection (3)(b) of this section, to prevent spilling and overfilling associated with transfer of regulated substances to the UST system, owners and operators shall use the following spill and overfill prevention equipment:

(i) Spill prevention equipment that will prevent release of regulated substances to the environment when the transfer hose is detached from the fill pipe (for example, a spill catchment basin); and

(ii) Overfill prevention equipment that will:

(A) Automatically shut off flow into the tank when the tank is no more than ninety-five percent full;

(B) Alert the transfer operator when the tank is no more than ninety percent full by restricting the flow into the tank or triggering a high-level alarm; or

(C) Restrict flow thirty minutes prior to overfilling, alert the operator with a high level alarm one minute before overfilling, or automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to regulated substances due to overfilling.

Note: Overflow prevention equipment that will automatically shut off or restrict flow into the tank should not be used where a pressurized fuel transfer system may be employed since an overflow may occur when the flow is suddenly shut off or restricted.

(b) Owners and operators are not required to use the spill and overfill prevention equipment specified in subsection (3)(a) of this section if:

(i) Alternative equipment is used that is determined by the department or delegated agency to be no less protective of human health and the environment than the equipment specified in subsection (3)(a)(i) or (ii) of this section; or

(ii) The UST system is filled by transfers of no more than twenty-five gallons at one time.

(4) Installation. All tanks and piping shall be properly installed by an UST supervisor who is certified in tank system installation in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions.

Note: Tank and piping system installation practices and procedures described in the following codes may be used to comply with the requirements of subsection (4) of this section:

(a) American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage System"; or

(b) Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems"; or

(c) American National Standards Institute Standard B31.3, "Petroleum Refinery Piping," and American National Standards Institute Standard B31.4 "Liquid Petroleum Transportation Piping System."

(5) Certification of installation. All owners and operators shall ensure compliance with subsection (4) of this section by submitting a properly completed notification form to the delegated agency, or, if no delegated agency exists, to the

department. The form must be signed by a certified UST supervisor.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-305, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-305, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-305, filed 11/28/90, effective 12/29/90.]

WAC 173-360-310 Upgrading requirements for existing UST systems. (1) Alternatives allowed. Not later than December 22, 1998, all existing UST systems shall comply with one of the following requirements:

(a) New UST system performance standards under WAC 173-360-305;

(b) The upgrading requirements in subsections (2) through (4) of this section; or

(c) Closure requirements under WAC 173-360-380 through 173-360-398, including applicable requirements for corrective action under WAC 173-360-399.

(2) Tank upgrading requirements. Steel tanks shall be upgraded by a certified UST supervisor to meet one of the following requirements in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory:

(a) Interior lining. A tank may be upgraded by internal lining if:

(i) The lining is installed in accordance with the requirements of WAC 173-360-325; and

(ii) Within ten years after lining, and every five years thereafter, the lined tank is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications, unless cathodic protection is also installed within ten years of lining the tank, as specified in WAC 173-360-310 (2)(c).

(b) Cathodic protection. A tank may be upgraded by cathodic protection if the cathodic protection system meets the requirements of WAC 173-360-305 (1)(b)(ii), (iii), and (iv) and the integrity of the tank is ensured using one of the following methods:

(i) The tank is internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes prior to installing the cathodic protection system; or

(ii) The tank has been installed or internally lined for less than ten years and is monitored monthly for releases in accordance with WAC 173-360-345 (6)(e) through (j); or

(iii) The tank has been installed or internally lined for less than ten years and is assessed for corrosion holes by conducting two tightness tests that meet the requirements of WAC 173-360-345 (6)(d). The first tightness test shall be conducted prior to installing the cathodic protection system. The second tightness test shall be conducted between three and six months following the first operation of the cathodic protection system; or

(iv) The tank is assessed for corrosion holes by a method that is determined by the department or delegated agency to prevent releases in a manner that is no less protective of human health and the environment than subsection (2)(b)(i) through (iii) of this section.

(c) Internal lining combined with cathodic protection. A tank may be upgraded by both internal lining and cathodic protection if:

(i) The lining is installed in accordance with the requirements of WAC 173-360-325; and

(ii) The cathodic protection system is installed within ten years of the tank being lined and meets the requirements of WAC 173-360-305 (1)(b)(ii), (iii), and (iv).

Note: The following codes and standards may be used to comply with this section:

(A) American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks";

(B) National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection";

(C) National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems";

(D) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"; and

(E) Steel Tank Institute Publication STI F894-91 "Specifications for External Corrosion Protection FRP Composite Underground Steel Storage Tanks."

(3) Piping upgrading requirements. Metal piping that routinely contains regulated substances and is in contact with the ground shall be cathodically protected in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and shall meet the requirements of WAC 173-360-305 (2)(b)(ii), (iii), and (iv).

Note: The codes and standards listed in the note following WAC 173-360-305 (2)(b) may be used to comply with this requirement.

(4) Spill and overfill prevention equipment. To prevent spilling and overfilling associated with transfer of regulated substances to the UST system, all existing UST systems shall comply with new UST system spill and overfill prevention equipment requirements specified in WAC 173-360-305(3), except that an UST system that is filled by transfers of no more than twenty-five gallons at a time is not required to use spill and overfill prevention equipment.

(5) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-310, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-310, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-310, filed 11/28/90, effective 12/29/90.]

WAC 173-360-315 Spill and overfill control requirements. (1) Owners and operators shall ensure that releases due to spilling or overfilling do not occur. The owner and operator shall ensure that the volume available in the tank is greater than the volume of regulated substances to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.

Note: The transfer procedures described in National Fire Protection Association Publication 385 may be used to comply with paragraph (a) of this section. Further guidance on spill and overfill prevention appears in American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," and National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code."

(2) The owner and operator shall report, investigate, and clean up any spills and overfills in accordance with WAC 173-360-375.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-315, filed 11/28/90, effective 12/29/90.]

WAC 173-360-320 Operation and maintenance of corrosion protection. All owners and operators of steel UST systems with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented for as long as the UST system is used to store regulated substances:

(1) All corrosion protection systems shall be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are in contact with the ground.

(2) All UST systems equipped with cathodic protection systems shall be inspected for proper operation by an UST supervisor who is certified in cathodic protection in accordance with the following requirements:

(a) Frequency. All cathodic protection systems shall be tested when they are installed, and again between one and six months after installation, and at least every three years thereafter or according to another reasonable time frame established by the department or delegated agency; and

(b) Inspection criteria. The criteria that are used to determine that cathodic protection is adequate as required by this section shall be in accordance with a code of practice developed by a nationally recognized association.

Note: National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," may be used to comply with subsection (2)(b) of this section.

(3) UST systems with impressed current cathodic protection systems shall also be inspected every 60 days to ensure the equipment is running properly.

(4) For UST systems using cathodic protection, records of the operation of the cathodic protection shall be maintained to demonstrate compliance with the performance standards in this section. These records shall provide the following:

(a) The results of the last three inspections required in subsection (3) of this section; and

(b) The results of testing from the last two inspections required in subsection (2) of this section.

(5) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-320, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-320, filed 11/28/90, effective 12/29/90.]

WAC 173-360-323 Compatibility. Owners and operators shall use an UST system made of or lined with materials that are compatible with and impermeable to the substance stored in the UST system.

Note: Owners and operators storing alcohol blends may use the following codes to comply with the requirements of this section:

(1) American Petroleum Institute Publication 1626, "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations"; and

(2) American Petroleum Institute Publication 1627, "Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations."

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-323, filed 11/28/90, effective 12/29/90.]

WAC 173-360-325 Repairs of UST systems. Repairs to UST systems shall be performed by a certified UST supervisor. Owners and operators of UST systems shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. Any UST system which is repaired to correct a structural defect must also be upgraded at the time of the repair to meet the requirements specified in WAC 173-360-310 (1)(a) or (b), and must employ a method of release detection for the tank as specified in WAC 183-360-335, 173-360-340 or 173-360-345, as applicable, and a method of release detection for the piping as specified in WAC 173-360-350. The repairs shall meet the following requirements:

(1) Repairs to UST systems shall be properly conducted by an UST supervisor certified in tank installation and retrofitting in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

Note: The following codes and standards may be used to comply with subsection (1) of this section: National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"; American Petroleum Institute Publication 2200, "Repairing Crude Oil, Liquified Petroleum Gas, and Product Pipelines"; American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks"; and National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection."

(2) Repairs to fiberglass-reinforced plastic tanks shall be made in accordance with the manufacturer's specifications or a code of practice developed by a nationally recognized association or an independent testing laboratory.

(3) Metal pipe sections and fittings that have released regulated substances as a result of corrosion or other damage shall be replaced. Fiberglass pipes and fittings may be repaired in accordance with the manufacturer's specifications.

(4) Repaired tanks and piping shall be tightness tested in accordance with WAC 173-360-345 (6)(d) and 173-360-350 (3)(b) within thirty days following the date of the completion

of the repair except as provided in subsection (4) (a) through (c), of this section:

(a) The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory; or

(b) The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in WAC 173-360-345 (6)(e) through (j); or

(c) Another test method is used that is determined by the department or delegated agency to be no less protective of human health and the environment than those listed above.

(5) Except as specified in subsection (6) of this section, within six months following the repair of any cathodically protected UST system, the cathodic protection system shall be tested in accordance with WAC 173-360-320 (2) and (3) to ensure that it is operating properly.

(6) Any repair to a cathodic protection system shall be tested in accordance with WAC 173-360-320 (2) and (3), at the time of the repair and again between one and six months following the repair.

(7) UST system owners and operators shall maintain records of each repair for the remaining operating life of the UST site that demonstrate compliance with the requirements of this section.

(8) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-325, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-325, filed 11/28/90, effective 12/29/90.]

WAC 173-360-330 Release detection compliance schedule. Owners and operators of all UST systems shall comply with the release detection requirements of WAC 173-360-330 through 173-360-355 by December 22 of the year listed in the following table:

TABLE: SCHEDULE FOR PHASE-IN OF RELEASE DETECTION

Year System was installed	Year when release detection is required (by December 22 of the year indicated)						
	1989	1990	1991	1992	1993	1994	1995
Before 1965 or date unknown.	RD	P	E				
1965-69..		P/RD		E			
1970-74..		P	RD		E		
1975-79..		P		RD		E	
1980-88..		P			RD		E

New tanks (after December 22, 1988,) immediately upon installation, except that emergency generator tanks installed between 1989 and 1990 must have release detection by 1996 and emergency generator tanks installed after December 29, 1990, must have release detection immediately upon installation.

P- Except for pressurized piping associated with emergency power generator tanks, release detection required by December 22, 1990.

RD- Except for emergency power generator tanks, must begin release detection for tanks and suction piping in accordance with WAC 173-360-335 (2)(a), 173-360-350 (2)(b), and 173-360-340.

E- Must begin release detection for emergency power generator tanks and piping in accordance with WAC 173-360-335 (2)(a) and 173-360-350 (2)(a) or (b).

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-330, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-330, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-330, filed 11/28/90, effective 12/29/90.]

WAC 173-360-335 Release detection for petroleum UST systems. (1) Owners and operators of new and existing petroleum UST systems shall provide a method, or combination of methods, of release detection that:

(a) Can detect a release from any portion of the tank and the connected underground piping that routinely contains a regulated substance;

(b) Is installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition; and

(c) Meets the performance requirements in WAC 173-360-345 or 173-360-350.

(2) Owners and operators of petroleum UST systems shall monitor tanks and piping for releases as follows:

(a) Tanks. Tanks shall be monitored at least every thirty days for releases using one of the methods listed in WAC 173-360-345 (6)(e) through (j) except as provided in WAC 173-360-345 (2) through (5).

(b) Piping. Underground piping that routinely contains regulated substances shall be monitored for releases as required under WAC 173-360-350.

(3) Owners and operators of any existing UST system that cannot apply a method of release detection that complies with the applicable requirements of WAC 173-360-330 through 173-360-355 shall complete the closure procedures in WAC 173-360-380 through 173-360-398 by the date on which release detection is required for that UST system under WAC 173-360-330.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-335, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-335, filed 11/28/90, effective 12/29/90.]

WAC 173-360-340 Release detection for hazardous substance UST systems. Owners and operators of hazardous substance UST systems shall provide release detection that meets the following requirements:

(1) Release detection at existing hazardous substance UST systems shall meet the requirements for petroleum UST systems in WAC 173-360-335. By December 22, 1998, all existing hazardous substance UST systems shall meet the release detection requirements for new systems in subsection (2) of this section.

(2) Release detection at new hazardous substance UST systems shall employ some method of release containment such as secondary containment systems, double-walled tanks, or external liners (e.g., in a pit or excavation). Such methods shall meet the following requirements:

(a) Secondary containment systems shall be designed, constructed and installed to:

(i) Contain regulated substances released from the tank system until they are detected and removed;

(ii) Prevent precipitation and ground water from entering the external liner and prevent the release of regulated substances to the environment at any time during the operational life of the UST system; and

(iii) Be checked for evidence of a release at least every thirty days.

Note: The provisions of 40 CFR 265.193, Containment and Detection of Releases, may be used to comply with these requirements.

(b) Double-walled tanks shall be designed, constructed, and installed to:

(i) Contain a release from any portion of the inner tank within the outer wall; and

(ii) Detect the failure of the inner wall.

(c) External liners (including vaults) shall be designed, constructed, and installed to:

(i) Contain one hundred ten percent of the capacity of the largest tank within its boundary;

(ii) Prevent the interference of precipitation or groundwater intrusion with the ability to contain or detect a release of regulated substances; and

(iii) Surround the tank completely (i.e., it is capable of preventing lateral as well as vertical migration of regulated substances).

(d) Underground piping shall be equipped with secondary containment that satisfies the requirements of subsection (2)(a) of this section (e.g., trench liners, jacketing double-walled pipe). In addition, underground piping that conveys regulated substances under pressure shall be equipped with an automatic line leak detector in accordance with WAC 173-360-350 (3)(a).

(e) Other methods of release detection may be used if owners and operators:

(i) Demonstrate to the department or delegated agency that an alternate method can detect a release of the stored substance as effectively as any of the methods allowed in WAC 173-360-345 (6)(b) through (j) can detect a release of petroleum;

(ii) Provide information to the department or delegated agency on effective corrective action technologies, health risks, and chemical and physical properties of the stored substance, and the characteristics of the UST site; and

(iii) Obtain approval from the department or delegated agency to use the alternate release detection method before the installation and operation of the new UST system.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-340, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-340, filed 11/28/90, effective 12/29/90.]

WAC 173-360-345 Methods of release detection for tanks. (1) Any method of release detection for tanks shall meet the performance requirements of this section. In addition, methods used after December 22, 1990, except for methods permanently installed prior to that date, shall be capable of detecting the leak rate or quantity specified for that method in subsection (6)(b), (c), (d), and (e) of this section with a probability of detection of 0.95 and a probability of false alarm of 0.05. (That is, under test conditions, a method will correctly detect at least ninety-five of one hundred actual releases, and will falsely indicate a release no more than five times in one hundred tests of nonleaking systems.)

Note: The establishment of leak indication thresholds is a means of setting a standard for the equipment or method used. It is not in any way meant to imply that actual leak rates less than these limits are allowable. No release is acceptable, and any indication that a release may have occurred should be investigated in accordance with WAC 173-360-360. Manufacturers and certified UST supervisors installing or utilizing leak detection equipment and/or methods must follow EPA's standard test procedures for evaluating leak detection methods to demonstrate compliance with the requirements of subsection (1) of this section.

(2) UST systems that meet the new tank or upgraded tank performance standards in WAC 173-360-305 or 173-360-310, and the inventory control requirements in subsection (6)(a) or (b) of this section, may use tank tightness testing (conducted in accordance with subsection (6)(d) of this section) at least every five years until December 22, 1998, or until ten years after the tank is installed or upgraded under WAC 173-360-310(2), whichever is later.

(3) UST systems that do not meet the new tank or upgraded tank performance standards in WAC 173-360-305 or 173-360-310 may use inventory controls (conducted in accordance with subsection (6)(a) or (b) of this section) and annual tank tightness testing (conducted in accordance with subsection (6)(d) of this section) until December 22, 1998, when the tank shall be upgraded under WAC 173-360-310 or permanently closed under WAC 173-360-385.

(4) Tanks with capacity of one thousand gallons or less may use weekly tank gauging conducted in accordance with subsection (6)(b) of this section.

(5) Tanks that store fuel solely for use by emergency power generators may use the following methods of release detection:

(a) Emergency power generator tanks with nominal capacity of one thousand gallons or less may use monthly tank gauging conducted in accordance with subsection (6)(c) of this section.

(b) Emergency power generator tanks with nominal capacity of one thousand one to two thousand gallons may use monthly tank gauging conducted in accordance with subsection (6)(c) of this section, in conjunction with annual tank tightness testing conducted in accordance with subsection (6)(d) of this section.

(c) Except as provided in subsection (2) of this section, emergency power generator tanks with nominal capacity greater than two thousand gallons may use weekly tank gauging conducted in accordance with subsection (6)(b) of this section, in conjunction with annual tank tightness testing conducted in accordance with subsection (6)(d) of this section.

(6) Each method of release detection for tanks used to meet the requirements of WAC 173-360-335 shall be conducted in accordance with the following:

(a) Daily inventory control. Daily inventory control (or another test of equivalent performance) shall be conducted in a manner capable of detecting a release of at least 1.0 percent of flow-through plus 130 gallons on a monthly basis in the following manner:

(i) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day;

(ii) The equipment used is capable of measuring the level of regulated substance in the tank over the full range of the tank's height to the nearest one-eighth of an inch;

(iii) The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery;

(iv) Deliveries are made through a drop tube that extends to within one foot of the tank bottom;

(v) Dispensing of regulated substances is metered and recorded within the local standards for meter calibration or an accuracy of at least six cubic inches for every five gallons of regulated substances which is withdrawn; and

(vi) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch at least once a month.

Note: Practices described in the American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," may be used, where applicable, as guidance in meeting the requirements of this paragraph.

(b) Weekly tank gauging. Only tanks of one thousand gallons or less nominal capacity may use weekly tank gauging as the sole method of release detection. Tanks of one thousand one to two thousand gallons may use the method in place of daily inventory control in (a) of this subsection, in conjunction with tank tightness testing, as specified in (d) of this subsection. Tanks of greater than two thousand gallons nominal capacity may use this method to meet the requirements of WAC 173-360-330 through 173-360-355 only if such tanks store fuel solely for use by emergency power generators. Weekly tank gauging shall meet the following requirements:

(i) Tank liquid level measurements are taken weekly at the beginning and ending of a period of at least thirty-six hours during which no liquid is added to or removed from the tank;

(ii) Level measurements are based on an average of two consecutive stick readings at both the beginning and ending of the period (that is, four measurements shall be taken, two consecutive measurements at the beginning and two consecutive measurements at the end of the period during which no liquid has been added or removed from the tank);

(iii) The equipment used is capable of measuring the level of regulated substance in the tank over the full range of the tank's height to the nearest one-eighth of an inch;

(iv) If the variation between beginning and ending measurements exceeds the weekly or monthly standards in the following table, a leak may be occurring and the requirements of WAC 173-360-360 through 173-360-375 shall be followed:

Nominal Tank Capacity	Weekly Standard (one test)	Monthly Standard
550 gallons or less	10 gallons	5 gallons
551-1,000 gallons	13 gallons	7 gallons
1,001-2,000 gallons	26 gallons	13 gallons
2,001 gallons or more*	.75% of capacity	.5% of capacity

(*Emergency Power Generator Tanks only.)

(c) Monthly tank gauging. Only tanks that store fuel solely for use by emergency power generators with a nominal capacity of two thousand gallons or less may use monthly tank gauging as a method of release detection. Such tanks with nominal capacity of one thousand one to two thousand gallons may use manual tank gauging in conjunction with tank tightness testing conducted in accordance with this section. Monthly tank gauging shall meet the following requirements:

(i) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded whenever inputs or withdrawals occur;

(ii) Tank liquid level measurements reconciled with inventory volume measurements are taken monthly at the beginning and ending of a period of at least twenty-one days, except when extreme snowfall or other travel obstructions occurring in remote locations and preventing access are specifically documented by the owner and operator;

(iii) Level measurements are based on an average of two consecutive readings at both the beginning and ending of the period (that is, four measurements shall be taken, two consecutive measurements at the beginning and two consecutive measurements at the end of the period);

(iv) The equipment used is capable of measuring the level of regulated substance in the tank over the full range of the tank's height to the nearest one-eighth of an inch or a corresponding amount of gallons;

(v) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch at least once a month;

(vi) If the variation between beginning and ending measurements exceeds the monthly standards in the following table, a leak may be occurring and the requirements of WAC 173-360-360 through 173-360-375 shall be followed:

Nominal Tank Capacity	Monthly Standard
550 gallons or less	5 gallons
551-1,000 gallons	7 gallons
1,001-2000 gallons	13 gallons

(d) Tank tightness testing. Tank tightness testing (or another test of equivalent performance) shall be capable of detecting at least a 0.1 gallon per hour leak rate from any portion of the tank up to the ninety-five percent full level or up to the product level limited by an overfill prevention device while accounting for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table. Tank tightness testing shall be conducted and the results reported in accordance with the instructions for that method.

(e) Automatic tank gauging. Equipment for automatic tank gauging that tests for the loss of regulated substance and conducts inventory control shall meet the following requirements:

(i) The automatic product level monitor test can detect at least a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance;

(ii) Daily inventory control (or another test of equivalent performance) is conducted in accordance with the requirements of (a) of this subsection; and

(iii) Automatic tank gauging equipment must be operated in the test mode at least once per year, and the results kept on file.

(f) Vapor monitoring. Testing or monitoring for vapors within the soil gas of the excavation zone shall meet the following requirements:

(i) The materials used as backfill are sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation zone;

(ii) The stored regulated substance, or a tracer compound placed in the tank system, is sufficiently volatile (e.g., gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank;

(iii) The measurement of vapors by the monitoring device is not rendered inoperative by the ground water, rainfall, or soil moisture or other known interferences so that a release could go undetected for more than thirty days;

(iv) The level of background contamination in the excavation zone will not interfere with the method used to detect releases from the tank;

(v) The vapor monitors are designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the tank system, a component or components of that substance, or a tracer compound placed in the tank system;

(vi) In the UST excavation zone, the site is evaluated for its appropriateness for installation of vapor monitors to ensure compliance with the requirements of this subsection and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the tank that routinely contains a regulated substance; and

(vii) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

Note: Monitoring wells must also comply with the minimum standards for construction, maintenance, and abandonment of resource protection wells specified in chapter 173-160 WAC. UST system owners and operators are encouraged to retain the services of a qualified professional who is experienced in determining the design and placement of vapor monitoring wells surrounding an UST system.

(g) Ground water monitoring. Testing or monitoring for liquids on or in the ground water shall meet the following requirements:

(i) The regulated substance stored is immiscible in water and has a specific gravity of less than one;

(ii) Ground water is never more than twenty feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec (e.g., the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials);

(iii) The slotted portion of the monitoring well casing shall be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low ground-water conditions;

(iv) Monitoring wells shall be sealed from the ground surface to the top of the filter pack;

(v) Monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible;

(vi) The continuous monitoring devices or manual methods used can detect the presence of at least one-eighth of an inch of free product on top of the ground water in the monitoring wells;

(vii) Within and immediately below the UST system excavation zone, the site is evaluated for its appropriateness for installation of ground water monitors to ensure compliance with the requirements in (g)(i) through (v) of this subsection and to establish the number and positioning of monitoring wells or devices that will detect releases from any portion of the tank that routinely contains a regulated substance; and

(viii) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

Note: Monitoring wells must also comply with the minimum standards for construction, maintenance, and abandonment of wells specified in chapter 173-160 WAC. UST system owners and operators are encouraged to retain the services of a qualified professional who is experienced in determining the design and placement of ground water monitoring wells surrounding an UST system.

(h) Interstitial monitoring. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the tank that routinely contains a regulated substance and also meets one of the following requirements:

(i) For double-walled UST systems, the sampling or testing method can detect a release through the inner wall in any portion of the tank that routinely contains a regulated substance;

Note: The provisions outlined in the Steel Tank Institute's "Standard for Dual Wall Underground Storage Tanks" may be used as guidance for aspects of the design and construction of underground steel double-walled tanks.

(ii) For UST systems with a secondary barrier within the excavation zone, the sampling or testing method used can detect a release between the UST system and the secondary barrier;

(A) The secondary barrier around or beneath the UST system consists of artificially constructed material that is sufficiently thick and impermeable (at least 10^{-6} cm/sec for the regulated substance stored) to direct a release to the monitoring point and permit its detection;

(B) The barrier is compatible with the regulated substance stored so that a release from the UST system will not cause a deterioration of the barrier allowing a release to pass through undetected;

(C) For cathodically protected tanks, the secondary barrier shall be installed so that it does not interfere with the proper operation of the cathodic protection system;

(D) The ground water, soil moisture, or rainfall will not render the testing or sampling method used inoperative so that a release could go undetected for more than thirty days;

(E) The site is evaluated for its appropriateness for installation of interstitial monitors to ensure that the secondary barrier is always above the ground water and not in a twenty-five-year flood plain, unless the barrier and monitoring designs are for use under such conditions; and

(F) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(iii) For tanks with an internally fitted liner, an automated device can detect a release between the inner wall of the tank and the liner, and the liner is compatible with the substance stored.

(i) Statistical inventory reconciliation. Statistical inventory reconciliation (SIR) shall meet the following requirements:

(i) Statistical inventory reconciliation must detect at least a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05; and

(ii) Daily inventory control must be performed in accordance with the requirements of (a) of this subsection; and

(iii) Owners and operators must submit daily inventory records from at least the previous thirty days on a monthly basis to a SIR vendor whose statistical analysis method has been demonstrated to meet the performance standard of (i) of this subsection; and

(iv) The SIR vendor must perform an independent SIR analysis on the daily inventory records submitted and report the results to the owner or operator within fifteen days of receiving them; and

(v) If the results of a SIR analysis show a 0.2 gallon per hour or greater leak rate in any single month, from any portion of the tank that routinely contains a regulated substance with a probability of detection of at least 0.95 and a probability of false alarm of no more than 0.05, it shall be determined to be a "fail." If an owner or operator receives a "fail" for two consecutive months, the owner or operator shall have a tank tightness test conducted in accordance with (d) of this subsection within fifteen days of receiving the second "fail" from the SIR vendor.

(j) Other methods. Any other type of release detection method, or combination of methods, can be used if:

(i) It can detect a 0.2 gallon per hour leak rate or a release of one hundred fifty gallons within a month with a probability of detection of 0.95 and a probability of false alarm of 0.05; or

(ii) The department or delegated agency may approve another method if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in (d) through (i) of this subsection. In comparing methods, the department or delegated agency shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, the owner and operator shall comply with any conditions imposed by the department or delegated agency on its use to ensure the protection of human health and the environment.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-345, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-345, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-345, filed 11/28/90, effective 12/29/90.]

WAC 173-360-350 Methods of release detection for piping. (1) Any method of release detection for piping shall meet the performance requirements of this section, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer. In addition, release detection methods, except for those methods permanently installed prior to December 22, 1990, shall be capable of detecting the leak rate or quantity specified for that method in subsection (3)(a) and (b) of this section with a probability of detection of 0.95 and a probability of false alarm of 0.05. (That is, under test conditions, a method will correctly detect at least ninety-five of one hundred actual releases, and will falsely indicate a release no more than five times in one hundred tests of nonleaking systems.)

Note: The establishment of leak indication thresholds is a means of setting a standard for the equipment or method used. It is not in any way meant to imply that actual leak rates less than these limits are allowable. No release is acceptable, and any indication that a release may have occurred should be investigated in accordance with WAC 173-360-360.

(2) Underground piping that routinely contains regulated substances shall be monitored for releases in a manner that meets one of the following requirements:

(a) Pressurized piping. Underground piping that conveys regulated substances under pressure shall:

(i) Be equipped with an automatic line leak detector conducted in accordance with subsection (3)(a) of this section; and

(ii) Have an annual line tightness test conducted by a certified UST supervisor in accordance with subsection (3)(b) of this section or have monthly monitoring conducted in accordance with subsection (3)(c) of this section.

(b) Suction piping. Underground piping that conveys regulated substances under suction shall either have a line tightness test conducted at least every three years beginning when release detection is required and in accordance with subsection (3)(b) of this section, or use a monthly monitoring method conducted in accordance with subsection (3)(c) of this section. No release detection is required for suction piping that is designed and constructed to meet the following standards:

(i) The below-grade piping operates at less than atmospheric pressure;

(ii) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;

(iii) Only one check valve is included in each suction line;

(iv) The check valve is located directly below and as close as practical to the suction pump; and

(v) A method is provided that allows compliance with subsection (2)(b)(ii) through (iv) of this section to be readily determined.

(3) Each method of release detection for piping used to meet the requirements of WAC 173-360-335 shall be conducted in accordance with the following:

(a) Automatic line leak detectors. Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of three gallons per hour at ten pounds per square inch line pressure within one hour. An annual test of the operation of the leak detector shall be conducted in accordance with the manufacturer's requirements.

(b) Line tightness testing. A periodic test of piping may be conducted only if it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure, or if it can detect a leak rate equal to multiplying 0.1 gallon per hour by the square root of the value obtained by dividing the line pressure during testing by 1.5 times the operating pressure. Line tightness testing shall be conducted and results interpreted and reported in accordance with the department's guid-

ance document for tightness testing, or as otherwise directed by the department or delegated agency.

(c) Applicable tank methods. Any of the methods in WAC 173-360-345 (6)(f) through (j) may be used if they are designed to detect a release from any portion of the underground piping that routinely contains regulated substances.

(4) Certified UST supervisors who perform any of the tank services described in this section shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-350, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-350, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-350, filed 11/28/90, effective 12/29/90.]

WAC 173-360-355 Release detection recordkeeping. All UST system owners and operators shall maintain records demonstrating compliance with all applicable requirements of WAC 173-360-330 through 173-360-355. These records shall include the following:

(1) All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, shall be maintained for five years, or for another reasonable period of time determined by the department or delegated agency, from the date of installation;

(2) The results of any sampling, testing, or monitoring shall be maintained for at least five years, or for another reasonable period of time determined by the department or delegated agency, except that the results of tank tightness testing conducted in accordance with WAC 173-360-345 (6)(d) shall be retained until the next test is conducted; and

(3) Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on-site shall be maintained for at least five years after the servicing work is completed, or for another reasonable time period determined by the department or delegated agency. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer shall be retained for five years from the date of installation.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-355, filed 11/28/90, effective 12/29/90.]

WAC 173-360-360 Reporting of suspected releases. Owners and operators of UST systems shall report to the department or delegated agency within twenty-four hours, or another reasonable time period specified by the department or delegated agency, and follow the procedures in WAC 173-360-370 when any of the following conditions apply:

(1) Owners and operators or others discover released regulated substances at the UST site or in the surrounding area (including but not limited to the presence of free product or its constituents in soils, basements, sewer and utility lines, ground water, and/or surface water).

(2) Unusual operating conditions are observed by owners and operators (such as the erratic behavior of product dispensing equipment, the sudden loss of a regulated substance from the UST system, or an unexplained presence of water in the tank), unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced; or

(3) Monitoring results from a release detection method required under WAC 173-360-335 and 173-360-340 indicate that a release may have occurred unless:

(a) A false alarm is confirmed;

(b) The monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result; or

(c) In the case of inventory control, a second month of data does not confirm the initial result, except that owners and operators shall immediately investigate all larger-than-normal or reoccurring variations in inventory control results, and report such variations if they are unaccounted for, without waiting to obtain a second month of data.

Note: Other federal, state, and local laws also require reporting, and in some cases investigation, of suspected releases.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-360, filed 11/28/90, effective 12/29/90.]

WAC 173-360-365 Investigation due to off-site impacts. When required by the department or delegated agency, owners and operators of UST systems shall follow the procedures in WAC 173-360-370 to determine if the UST system is the source of off-site impacts. These impacts include the discovery of regulated substances (including but not limited to the presence of free product or its constituents in soils, basements, sewer and utility lines, ground water, and/or surface water) that has been observed by the department or delegated agency or brought to their attention by another person.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-365, filed 11/28/90, effective 12/29/90.]

WAC 173-360-370 Release investigation and confirmation steps. Unless corrective action is initiated in accordance with WAC 173-360-399, owners and operators shall immediately investigate and confirm all suspected releases of regulated substances requiring reporting under WAC 173-360-360 within seven days of discovery, or another reasonable time period specified by the department or delegated agency, using either the following steps or another procedure approved by the department or delegated agency:

(1) System test. Owners and operators shall have tests conducted (according to the requirements for tightness testing in WAC 173-360-345 (6)(d) and 173-360-350 (3)(b)) that determine whether a leak exists in any portions of the UST system that routinely contains a regulated substance, including the tank and the attached delivery piping, and in any connected tanks and piping that may or may not be in use. All such portions shall be tested either separately or together or in combinations thereof.

(a) Owners and operators shall have their system repaired, replaced, upgraded or closed by a certified UST supervisor and shall begin corrective action in accordance with WAC 173-360-399 if the test results for the system, tank, or delivery piping indicate that a leak exists.

(b) Further investigation is not required if the test results for the system, tank, and delivery piping do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a release.

(c) Owners and operators shall conduct a site check in accordance with subsection (2) of this section if the test results for the system, tank, and delivery piping do not indicate that a leak exists but environmental contamination is the basis for suspecting a release.

(2) Site check. Owners and operators shall have a certified UST supervisor, as specified in WAC 173-360-610, sample for the presence of a release. Such samples shall be taken, analyzed, and results reported to the department or delegated agency in accordance with the department's guidance document for site checks and site assessments, or as otherwise directed by the department or delegated agency, where contamination is most likely to be present at the UST site.

(a) If the site check results indicate that a release has occurred, owners and operators shall report to the department or delegated agency in accordance with WAC 173-360-372 and begin corrective action in accordance with WAC 173-360-399.

(b) If the site check results indicate that a release has occurred, further investigation is not required under this chapter, but the release must be characterized and remediated in accordance with chapter 173-340 WAC.

(3) Certified UST supervisors who perform any of the tank services described in this section, shall certify that such services comply with the requirements of this section by signing the appropriate checklist(s) provided by the department.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-370, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-370, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-370, filed 11/28/90, effective 12/29/90.]

WAC 173-360-372 Reporting of confirmed releases. Owners and operators shall report all confirmed releases, including but not limited to those confirmed in accordance with WAC 173-360-370 and 173-360-390, and those required to be reported under WAC 173-360-375, to the department or delegated agency within twenty-four hours.

Note: Other federal, state, and local laws also require reporting, and in some cases cleanup, of confirmed releases.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-372, filed 11/28/90, effective 12/29/90.]

WAC 173-360-375 Cleanup and reporting of spills and overfills. (1) Owners and operators of UST systems shall immediately contain and clean up any spill or overfill of petroleum or hazardous substances in accordance with subsections (2) and (3) of this section. Spills and overfills shall also be reported as follows:

(a) Owners and operators shall immediately report any spill or overfill of petroleum and the results of any related cleanup to the department or delegated agency if the spill or overfill comes in contact with soil, ground water, or surface water. Spills or overfills of petroleum which are above a de minimis amount but do not come in contact with soil, ground water, or surface water shall be reported within twenty-four hours. A de minimis amount of petroleum is any amount that immediately evaporates or that is specified by the department or delegated agency through guidance documents. Spills or overfills of petroleum which do not exceed a de minimis amount and do not come in contact with soil, ground water, or surface water are not required to be reported.

(b) Owners and operators shall immediately report any spill or overfill of a hazardous substance and the results of any related cleanup to the department or delegated agency if the spill or overfill comes in contact with soil, ground water, or surface water. Spills or overfills of hazardous substances which are above a de minimis amount but which do not come in contact with soil, ground water, or surface water shall also be reported immediately. A de minimis amount of a hazardous substance is any amount that is below the specified reportable quantity under CERCLA. Spills or overfills of hazardous substances which do not exceed a de minimis amount and do not come in contact with soil, ground water, or surface water are not required to be reported.

Note: A release of a hazardous substance equal to or in excess of its reportable quantity under CERCLA (40 CFR 302) must also be reported immediately to the National Response Center under sections 102 and 103 of CERCLA (40 CFR 302.6) and to the appropriate state and local authorities under Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR 355.40).

(2) Containment and cleanup shall include the following actions:

(a) Visually inspect and take immediate action to prevent any further release and/or spreading of the regulated substance into the environment, including surrounding soils, ground water, and surface water;

(b) Eliminate or minimize any fire, explosion, and vapor hazards, and absorb or otherwise contain all free product and provide for proper disposal of such product and any used absorbent materials in accordance with all applicable federal, state, and local requirements. Free product shall not be flushed into storm drains, catch basins, dry wells, monitoring wells, or other locations with a possible connection to surrounding soils, ground water, or surface water; and

(c) Provide for proper disposal of, or treat, any contaminated soils in accordance with all applicable federal, state, and local requirements.

(3) Owners and operators shall take appropriate action in accordance with WAC 173-360-399 in the following cases:

(a) A spill or overfill of petroleum that results in a release to the environment of less than twenty-five gallons or another reasonable amount specified by the department or delegated agency, if cleanup is not or cannot be accomplished within twenty-four hours or another reasonable time period established by the department or delegated agency;

(b) A spill or overfill of petroleum that results in a release to the environment that exceeds twenty-five gallons or another reasonable amount specified by the department or delegated agency;

(c) A spill or overfill of petroleum, regardless of amount, that results in ground water contamination or causes a sheen on ground water or surface water, including such water in dry wells;

(d) A spill or overfill of a hazardous substance that results in a release to the environment that is less than the reportable quantity under CERCLA, if cleanup is not or cannot be accomplished within twenty-four hours or another reasonable time period established by the department or delegated agency; and

(e) A spill or overfill of a hazardous substance that results in a release to the environment that equals or exceeds its reportable quantity under CERCLA (40 CFR 302).

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-375, filed 11/28/90, effective 12/29/90.]

WAC 173-360-380 Temporary closure of UST systems. (1) When an UST system is temporarily closed, owners and operators shall continue operation and maintenance of corrosion protection in accordance with WAC 173-360-320, and any release detection in accordance with WAC 173-360-330 through 173-360-355. WAC 173-360-360 through 173-360-375 and 173-360-399 shall be complied with if a release is suspected or confirmed. However, release detection is not required as long as the UST system is empty. The UST system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the system.

(2) When an UST system is temporarily closed for three months or more, owners and operators shall also comply with the following requirements:

(a) Leave vent lines open and functioning; and

(b) Cap and secure all other lines, pumps, entryways, and ancillary equipment.

(3) Any UST system temporarily closed for three months or more shall be tightness tested by a certified UST supervisor in accordance with WAC 173-360-345 (6)(d) and 173-360-350 (3)(b) prior to being put back into service unless the system is subject to and in compliance with the release detection requirements of WAC 173-360-330.

(4) When an UST system is temporarily closed for more than twelve months, owners and operators shall have a certified UST supervisor permanently close the UST system if it does not either meet the performance standards in WAC 173-360-305 for new UST systems or the upgrading requirements in WAC 173-360-310 (2) and (3). Such UST systems shall be permanently closed in accordance with WAC 173-360-385 through 173-360-398 at the end of the twelve-month period unless the department or delegated agency provides an extension before expiration of the twelve-month temporary closure period. Owners and operators shall have a site assessment completed in accordance with WAC 173-360-390 before such an extension is applied for.

(5) Any active permits for those systems being temporarily closed shall be returned to the department within thirty days of completion of the temporary closure activities.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-380, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-380, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-380, filed 11/28/90, effective 12/29/90.]

WAC 173-360-385 Permanent closure and change-in-service. Permanent closure shall be completed by a certified UST supervisor.

(1) At least thirty days before beginning either permanent closure or a change-in-service under subsections (2) and (3) of this section, or within another reasonable time period determined by the department or delegated agency, owners and operators shall notify the department or delegated agency in writing of their intent to permanently close or make the change-in-service, unless such action is in response to corrective action. The site assessment required under WAC 173-360-390 shall be performed after notifying the department or delegated agency but before completion of the permanent closure or a change-in-service.

(2) Permanent closure shall be completed by a certified UST supervisor within sixty days after expiration of the thirty-day notice, unless a written request for an extension, explaining the reason for the request, is approved by the department or delegated agency. Any UST system not permanently closed by a compliance date that the UST system is subject to, shall be in compliance with the requirement associated with the compliance date, including the payment of fees. Any UST system not in compliance with any such requirement will be subject to the penalties described in WAC 173-360-170.

(3) To permanently close an UST system, the certified UST supervisor shall empty and clean the tank by removing all liquids and accumulated sludges.

Note: Any sludges removed must also be designated and disposed of in accordance with chapter 173-303 WAC.

(4) All tanks taken out of service permanently shall also be either removed from the ground or filled with an inert solid material. All piping shall either be capped (except any vent lines) or removed from the ground.

(5) Continued use of an UST system to store a nonregulated substance is considered a change-in-service. Before a change-in-service, owners and operators shall have a certified UST supervisor empty and clean the tank by removing all liquid and accumulated sludge, and shall have a site assessment conducted in accordance with WAC 173-360-390.

Note: The following cleaning and closure procedures may be used to comply with this section:

(A) American Petroleum Institute Recommended Practice 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks";

(B) American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks";

(C) American Petroleum Institute Recommended Practice 1631, "Interior Lining of Underground Storage Tanks," may be used as guidance for compliance with this section; and

(D) The National Institute for Occupational Safety and Health "Criteria for a Recommended Standard...Working in Confined Space" may be used as guidance for conducting safe closure procedures at some hazardous substance tanks.

(6) Owners and operators are responsible for submitting checklists for any of the tank services described in this section. Any active tank permits for the systems being closed shall be returned to the department within thirty days of closure activities.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-385, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-385, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-385, filed 11/28/90, effective 12/29/90.]

WAC 173-360-390 Site assessment at closure or change-in-service. (1) Before permanent closure or a change-in-service is completed, except as specified in sub-

sections (2), (3), and (4) of this section, owners and operators shall have a person registered by the department to perform site assessments, as specified in WAC 173-360-610, sample for the presence of a release. Such samples shall be taken, analyzed, and the results reported to the department or delegated agency in accordance with the department's guidance document for site assessments, or as otherwise directed by the department or delegated agency, where contamination is most likely to be present at the UST site.

(2) The requirements of this section are satisfied if one of the external release detection methods allowed in WAC 173-360-345 (6)(f) and (g) is employed for the UST system being closed or undergoing a change-in-service, if the following conditions are met:

(a) The external release detection method is operating, at the time of closure or change-in-service, in accordance with the requirements of WAC 173-360-345 (6)(f) or (g), as applicable; and

(b) A report is provided to the department with sufficient information to clearly demonstrate that:

(i) The external release detection method employed was appropriately designed, installed, and operated to adequately detect any releases from the UST system; and

(ii) No release was detected from the UST system.

(3) If the department determines that the conditions specified in subsection (2)(a) and (b) of this section have not been satisfactorily met, the department may require that a site assessment be performed for the site.

(4) If contaminated soils, contaminated ground water, or free product is discovered under subsection (1) of this section, or by any other manner, owners and operators shall report to the department or delegated agency in accordance with WAC 173-360-372 and take appropriate action in accordance with WAC 173-360-399.

(5) Persons who perform site assessments shall certify that such site assessments comply with the requirements of this section by submitting the appropriate checklist to the department in accordance with WAC 173-360-630(12).

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-390, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-390, filed 11/28/90, effective 12/29/90.]

WAC 173-360-395 Applicability to previously closed UST systems. When directed by the department or delegated agency, the owner or operator of an UST system permanently closed or abandoned before December 22, 1988, shall have a person registered to perform site assessments assess the site and shall have a licensed tank services provider close the UST system in accordance with WAC 173-360-380 through 173-360-398 if releases from the UST may, in the judgment of the department or delegated agency, pose a current or potential threat to human health and the environment.

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-395, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-395, filed 11/28/90, effective 12/29/90.]

WAC 173-360-398 Closure records. Owners and operators shall maintain records that demonstrate compliance with closure requirements under WAC 173-360-380 through 173-360-398. The results of the site assessment required in WAC 173-360-390 shall be maintained for at least five years after completion of permanent closure or change-in-service in one of the following ways:

(1) By the owners and operators who took the UST system out of service;

(2) By the current owners and operators of the UST system site; or

(3) By mailing these records to the department or delegated agency if they cannot be maintained at the closed facility.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-398, filed 11/28/90, effective 12/29/90.]

WAC 173-360-399 Corrective action requirements. Except as provided in WAC 173-360-375, upon confirmation of a release in accordance with WAC 173-360-370 or 173-360-390, or after a release from the UST system is identified in any other manner, owners and operators shall immediately undertake appropriate measures in accordance with chapter 173-340 WAC and/or this chapter, and any additional measures as directed by the department under chapter 90.48 RCW. Owners and operators shall also report such releases to the department or delegated agency within twenty-four hours in accordance with WAC 173-360-372.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-399, filed 11/28/90, effective 12/29/90.]

PART IV
FINANCIAL RESPONSIBILITY REQUIREMENTS

WAC 173-360-400 Applicability. (1) WAC 173-360-400 through 173-360-499 applies to owners and operators of all petroleum underground storage tank (UST) systems except as otherwise provided in this section.

(2) Owners and operators of petroleum UST systems are subject to these requirements if they are in operation on or after the date for compliance established in WAC 173-360-403.

(3) State and federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States are exempt from the requirements of WAC 173-360-400 through 173-360-499.

(4) The requirements of WAC 173-360-400 through 173-360-499 do not apply to owners and operators of any UST system described in WAC 173-360-110 (2) or (3).

(5) If the owner and operator of a petroleum underground storage tank are separate persons, only one person is required to demonstrate financial responsibility; however, both parties are liable in event of noncompliance. Regardless of which party complies, the date set for compliance at a particular facility is determined by the characteristics of the owner as set forth in WAC 173-360-403.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-400, filed 11/28/90, effective 12/29/90.]

WAC 173-360-403 Compliance dates. Owners of petroleum underground storage tanks are required to comply with the requirements of WAC 173-360-400 through 173-360-499 by the following dates:

(1) All petroleum marketing firms owning 1,000 or more USTs and all other UST owners that report a tangible net worth of twenty million dollars or more to the United States

Securities and Exchange Commission (SEC), Dun and Bradstreet, the Energy Information Administration, or the Rural Electrification Administration; January 24, 1989, except that compliance with WAC 173-360-410 (2) is required by July 24, 1989.

(2) All petroleum marketing firms owning 100-999 USTs; October 26, 1989.

(3) All petroleum marketing firms owning a combined total of 13-99 USTs which are located at more than one facility; April 26, 1991.

(4) All petroleum UST owners not described in subsections (1), (2), or (3) of this section, including all local government entities; the same as the requirements and deadlines adopted under 40 C.F.R. 280.91.

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-403, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-403, filed 11/28/90, effective 12/29/90.]

WAC 173-360-406 Amount and scope of required financial responsibility. (1) Owners or operators of petroleum underground storage tanks shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least the following per-occurrence amounts:

(a) For owners or operators of petroleum underground storage tanks that are located at petroleum marketing facilities, or that handle an average of more than ten thousand gallons of petroleum per month based on annual throughput for the previous calendar year; one million dollars.

(b) For all other owners or operators of petroleum underground storage tanks; five hundred thousand dollars.

(2) Owners or operators of petroleum underground storage tanks shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least the following annual aggregate amounts:

(a) For owners or operators of 1 to 100 petroleum underground storage tanks, one million dollars; and

(b) For owners or operators of 101 or more petroleum underground storage tanks, two million dollars.

(3) For the purposes of subsections (2) and (4) of this section only, "a petroleum underground storage tank" means a single containment unit and does not mean combinations of single containment units.

(4) Owners or operators shall review the amount of aggregate assurance provided whenever additional petroleum underground storage tanks are acquired or installed. If the number of petroleum underground storage tanks for which assurance must be provided exceeds one hundred, the owner or operator shall demonstrate financial responsibility in the amount of at least two million dollars of annual aggregate assurance by the anniversary of the date on which the mechanism demonstrating financial responsibility became effective. If assurance is being demonstrated by a combination of mechanisms, the owner or operator shall demonstrate financial responsibility in the amount of at least two million dollars of annual aggregate assurance by the first-occurring effective date anniversary of any one of the mechanisms combined (other than a financial test or guarantee) to provide assurance.

(5) The amounts of assurance required under this section exclude legal defense costs.

(6) The required per-occurrence and annual aggregate coverage amounts do not in any way limit the liability of the owner or operator.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-406, filed 11/28/90, effective 12/29/90.]

WAC 173-360-410 Allowable mechanisms and combinations of mechanisms. (1) Subject to the limitations of subsections (2) and (3) of this section, an owner or operator may use any one or combination of the mechanisms listed in WAC 173-360-413 through 173-360-436 to demonstrate financial responsibility under WAC 173-360-400 through 173-360-499 for one or more underground storage tanks.

(2) An owner or operator may use a guarantee or surety bond to establish financial responsibility under WAC 173-360-400 through 173-360-499.

(3) An owner or operator may use self-insurance in combination with a guarantee only if, for the purpose of meeting the requirements of the financial test under this rule, the financial statements of the owner or operator are not consolidated with the financial statements of the guarantor.

(4) Except as provided in subsection (5) of this section, if the owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for:

(a) Taking corrective action;

(b) Compensating third parties for bodily injury and property damage caused by sudden accidental releases; or

(c) Compensating third parties for bodily injury and property damage caused by nonsudden accidental releases, the amount of assurance provided by each mechanism or combination of mechanisms shall be in the full amount specified in WAC 173-360-406 (1) and (2).

(5) If an owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for different petroleum underground storage tanks, the annual aggregate required shall be based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-410, filed 11/28/90, effective 12/29/90.]

WAC 173-360-413 Financial test of self-insurance. (1) An owner or operator, and/or guarantor, may satisfy the requirements of WAC 173-360-406 by passing a financial test as specified in this section. To pass the financial test of self-insurance, the owner or operator, and/or guarantor shall meet the criteria of subsection (2) or (3) of this section based on year-end financial statements for the latest completed fiscal year.

(2)(a) The owner or operator, and/or guarantor, must have a tangible net worth of at least ten times:

(i) The total of the applicable aggregate amount required by WAC 173-360-406, based on the number of underground storage tanks for which a financial test is used to demonstrate financial responsibility to the department under this section;

(ii) The sum of the corrective action cost estimates, the current closure and post-closure care cost estimates, and amount of liability coverage for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR Parts 264.101, 264.143, 264.145, 265.143, 265.145, 264.147, and 265.147 or to a state agency under a state program authorized by EPA under Part 271; and

(iii) The sum of current plugging and abandonment cost estimates for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR Part 144.63 or to a state agency under a state program authorized by EPA under 40 CFR Part 145.

Note: Titles of the above-referenced CFR citations are as follows: Part 264.101 - Corrective Action for Solid Waste Management Units; Part 264.143 - Financial Assurance for Closure; Part 264.145 - Financial Assurance for Post-Closure Care; Part 265.143 - Financial Assurance for Closure; Part 265.145 - Financial Assurance for Post-Closure Care; Part 264.147 - Liability Requirements; Part 265.147 - Liability Requirements; Part 144.63 - Financial Assurance for Plugging and Abandonment; and Part 145 - State UIC Program Requirements.

(b) The owner or operator, and/or guarantor, must have a tangible net worth of at least ten million dollars.

(c) The owner or operator, and/or guarantor, shall have a letter signed by the chief financial officer as specified in subsection (4) of this section and as set forth in WAC 173-360-470.

(d) The owner or operator, and/or guarantor, shall either:

(i) File financial statements annually with the United States Securities and Exchange Commission, the Energy Information Administration, or the Rural Electrification Administration; or

(ii) Report annually the firm's tangible net worth to Dun and Bradstreet, and Dun and Bradstreet must have assigned the firm a financial strength rating of 4A or 5A.

(e) The firm's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.

(3)(a) The owner or operator, and/or guarantor shall meet the financial test requirements of 40 CFR 264.147 (f)(1), substituting the appropriate amounts specified in WAC 173-360-406 (2)(a) and (b) for the "amount of liability coverage" each time specified in that section.

(b) The fiscal year-end financial statements of the owner or operator, and/or guarantor, shall be examined by an independent certified public accountant and be accompanied by the accountant's report of the examination.

(c) The firm's year-end financial statements cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.

(d) The owner or operator, and/or guarantor, shall have a letter signed by the chief financial officer, worded as specified in subsection (4) of this section.

(e) If the financial statements of the owner or operator, and/or guarantor, are not submitted annually to the United States Securities and Exchange Commission, the Energy Information Administration or the Rural Electrification Administration, the owner or operator, and/or guarantor, shall obtain a special report by an independent certified public accountant stating that:

(i) He or she has compared the data that the letter from the chief financial officer specifies as having been derived from the latest year-end financial statements of the owner or operator, and/or guarantor, with the amounts in such financial statements; and

(ii) In connection with that comparison, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) To demonstrate that it meets the financial test under subsection (2) or (3) of this section, the chief financial officer of the owner or operator, and/or guarantor, shall sign, within one hundred twenty days of the close of each financial reporting year, as defined by the twelve-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as set forth in WAC 173-360-470, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted.

(5) If an owner or operator using the test to provide financial assurance finds that he or she no longer meets the requirements of the financial test based on the year-end financial statements, the owner or operator shall obtain alternative coverage within one hundred fifty days of the end of the year for which financial statements have been prepared.

(6) The director may require reports of financial condition at any time from the owner or operator, and/or guarantor. If the director finds, on the basis of such reports or other information, that the owner or operator, and/or guarantor, no longer meets the financial test requirements of WAC 173-360-413 (2) or (3) and (4), the owner or operator shall obtain alternate coverage within thirty days after notification of such a finding.

(7) If the owner or operator fails to obtain alternate assurance within one hundred fifty days of finding that he or she no longer meets the requirements of the financial test based on the year-end financial statements, or within thirty days of notification by the director that he or she no longer meets the requirements of the financial test, the owner or operator shall notify the director of such failure within ten days.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-413, filed 11/28/90, effective 12/29/90.]

WAC 173-360-416 Guarantee. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by obtaining a guarantee that conforms to the requirements of this section. The guarantor shall be:

(a) A firm that:

(i) Possesses a controlling interest in the owner or operator;

(ii) Possesses a controlling interest in a firm described under (a)(i) of this subsection; or

(iii) Is controlled through stock ownership by a common parent firm that possesses a controlling interest in the owner or operator; or

(b) A firm engaged in a substantial business relationship with the owner or operator and issuing the guarantee as an act incident to that business relationship.

(2) Within one hundred twenty days of the close of each financial reporting year the guarantor shall demonstrate that it meets the financial test criteria of WAC 173-360-413 based on year-end financial statements for the latest completed

financial reporting year by completing the letter from the chief financial officer described in WAC 173-360-413(4) and shall deliver the letter to the owner or operator. If the guarantor fails to meet the requirements of the financial test at the end of any financial reporting year, within one hundred twenty days of the end of that financial reporting year the guarantor shall send by certified mail, before cancellation or nonrenewal of the guarantee, notice to the owner or operator. If the director notifies the guarantor that he no longer meets the requirements of the financial test of WAC 173-360-413 (2) or (3) and (4), the guarantor shall notify the owner or operator within ten days of receiving such notification from the director. In both cases, the guarantee will terminate no less than one hundred twenty days after the date the owner or operator receives the notification, as evidenced by the return receipt. The owner or operator shall obtain alternate coverage as specified in WAC 173-360-460(3).

(3) The guarantee shall be worded as set forth is WAC 173-360-473, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

(4) An owner or operator who uses a guarantee to satisfy the requirements of WAC 173-360-406 shall establish a standby trust fund when the guarantee is obtained. Under the terms of the guarantee, all amounts paid by the guarantor under the guarantee will be deposited directly into the standby trust fund in accordance with instructions from the director under WAC 173-360-453. This standby trust fund shall meet the requirements specified in WAC 173-360-436.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-416, filed 11/28/90, effective 12/29/90.]

WAC 173-360-420 Insurance and risk retention group coverage. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by obtaining liability insurance that conforms to the requirements of this section from a qualified insurer or risk retention group. Such insurance may be in the form of a separate insurance policy or an endorsement to an existing insurance policy.

(2) Each insurance policy shall be amended by an endorsement worded as specified in WAC 173-360-476 or evidenced by a certificate of insurance worded as specified in WAC 173-360-480, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

(3) Each insurance policy shall be issued by an insurer or a risk retention group that, at a minimum, is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-420, filed 11/28/90, effective 12/29/90.]

WAC 173-360-423 Surety bond. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by obtaining a surety bond that conforms to the requirements of this section. The surety company issuing the bond shall be among those listed as acceptable sureties on federal bonds in the latest Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall be worded as set forth in WAC 173-360-483, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

(3) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. In all cases, the surety's liability is limited to the per-occurrence and annual aggregate penal sums.

(4) The owner or operator who uses a surety bond to satisfy the requirements of WAC 173-360-406 shall establish a standby trust fund when the surety bond is acquired. Under the terms of the bond, all amounts paid by the surety under the bond will be deposited directly into the standby trust fund in accordance with instructions from the director under WAC 173-360-453. This standby trust fund shall meet the requirements specified in WAC 173-360-436.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-423, filed 11/28/90, effective 12/29/90.]

WAC 173-360-426 Letter of credit. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by obtaining an irrevocable standby letter of credit that conforms to the requirements of this section. The issuing institution shall be an entity that has the authority to issue letters of credit in Washington state and whose letter-of-credit operations are regulated and examined by a federal or state agency.

(2) The letter of credit shall be worded as set forth in WAC 173-360-486, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

(3) An owner or operator who uses a letter of credit to satisfy the requirements of WAC 173-360-406 shall also establish a standby trust fund when the letter of credit is acquired. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the director will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the director under WAC 173-360-453. This standby trust fund shall meet the requirements specified in WAC 173-360-436.

(4) The letter of credit shall be irrevocable with a term specified by the issuing institution. The letter of credit shall provide that credit be automatically renewed for the same term as the original term, unless, at least one hundred twenty days before the current expiration date, the issuing institution notifies the owner or operator by certified mail of its decision not to renew the letter of credit. Under the terms of the letter of credit, the one hundred twenty days will begin on the date when the owner or operator receives the notice, as evidenced by the return receipt.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-426, filed 11/28/90, effective 12/29/90.]

WAC 173-360-433 Trust fund. (1) An owner or operator may satisfy the requirements of WAC 173-360-406 by establishing a trust fund that conforms to the requirements of this section. The trustee shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(2) The wording of the trust agreement shall be identical to the wording specified in WAC 173-360-490, and shall be

accompanied by a formal certification of acknowledgment as specified in WAC 173-360-493.

(3) The trust fund, when established, shall be funded for the full required amount of coverage, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining required coverage.

(4) If the value of the trust fund is greater than the required amount of coverage, the owner or operator may submit a written request to the director for release of the excess.

(5) If other financial assurance as specified in WAC 173-360-400 through 173-360-499 is substituted for all or part of the trust fund, the owner or operator may submit a written request to the director for release of the excess.

(6) Within sixty days after receiving a request from the owner or operator for release of funds as specified in subsections (4) or (5) of this section, the director will instruct the trustee to release to the owner or operator such funds as the director specifies in writing.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-433, filed 11/28/90, effective 12/29/90.]

WAC 173-360-436 Standby trust fund. (1) An owner or operator using any one of the mechanisms authorized by WAC 173-360-416, 173-360-423, or 173-360-426 shall establish a standby trust fund when the mechanism is acquired. The trustee of the standby trust fund must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(2)(a) The standby trust agreement or trust agreement shall be worded as set forth in WAC 173-360-490, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

(b) The standby trust agreement or trust agreement shall be accompanied by a formal certification of acknowledgment similar to that set forth in WAC 173-360-493.

(3) The director will instruct the trustee to refund the balance of the standby trust fund to the provider of financial assurance if the director determines that no additional corrective action costs or third-party liability claims will occur as a result of a release covered by the financial assurance mechanism for which the standby trust fund was established.

(4) An owner or operator may establish one trust fund as the depository mechanism for all funds assured in compliance with this rule.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-436, filed 11/28/90, effective 12/29/90.]

WAC 173-360-440 Substitution of financial assurance mechanisms by owner or operator. (1) An owner or operator may substitute any alternate financial assurance mechanisms as specified in WAC 173-360-400 through 173-360-499, provided that at all times he maintains an effective financial assurance mechanism or combination of mechanisms that satisfies the requirements of WAC 173-360-406.

(2) After obtaining alternate financial assurance as specified in WAC 173-360-400 through 173-360-499, an owner or operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance in accordance with requirements for cancellation set forth for the specific mechanism in WAC 173-360-470 through 173-360-490.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-440, filed 11/28/90, effective 12/29/90.]

WAC 173-360-443 Cancellation or nonrenewal by a provider of financial assurance. (1) Except as otherwise provided, a provider of financial assurance may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner or operator.

(a) Termination of a guarantee, a surety bond, or a letter of credit may not occur until one hundred twenty days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(b) Termination of insurance or risk retention group coverage, except for nonpayment or misrepresentation by the insured, or state-funded assurance may not occur until sixty days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt. Termination for nonpayment of premium or misrepresentation by the insured may not occur until a minimum of ten days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(2) If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider as specified in WAC 173-360-446, the owner or operator shall obtain alternate coverage as specified in this section within sixty days after receipt of the notice of termination. If the owner or operator fails to obtain alternate coverage within sixty days after receipt of the notice of termination, the owner or operator shall notify the director of such failure and submit:

(a) The name and address of the provider of financial assurance;

(b) The effective date of termination; and

(c) The evidence of the financial assurance mechanism subject to the termination maintained in accordance with WAC 173-360-450(2).

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-443, filed 11/28/90, effective 12/29/90.]

WAC 173-360-446 Reporting by owner or operator. (1) An owner or operator shall submit the appropriate forms listed in WAC 173-360-450(2) documenting current evidence of financial responsibility to the director:

(a) Within thirty days after the owner or operator identifies a release from an underground storage tank required to be reported under WAC 173-360-372, 173-360-375 or 173-360-399;

(b) If the owner or operator fails to obtain alternate coverage as required by WAC 173-360-400 through 173-360-499, within thirty days after the owner or operator receives notice of:

(i) Commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor, (ii) Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism, (iii) Failure of a guarantor to meet the requirements of the financial test, (iv) Other incapacity of a provider of financial assurance; or

(c) As required by WAC 173-360-413(7) and 173-360-443(2).

(2) An owner or operator shall certify compliance with the financial responsibility requirements of WAC 173-360-400 through 173-360-499 as specified in the new tank notification form when notifying the appropriate state or local agency of the installation of a new underground storage tank under WAC 173-360-200.

(3) The director may require an owner or operator to submit evidence of financial assurance as described in WAC 173-360-450(2) or other information relevant to compliance with WAC 173-360-400 through 173-360-499 at any time.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-446, filed 11/28/90, effective 12/29/90.]

WAC 173-360-450 Recordkeeping. (1) Owners or operators shall maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under WAC 173-360-400 through 173-360-499 for an underground storage tank until released from the requirements of WAC 173-360-400 through 173-360-499 under 173-360-456. An owner or operator shall maintain such evidence at the underground storage tank site or the owner's or operator's place of business. Records maintained off-site shall be made available upon request of the department or delegated agency.

(2) An owner or operator shall maintain the following types of evidence of financial responsibility:

(a) An owner or operator using an assurance mechanism specified in WAC 173-360-413 through 173-360-433 shall maintain a copy of the instrument worded as specified.

(b) An owner or operator using a financial test or guarantee shall maintain a copy of the chief financial officer's letter based on year-end financial statements for the most recent completed financial reporting year. Such evidence shall be on file no later than one hundred twenty days after the close of the financial reporting year.

(c) An owner or operator using a guarantee, surety bond, or letter of credit shall maintain a copy of the signed standby trust fund agreement and copies of any amendments to the agreement.

(d) An owner or operator using an insurance policy or risk retention group coverage shall maintain a copy of the signed insurance policy or risk retention group coverage policy, with the endorsement or certificate of insurance and any amendments to the agreements.

(e) An owner or operator covered by a financial assurance program shall maintain on file a copy of any evidence of coverage supplied by or required by the state.

(f) An owner or operator using an assurance mechanism specified in WAC 173-360-413 through 173-360-433 shall maintain an updated copy of a certification of financial responsibility worded as set forth in WAC 173-360-496, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

The owner or operator shall update this certification whenever the financial assurance mechanism(s) used to demonstrate financial responsibility change(s).

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-450, filed 11/28/90, effective 12/29/90.]

WAC 173-360-453 Drawing on financial assurance mechanisms. (1) The director shall require the guarantor, surety, or institution issuing a letter of credit to place the amount of funds stipulated by the director, up to the limit of funds provided by the financial assurance mechanism, into the standby trust if:

(a)(i) The owner or operator fails to establish alternate financial assurance within sixty days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or, as applicable, other financial assurance mechanism; and

(ii) The director determines or suspects that a release from an underground storage tank covered by the mechanism has occurred and so notifies the owner or operator or the owner or operator has notified the director pursuant to WAC 173-360-360 through 173-360-375 or 173-360-399 of a release from an underground storage tank covered by the mechanism; or

(b) The conditions of subsection (2)(a), (b)(i) or (ii) of this section are satisfied.

(2) The director may draw on a standby trust fund when:

(a) The director makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and the owner or operator, after appropriate notice and opportunity to comply, has not conducted corrective action as required under WAC 173-360-399; or

(b) The director has received either:

(i) Certification from the owner or operator and the third-party liability claimant(s) and from attorneys representing the owner or operator and the third-party liability claimant(s) that a third-party liability claim should be paid. The certification shall be worded as set forth in WAC 173-360-499, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted; or

(ii) A valid final court order establishing a judgment against the owner or operator for bodily injury or property damage caused by an accidental release from an underground storage tank covered by financial assurance under WAC 173-360-400 through 173-360-499 and the director determines that the owner or operator has not satisfied the judgment.

(3) If the director determines that the amount of corrective action costs and third-party liability claims eligible for payment under subsection (2) of this section may exceed the balance of the standby trust fund and the obligation of the provider of financial assurance, the first priority for payment shall be corrective action costs necessary to protect human health and the environment. The director shall pay third-party liability claims in the order in which the director receives certifications under subsection (2)(b)(i) of this section and valid court orders under subsection (2)(b)(ii) of this section.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-453, filed 11/28/90, effective 12/29/90.]

WAC 173-360-456 Release from the requirements. An owner or operator is no longer required to maintain financial responsibility under WAC 173-360-400 through 173-360-499 for an underground storage tank after the tank has been properly closed or, if corrective action is required, after corrective action has been completed and the tank has been properly closed as required by WAC 173-360-380 through 173-360-398.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-456, filed 11/28/90, effective 12/29/90.]

WAC 173-360-460 Bankruptcy or other incapacity of owner or operator. (1) Within ten days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming an owner or operator as debtor, the owner or operator shall notify the director by certified mail of such commencement and submit the appropriate forms listed in WAC 173-360-450(2) documenting current financial responsibility.

(2) Within ten days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing financial assurance as debtor, such guarantor shall notify the owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in WAC 173-360-416.

(3) An owner or operator who obtains financial assurance by a mechanism other than the financial test of self-insurance will be deemed to be without the required financial assurance in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of financial assurance to issue a guarantee, insurance policy, risk retention group coverage policy, surety bond, or letter of credit. The owner or operator shall obtain alternate financial assurance as specified in WAC 173-360-400 through 173-360-499 within thirty days after receiving notice of such an event. If the owner or operator does not obtain alternate coverage within thirty days after such notification, he shall notify the director.

(4) Within thirty days after receipt of notification that a state fund or other state assurance has become incapable of paying for assured corrective action or third-party compensation costs, the owner or operator shall obtain alternate financial assurance.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-460, filed 11/28/90, effective 12/29/90.]

WAC 173-360-463 Replenishment of guarantees, letters of credit, or surety bonds. (1) If at any time after a standby trust is funded upon the instruction of the director with funds drawn from a guarantee, letter of credit, or surety bond, and the amount in the standby trust is reduced below the full amount of coverage required, the owner or operator shall by the anniversary date of the financial mechanism from which the funds were drawn:

(a) Replenish the value of financial assurance to equal the full amount of coverage required, or (b) Acquire another financial assurance mechanism for the amount by which funds in the standby trust have been reduced.

(2) For purposes of this section, the full amount of coverage required is the amount of coverage to be provided by WAC 173-360-406. If a combination of mechanisms was used to provide the assurance funds which were drawn upon, replenishment shall occur by the earliest anniversary date among the mechanisms.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-463, filed 11/28/90, effective 12/29/90.]

WAC 173-360-466 Suspension of enforcement. Reserved.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-466, filed 11/28/90, effective 12/29/90.]

WAC 173-360-470 Appendix A—Letter from chief financial officer.

LETTER FROM CHIEF FINANCIAL OFFICER

I am the chief financial officer of [insert: name and address of the owner or operator, or guarantor]. This letter is in support of the use of [insert: "the financial test of self-insurance," and/or "guarantee"] to demonstrate financial responsibility for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage"] caused by [insert: "sudden accidental releases" and/or "nonsudden accidental releases"] in the amount of at least [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate arising from operating (an) underground storage tank(s).

Underground storage tanks at the following facilities are assured by this financial test by this [insert: "owner or operator," and/or "guarantor"]: [List for each facility: The name and address of the facility where tanks assured by this financial test are located, and whether tanks are assured by this financial test. If separate mechanisms or combinations of mechanisms are being used to assure any of the tanks at this facility, list each tank assured by this financial test by the tank identification number provided in the notification submitted pursuant to WAC 173-360-200.]

A [insert: "financial test," and/or "guarantee"] is also used by this [insert: "owner or operator," or "guarantor"] to demonstrate evidence of financial responsibility in the following amounts under other EPA regulations or state programs authorized by EPA under 40 CFR Parts 271 and 145:

	Amount
EPA Regulations:	
Closure (264.143 and 265.143)	$
Post-Closure Care (264.145 and 265.145)	$
Liability Coverage (264.147 and 265.147)	$
Corrective Action (264.101(b))	$
Plugging and Abandonment (144.63)	$
	Amount
Authorized state programs:	
Closure	$
Post-Closure Care	$
Liability Coverage	$
Corrective Action	$
Plugging and Abandonment	$
TOTAL	$

This [insert: "owner or operator," or "guarantor"] has not received an adverse opinion, a disclaimer of opinion, or a "going concern" qualification from an independent auditor on his financial statements for the latest completed fiscal year.

[Fill in the information for Alternative I if the criteria of WAC 173-360-413(2) are being used to demonstrate compliance with the financial test requirements. Fill in the information for Alternative II if the criteria of WAC 173-360-413(3) are being used to demonstrate compliance with the financial test requirements.]

ALTERNATIVE I

1. Amount of annual UST aggregate coverage being assured by a financial test, and/or guarantee . . . . . $ . . . . .

2. Amount of corrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee . . . . . $ . . . . .

3. Sum of lines 1 and 2 . . . . . $ . . . . .

4. Total tangible assets . . . . . $ . . . . .

5. Total liabilities [if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6] . . . . . $ . . . . .

6. Tangible net worth [subtract line 5 from line 4] . . . . . $ . . . . .

	Yes	No
7. Is line 6 at least $10 million?	. . .	. . .
8. Is line 6 at least 10 times line 3?		
9. Have financial statements for the latest fiscal year been filed with the Securities and Exchange Commission?	. . .	. . .
10. Have financial statements for the latest fiscal year been filed with the Energy Information Administration?	. . .	. . .
11. Have financial statements for the latest fiscal year been filed with the Rural Electrification Administration?	. . .	. . .
12. Has financial information been provided to Dun and Bradstreet, and has Dun and Bradstreet provided a financial strength rating of 4A or 5A? [Answer "Yes" only if both criteria have been met]	. . .	. . .

ALTERNATIVE II

1. Amount of annual UST aggregate coverage being assured by a financial test, and/or guarantee . $ . . . . .

2. Amount of corrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee . . . . . $ . . . . .

3. Sum of lines 1 and 2 . . . . . $ . . . . .

4. Total tangible assets . . . . . $ . . . . .

5. Total liabilities [if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6] . . . . . $ . . . . .

6. Tangible net worth [subtract line 5 from line 4] . . . . . $ . . . . .

7. Total assets in the U.S. [required only if less than 90 percent of assets are located in the U.S.] . . $ . . . . .

	Yes	No
8. Is line 6 at least $10 million?	. . .	. . .
9. Is line 6 at least 6 times line 3?	. . .	. . .
10. Are at least 90 percent of assets located in the U.S.? [If "No," complete line 11]	. . .	. . .
11. Is line 7 at least 6 times line 3?	. . .	. . .
[Fill in either lines 12-15 or lines 16-18:]		
12. Current assets . . . . . $		
13. Current liabilities . . . . . $		
14. Net working capital [subtract line 13 from line 12] . . . . . $		
15. Is line 14 at least 6 times line 3?	. . .	. . .
16. Current bond rating of most recent bond issue	. . .	. . .
17. Name of rating service	. . .	. . .
18. Date of maturity of bond	. . .	. . .
19. Have financial statements for the latest fiscal year been filed with the SEC, the Energy Information Administration, or the Rural Electrification Administration?	. . .	. . .

[If "No," please attach a report from an independent certified public accountant certifying that there are no material differences between the data as reported in lines 4-18 above and the financial statements for the latest fiscal year.]

[For both Alternative I and Alternative II complete the certification with this statement.]

I hereby certify that the wording of this letter is identical to the wording specified in WAC 173-360-470 as such regulations were constituted on the date shown immediately below.

[Signature]

[Name]

[Title]

[Date]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-470, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-473 Appendix B—Guarantee.

GUARANTEE

Guarantee made this [date] by name of guaranteeing entity, a business entity organized under the laws of (name of state), herein referred to as guarantor, to the Washington state department of ecology and to any and all third parties, and obligees, on behalf of [owner or operator] of [business address].

Recitals.

(1) Guarantor meets or exceeds the financial test criteria of WAC 173-360-413 (2) or (3) and (4) and agrees to comply with the requirements for guarantors as specified in WAC 173-360-416(2).

(2) [Owner or operator] owns or operates the following underground storage tank(s) covered by this guarantee: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility.] This guarantee satisfies WAC 173-360-400 through 173-360-499 requirements for assuring funding for [insert: "Taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the above-identified underground storage tank(s) in

the amount of [insert dollar amount] per occurrence and [insert dollar amount] annual aggregate.

(3) [Insert appropriate phrase: "On behalf of our subsidiary" (if guarantor is corporate parent of the owner or operator); "On behalf of our affiliate" (if guarantor is a related firm of the owner or operator); or "Incident to our business relationship with" (if guarantor is providing the guarantee as an incident to a substantial business relationship with owner or operator)] [owner or operator], guarantor guarantees to the Washington state department of ecology and to any and all third parties that:

In the event that [owner or operator] fails to provide alternate coverage within 60 days after receipt of a notice of cancellation of this guarantee and the director of the Washington state department of ecology has determined or suspects that a release has occurred at an underground storage tank covered by this guarantee, the guarantor, upon instructions from the director, shall fund a standby trust fund in accordance with the provisions of WAC 173-360-453, in an amount not to exceed the coverage limits specified above.

In the event that the director determines that [owner or operator] has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with WAC 173-360-399, the guarantor, upon written instructions from the director, shall fund a standby trust in accordance with the provisions of WAC 173-360-453, in an amount not to exceed the coverage limits specified above.

If [owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by ["sudden" and/or "nonsudden"] accidental releases arising from the operation of the above-identified tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor, upon written instructions from the director, shall fund a standby trust in accordance with the provisions of WAC 173-360-453 to satisfy such judgment(s), award(s), or settlement agreement(s) up to the limits of coverage specified above.

(4) Guarantor agrees that if, at the end of any fiscal year before cancellation of this guarantee, the guarantor fails to meet the financial test criteria of WAC 173-360-413 (2) or (3) and (4), guarantor shall send within 120 days of such failure, by certified mail, notice to [owner or operator]. The guarantee will terminate 120 days from the date of receipt of the notice by [owner or operator], as evidenced by the return receipt.

(5) Guarantor agrees to notify [owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

(6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [owner or operator] pursuant to chapter 173-360 WAC.

(7) Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] shall comply with the applicable financial responsibility requirements of WAC 173-360-400 through 173-360-499 for the above-identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [owner or operator], as evidenced by the return receipt.

(8) The guarantor's obligation does not apply to any of the following:

(a) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily damage or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of WAC 173-360-406.

(9) Guarantor expressly waives notice of acceptance of this guarantee by the Washington state department of ecology, by any or all third parties, or by [owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in WAC 173-360-473 as such regulations were constituted on the effective date shown immediately below.

Effective date:

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-473, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-473, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-476 Appendix C—Endorsement.

ENDORSEMENT

Name: [Name of each covered location]

Address: [Address of each covered location]

Policy Number:

Period of Coverage: [Current policy period]

Name of [insurer or risk retention group]:

Address of [insurer or risk retention group]:

Name of insured:

Address of insured:

Endorsement:

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering the following underground storage tanks:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure differ-

ent tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility.]

for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental release"; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the insurer's or group's liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

a. Bankruptcy or insolvency of the insured shall not relieve the ["insurer" or "group"] of its obligations under the policy to which this endorsement is attached.

b. The ["insurer" or "group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement by the insured for any such payment made by the ["insurer" or "group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in WAC 173-360-413 through 173-360-433.

c. Whenever requested by the director of the Washington state department of ecology, the ["insurer" or "group"] agrees to furnish to the director a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the ["insurer" or "group"], except for nonpayment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for nonpayment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured.

[Insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the ["insurer" or "group"] within six months of the effective date of cancellation or nonrenewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in WAC 173-360-476 and that the ["insurer" or "group"] is ["licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states"].

[Signature of authorized representative of insurer or risk retention group]

[Name of person signing]

[Title of person signing], Authorized Representative of [name of insurer or risk retention group]

[Address of representative]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-476, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-480 Appendix D—Certificate of insurance.

CERTIFICATE OF INSURANCE

Name: [Name of each covered location]
Address: [Address of each covered location]
Policy number:
Endorsement (if applicable):
Period of coverage: [Current policy period]
Name of [insurer or risk retention group]:
Address of [insurer or risk retention group]:
Name of insured:
Address of insured:
Certification:

1. [Name of insurer or risk retention group], [the "insurer" or "group"], as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s):

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility].

for [insert: "Taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the insurer's or group's liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs,

which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The ["insurer" or "group"] further certifies the following with respect to the insurance described in Paragraph 1:

a. Bankruptcy or insolvency of the insured shall not relieve the ["insurer" or "group"] of its obligations under the policy to which this certificate applies.

b. The ["insurer" or "group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement by the insured for any such payment made by the ["insurer" or "group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in WAC 173-360-413 through 173-360-433.

c. Whenever requested by the director of the Washington state department of ecology, the ["insurer" or "group"] agrees to furnish the director a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the ["insurer" or "group"], except for nonpayment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for nonpayment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such notice is received by the insured.

[Insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the ["insurer" or "group"] within six months of the effective date of the cancellation or nonrenewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in WAC 173-360-480 and that the ["insurer" or "group"] is ["licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states"].

[Signature of authorized representative of insurer]

[Type name]

[Title], authorized representative of [name of insurer or risk retention group]

[Address of representative]

[Statutory Authority: Chapter 90.76 RCW. 91-22-020 (Order 91-26), § 173-360-480, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-480, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-483 Appendix E—Performance bond.

PERFORMANCE BOND

Date bond executed:

Period of coverage:

Principal: [Legal name and business address of owner or operator]

Type of organization: [Insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation (if applicable):

Surety(ies): [Name(s) and business address(es)]

Scope of coverage: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility. List the coverage guaranteed by the bond: "Taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases" "arising from operating the underground storage tank"].

Penal sums of bond:

Per occurrence $

Annual aggregate $

Surety's bond number:

Know All Persons by These Presents, that we, the principal and surety(ies), hereto are firmly bound to the Washington state department of ecology, in the above penal sums for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sums jointly and severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each surety binds itself, jointly and severally with the principal, for the payment of such sums only as is set forth opposite the name of such surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sums.

Whereas said principal is required under Subtitle I of the Resource Conservation and Recovery Act (RCRA), as amended, to provide financial assurance for [insert: "Taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tanks identified above, and

Whereas said principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, therefore, the conditions of the obligation are such that if the principal shall faithfully ["take corrective action, in accordance with WAC 173-360-399 and the director of the Washington state department of ecology's instructions for," and/or "compensate injured third parties for bodily injury and

property damage caused by" either "sudden" or "nonsudden" or "sudden and nonsudden"] accidental releases arising from operating the tank(s) identified above, or if the principal shall provide alternate financial assurance, as specified in WAC 173-360-400 through 173-360-499, within 120 days after the date the notice of cancellation is received by the principal from the surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

Such obligation does not apply to any of the following:

(1) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(2) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(3) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(4) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(5) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of WAC 173-360-406.

The surety(ies) shall become liable on this bond obligation only when the principal has failed to fulfill the conditions described above.

Upon notification by the director of the Washington state department of ecology that the principal has failed to ["take corrective action, in accordance with WAC 173-360-399 and the director's instructions" and/or "compensate injured third parties"] as guaranteed by this bond, the surety(ies) shall either perform ["corrective action in accordance with WAC 173-360-399 and the director's instructions" and/or "third-party liability compensation"] or place funds in an amount up to the annual aggregate penal sum into the standby trust fund as directed by the director under WAC 173-360-453.

Upon notification by the director that the principal has failed to provide alternate financial assurance within 60 days after the date the notice of cancellation is received by the principal from the surety(ies) and that the director has determined or suspects that a release has occurred, the surety(ies) shall place funds in an amount not exceeding the annual aggregate penal sum into the standby trust fund as directed by the director under WAC 173-360-453.

The surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the annual aggregate to the penal sum shown on the face of the bond, but in no event shall the obligation of the surety(ies) hereunder exceed the amount of said annual aggregate penal sum.

The surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the principal, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the principal, as evidenced by the return receipt.

The principal may terminate this bond by sending written notice to the surety(ies).

In witness thereof, the principal and surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the principal and surety(ies) and that the wording of this surety bond is identical to the wording specified in WAC 173-360-483 as such regulations were constituted on the date this bond was executed.

PRINCIPAL

[Signature(s)]
[Name(s)]
[Title(s)]
[Corporate seal]

CORPORATE SURETY(IES)

[Name and address]
[State of incorporation:
[Liability limit: $
[Signature(s)]
[Name(s) and title(s)]
[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for surety above.]

Bond premium: $

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-483, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-486 Appendix F—Irrevocable standby letter of credit.

IRREVOCABLE STANDBY LETTER OF CREDIT

[Name and address of issuing institution]

[Name and address of director of the Washington state department of ecology]

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. . . . . in your favor, at the request and for the account of [owner or operator name] of [address] up to the aggregate amount of [in words] U.S. dollars ($[insert dollar amount]), available upon presentation of

(1) your sight draft, bearing reference to this letter of credit, No. . . . ., and

(2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of Subtitle I of the Resource Conservation and Recovery Act of 1976, as amended."

This letter of credit may be drawn on to cover [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental

releases" or "accidental releases"] arising from operating the underground storage tank(s) identified below in the amount of [in words] $[insert dollar amount] per occurrence and [in words] $[insert dollar amount] annual aggregate:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to WAC 173-360-200, and the name and address of the facility.]

The letter of credit may not be drawn on to cover any of the following:

(a) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of WAC 173-360-406.

This letter of credit is effective as of [date] and shall expire on [date], but such expiration date shall be automatically extended for a period of [at least the length of the original term] on [expiration date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify [owner or operator] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event that [owner or operator] is so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by [owner or operator], as shown on the signed return receipt.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner or operator] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in WAC 173-360-486 as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]

[Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"].

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-486, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-490 Appendix G—Trust agreement.

TRUST AGREEMENT

Trust agreement, the "agreement," entered into as of [date] by and between [name of the owner or operator], a Washington state [insert "corporation," "partnership," "association," or "proprietorship"], the "grantor," and [name of corporate trustee], [insert "Incorporated in the state of Washington" or "a national bank"], the "trustee."

Whereas, the department of ecology, "ecology", an agency of the state of Washington, has established certain regulations applicable to the grantor, requiring that an owner or operator of an underground storage tank shall provide assurance that funds will be available when needed for corrective action and third-party compensation for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from the operation of the underground storage tank. The attached Schedule A lists the number of tanks at each facility and the name(s) and addresses of the facility(ies) where the tanks are located that are covered by the standby trust agreement.

[Whereas, the grantor has elected to establish [insert either "a guarantee," "surety bond," or "letter of credit"] to provide all or part of such financial assurance for the underground storage tanks identified herein and is required to establish a standby trust fund able to accept payments from the instrument (This paragraph is only applicable to the standby trust agreement.)];

Whereas, the grantor, acting through its duly authorized officers, has selected the trustee to be the trustee under this agreement, and the trustee is willing to act as trustee;

Now, therefore, the grantor and the trustee agree as follows:

Section 1. Definitions. As used in this agreement:

(1) The term "grantor" means the owner or operator who enters into this agreement and any successors or assigns of the grantor.

(2) The term "trustee" means the trustee who enters into this agreement and any successor trustee.

Section 2. Identification of the Financial Assurance Mechanism. This agreement pertains to the [identify the financial assurance mechanism, either a guarantee, surety bond, or letter of credit, from which the standby trust fund is established to receive payments (This paragraph is only applicable to the standby trust agreement.)].

Section 3. Establishment of fund. The grantor and the trustee hereby establish a trust fund, the "fund," for the benefit of the Washington state department of ecology. The grantor and the trustee intend that no third party have access to the fund except as herein provided. [The fund is established initially as a standby to receive payments and shall not consist of any property.] Payments made by the provider of financial assurance pursuant to the director of the department of ecology's instruction are transferred to the trustee and are referred to as the fund, together with all earnings and profits thereon, less any payments or distributions made by the trustee pursuant to this agreement. The fund shall be held by the trustee, IN TRUST, as thereinafter provided. The trustee

shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the grantor as provider of financial assurance, any payments necessary to discharge any liability of the grantor established by the department of ecology.

Section 4. Payment for ["corrective action" and/or "third-party liability claims"]. The trustee shall make payments from the fund as the director of the department of ecology shall direct, in writing, to provide for the payment of the costs of [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"] arising from operating the tanks covered by the financial assurance mechanism identified in this agreement.

The fund may not be drawn upon to cover any of the following:

(a) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert owner or operator] that is not the direct result of a release from a petroleum underground storage tank;

(e) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of WAC 173-360-406.

The trustee shall reimburse the grantor, or other persons as specified by the director from the fund for corrective action expenditures and/or third-party liability claims in such amounts as the director shall direct in writing. In addition, the trustee shall refund to the grantor such amounts as the director specifies in writing. Upon refund, such funds shall no longer constitute part of the fund as defined herein.

Section 5. Payments comprising the fund. Payments made to the trustee for the fund shall consist of cash and securities acceptable to the trustee.

Section 6. Trustee management. The trustee shall invest and reinvest the principal and income of the fund and keep the fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the grantor may communicate in writing to the trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the fund, the trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiaries and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(a) Securities or other obligations of the grantor, or any other owner or operator of the tanks, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(1), shall not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(b) The trustee is authorized to invest the fund in time or demand deposits of the trustee, to the extent insured by an agency of the federal or state government; and

(c) The trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and investment. The trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the fund to any common, commingled, or collective trust fund created by the trustee in which the fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the trustee. The trustee may vote such shares in its discretion.

Section 8. Express powers of trustee. Without in any way limiting the powers and discretions conferred upon the trustee by the other provisions of this agreement or by law, the trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the trustee shall at all times show that all such securities are part of the fund;

(d) To deposit any cash in the fund in interest-bearing accounts maintained or savings certificates issued by the trustee, in its separate corporate capacity, or in any other banking institution affiliated with the trustee, to the extent insured by an agency of the federal or state government; and

(e) To compromise or otherwise adjust all claims in favor of or against the fund.

Section 9. Taxes and expenses. All taxes of any kind that may be assessed or levied against or in respect of the fund and all brokerage commissions incurred by the fund shall be paid from the fund. All other expenses incurred by the trustee in connection with the administration of this trust, including fees for legal services rendered to the trustee, the compensation of the trustee to the extent not paid directly by the grantor, and all other proper charges and disbursements of the trustee shall be paid from the fund.

Section 10. Advice of counsel. The trustee may from time to time consult with counsel, who may be counsel to the grantor, with respect to any questions arising as to the construction of this agreement or any action to be taken hereunder. The trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. Trustee compensation. The trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the grantor.

Section 12. Successor trustee. The trustee may resign or the grantor may replace the trustee, but such resignation or replacement shall not be effective until the grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the trustee hereunder. Upon the successor trustee's acceptance of the appointment, the trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the fund. If for any reason the grantor cannot or does not act in the event of the resignation of the trustee, the trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in writing sent to the grantor and the present trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the trustee as a result of any of the acts contemplated by this section shall be paid as provided in section 9.

Section 13. Instructions to the trustee. All orders, requests, and instructions by the grantor to the trustee shall be in writing, signed by such persons as are designated in the attached Schedule B or such other designees as the grantor may designate by amendment to Schedule B. The trustee shall be fully protected in acting without inquiry in accordance with the grantor's orders, requests, and instructions. All orders, requests, and instructions by the director of the Washington state department of ecology to the trustee shall be in writing, signed by the director, and the trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the grantor or the director, hereunder has occurred. The trustee shall have no duty to act in the absence of such orders, requests, and instructions from the grantor and/or the director, except as provided for herein.

Section 14. Amendment of agreement. This agreement may be amended by an instrument in writing executed by the grantor and the trustee, or by the trustee and the director of the department of ecology, if the grantor ceases to exist.

Section 15. Irrevocability and termination. Subject to the right of the parties to amend this agreement as provided in Section 14, this trust shall be irrevocable and shall continue until terminated at the written direction of the grantor and the trustee, or by the trustee and the director of the department of ecology, if the grantor ceases to exist. Upon termination of the trust, all remaining trust property, less final trust administration expenses, shall be delivered to the grantor.

Section 16. Immunity and indemnification. The trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this trust, or in carrying out any directions by the grantor or the director of the department of ecology, issued in accordance with this agreement. The trustee shall be indemnified and saved harmless by the grantor, from and against any personal liability to which the trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the grantor fails to provide such defense.

Section 17. Choice of law. This agreement shall be administered, construed, and enforced according to the laws of the state of Washington, or the Comptroller of the Currency in the case of National Association banks.

Section 18. Interpretation. As used in this agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this agreement shall not affect the interpretation or the legal efficacy of this agreement.

In witness whereof the parties have caused this agreement to be executed by their respective officers duly authorized and their corporate seals (if applicable) to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this agreement is identical to the wording specified in WAC 173-360-490 as such regulations were constituted on the date written above.

[Signature of grantor]
[Name of the grantor]
[Title]

Attest:

[Signature of trustee]
[Name of the trustee]
[Title]
[Seal]

Attest:

[Signature of witness]
[Name of witness]
[Title]
[Seal]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-490, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-493 Appendix H—Certification of acknowledgment.

State of Washington
County of

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is

[title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation; and that she/he signed her/his name thereto by like order.

[Signature of notary public]

[Name of notary public]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-493, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-496 Appendix I—Certification of financial responsibility.

CERTIFICATION OF FINANCIAL RESPONSIBILITY

[Owner or operator] hereby certifies that it is in compliance with the requirements of WAC 173-360-400 through 173-360-499.

The financial assurance mechanism[s] used to demonstrate financial responsibility under WAC 173-360-400 through 173-360-499 is [are] as follows:

[For each mechanism, list the type of mechanism, name of issuer, mechanism number (if applicable), amount of coverage, effective period of coverage and whether the mechanism covers "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases."]

[Signature of owner or operator]

[Name of owner or operator]

[Title]

[Date]

[Signature of witness or notary]

[Name of witness or notary]

[Date]

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-496, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-360-499 Appendix J—Certification of valid claim.

CERTIFICATION OF VALID CLAIM

The undersigned, as principals and as legal representatives of [insert owner or operator] and [insert name and address of third-party claimant], hereby certify that the claim of bodily injury [and/or] property damage caused by an accidental release arising from operating [owner's or operator's] underground storage tank should be paid in the amount of $[. . .].

[Signatures]	[Signature(s)]
Owner or Operator	Claimant(s)
Attorney for	Attorney(s) for
Owner or Operator	Claimant(s)
(Notary) Date	(Notary) Date

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-499, filed 11/28/90, effective 12/29/90.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

PART V
LOCAL PROGRAMS

Note: RCW 90.76.110 states that the rules adopted under chapter 90.76 RCW preempt and supersede any state or local underground storage tank law, ordinance, or resolution governing any aspect of regulation covered by these regulations. Exceptions are: (1) Local laws, ordinances, and resolutions pertaining to local authority to take immediate action in response to a release of a regulated substance; (2) local laws, ordinances, and resolutions pertaining to permits and fees for the use of underground storage tanks in street right of ways that were in existence prior to July 1, 1990; and (3) underground storage tank ordinances that are more stringent than the federal regulations and the uniform codes adopted under chapter 19.27 RCW and that were in effect on November 1, 1988. These cities, towns, and counties were required by the statute to notify the department of the existence of that ordinance by July 1, 1989. The department has received notification from: City of Spokane, Spokane County, Tacoma-Pierce County, city of Redmond, and city of Renton.

WAC 173-360-500 Local delegation of underground storage tank programs. (1) The department encourages the delegation of underground storage tank program responsibilities to a qualified city, town, or county.

(2) A city, town, or county may apply to the department for delegation of authority to enforce, within its jurisdictional boundaries, the state underground storage tank regulations included in part or all of WAC 173-360-100 through 173-360-399.

(3) A fire protection district or political subdivision may enter into an agreement under chapter 39.34 RCW with a city, town, or county to assume all or a portion of delegated program responsibilities. Department approval shall be obtained prior to the effective date of such agreement, and such agreement shall be part of the city, county, or town's agreement or contract with the department.

(4) A city, town, or county seeking delegation of underground storage tank program activities shall submit a written application to the department, describing the portions of the state program for which delegation is sought. The application shall contain the following:

(a) A description of the scope, structure, and procedures of the proposed program; and

(b) A description, including an organization chart, of the local agency which will operate the program, including:

(i) The number of employees, occupation and general duties of each employee who will carry out the activities of the program;

(ii) An estimate of the cost of establishing and administering the program, including the cost of personnel listed in (b)(i) of this subsection, as well as administrative and technical support.

(5) Within thirty days after receiving the application, the department will review the application for completeness and request any additional information needed in order for the application to be complete.

(6) The department will begin negotiating with the applicant within thirty days of receiving a complete application, in order to establish the following:

(a) The source and amount of funding available to meet the costs listed in subsection (4)(b)(ii) of this section, including any restrictions or limitation upon this funding;

(b) The applicable procedures, including any required permit procedures;

(c) Permit forms, application forms, and reporting forms that will be used in the program;

(d) The methods to be used to assure compliance and enforcement of the program; and

(e) The procedures to be used to coordinate information with the department, including the frequency of reporting and report content.

(7) After finalizing the items listed in subsection (6) of this section, the department will prepare and mail a written agreement or contract to the applicant, which outlines the terms and conditions under which the department will delegate the state underground storage tank program, or portions of the state program, to the applicant. The applicant must sign and return the agreement or contract to the department in order for the agreement or contract to become effective.

(8) In developing agreements or contracts with local governments, the department shall, if possible, provide for an appropriate distribution of resources collected under RCW 90.76.090, while still enabling the department to operate a state program.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-500, filed 11/28/90, effective 12/29/90.]

WAC 173-360-510 Environmentally sensitive areas. (1) An environmentally sensitive area is an area, proposed by a city, town or county, and designated by the department, which possesses physical characteristics that make it especially vulnerable to threats from leaking underground storage tanks, and in which local underground storage tank requirements more stringent than statewide requirements are necessary.

(2) Any city, town, or county may apply to the department to have an area within its jurisdictional boundaries designated an environmentally sensitive area. A city, town, or county may submit a joint application with any other city, town, or county for joint administration under chapter 39.34 RCW of a single environmentally sensitive area located in both jurisdictions.

(3) An area that has been designated a sensitive area for the purposes of protecting ground water or surface water from pollution under another statute or regulation will, upon request for designation by the local government, be approved as an environmentally sensitive area for the purposes of WAC 173-360-510. Those areas may include, but are not limited to:

(a) An aquifer identified as the primary source of supply for public water supply systems;

(b) An aquifer underlying a critical water supply service area where the coordinated water system plan established pursuant to chapter 70.116 RCW has identified a need for a ground water management program;

(c) An aquifer designated as a sole source aquifer by the Federal Environmental Protection Agency;

(d) An area designated a certified ground water management area identified under chapter 173-100 WAC; and

(e) An area designated an aquifer protection area, under chapter 36.36 RCW.

(4) The agency requesting designation shall comply with WAC 173-360-530.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-510, filed 11/28/90, effective 12/29/90.]

WAC 173-360-520 Physical criteria for environmentally sensitive areas. Except as provided for in WAC 173-360-510(3), environmentally sensitive areas shall be designated based on the criteria established by the department. One or more of the criteria shall be present and the department will evaluate the application for designation based on the overall sensitivity of the environment and consistency with WAC 173-360-510(1). Those criteria include, but are not limited to:

(1) Ground water that is vulnerable to pollution because of specific hydrogeological characteristics, including but not limited to, recharge areas, permeability, precipitation, direction and quantity of ground water flow, and presence of aquitards;

(2) Proximity to wetlands;

(3) Being located within a 100-year flood plain; or

(4) Proximity to other surface waters that can be shown to have a hydrogeologic link to such ground water as is described in subsection (1) of this section, underlying an area where underground storage tank systems are installed or may be installed, if a leak from such a system has a reasonable chance of reaching ground water.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-520, filed 11/28/90, effective 12/29/90.]

WAC 173-360-530 Application for designation of environmentally sensitive area and approval of local regulations. (1) Designation of an environmentally sensitive area under this chapter is solely for the purposes of implementing chapter 90.76 RCW, and such designation under chapter 90.76 RCW does not establish an environmentally sensitive area under any other law.

(2) The application for designation of an environmentally sensitive area shall consist of a concise, factual report and shall consider the guidelines and criteria set forth in WAC 173-360-520. The local government applicant shall provide sufficient information for the department to determine if the area should be so designated. Information provided by the applicant shall include, but need not be limited to, the following:

(a) A rationale for the proposed designation;

(b) A description of any underground water resource included within the proposed environmentally sensitive area;

(c) The geographic limits of the area where more stringent underground storage tank standards would be required;

(d) Any available maps of the aquifer and recharge area, including water table;

(e) A map of the area to be designated;

(f) A description of the more stringent underground storage tank standards proposed to be required in the area, including underground storage tank technical standards, operating standards, and administrative procedures. When proposing more stringent standards, the local jurisdiction should consider:

(i) Actions already undertaken by owners or operators to upgrade existing underground storage tank systems to federal or state standards, and the economic impacts of requiring already upgraded systems to meet more stringent standards; and

(ii) The possible impacts of contaminated ground water on human health and the environment and whether underground storage tank systems which have already been upgraded under the requirements of the state or federal rules will effectively prevent leaks which may contaminate ground water.

(g) A description of any other measures in place or considered to protect ground water and/or surface water from environmental threats;

(h) Any written comments submitted by members of the public to the local government regarding the proposed designation of an environmentally sensitive area; and

(i) Documentation of coordination with affected state and local agencies and water user groups.

(3) Additional information may be required by the department if necessary to adequately evaluate the proposal. This information may include, but is not limited to, the following:

(a) The geographic limits of the ground water recharge zone;

(b) The geographic limits of the underground water resource;

(c) The geology within both the recharge zone and the underground water resource;

(d) Location, yield, well depth and present use of wells within the limits of the threatened underground water resource;

(e) Estimated capacity of the underground water resource;

(f) Location, type and number of underground storage tanks existing in the proposed area;

(g) Such other information the department deems necessary.

(4) Prior to submitting the request for designation and approval of more stringent standards to the department, the local government applicant shall hold at least one public hearing for the purpose of receiving comments from the public, affected local, state, and tribal agencies and ground water user groups, regarding the designation proposal. The local government shall provide adequate notice to affected parties.

The local government applicant shall submit the application for designation and approval of more stringent standards to the department and other affected agencies and ground water user groups for their review and comment. Comments shall be submitted to the department.

(5) Within thirty days after receiving the application, the department will review the application for completeness and request any additional information needed in order for the application to be complete.

(a) Prior to approval of the application, the department may, at its discretion, hold a public hearing in the jurisdiction where the environmentally sensitive area is proposed.

(b) The department shall approve or disapprove the application for designation as an environmentally sensitive area based upon review of the application, comments received, whether the proposed area meets the guidelines and criteria of WAC 173-360-520 and 173-360-530, and whether the proposed local ordinance or resolution is reasonably consistent with previously approved local regulations for similar environmentally sensitive areas.

(6) If application for the designation of an environmentally sensitive area is made later than five years after the date of final adoption of these rules, proposed local ordinances and resolutions shall only apply to new underground storage tank installations.

Ordinances and resolutions described under subsection (1) of this section and disapproved by the department may be modified by the local government and resubmitted to the department for approval.

(7) Proposed local ordinances and resolutions shall become effective when approved by the department.

(8) A local jurisdiction with an approved ordinance or resolution under this chapter may establish local tank fees, in an amount not to exceed fifty percent of the annual state tank fee, if the fee is necessary for enhanced program administration or enforcement. Pursuant to RCW 90.76.090, the fee shall be collected and deposited into the state underground storage tank account.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-530, filed 11/28/90, effective 12/29/90.]

PART VI
REGISTRATION AND LICENSING REQUIREMENTS FOR UNDERGROUND STORAGE TANK SERVICE PROVIDERS AND SERVICE SUPERVISORS

Note: Individuals who perform underground tank services may be subject to additional state laws and regulations. These include, but may not be limited to:
(1) Chapter 18.27 RCW and chapter 296-200 WAC, which apply to individuals who are general and specialty contractors;
(2) Chapter 18.104 RCW and chapter 173-162 WAC, which apply to individuals who install ground water monitoring wells;
(3) Chapter 19.28 RCW, chapters 296-46 and 296-40 WAC, which apply to individuals who install and repair impressed current cathodic protection systems; and
(4) Chapter 49.17 RCW and chapter 296-62 WAC, which apply to individuals engaged in activities involving hazardous chemicals and substances and who perform confined space entry during field activities, and chapter 296-155 WAC, which sets forth safety standards for construction work.

WAC 173-360-600 Purpose of Part VI. After the effective date of these regulations, individuals who perform tank services must be certified by the International Fire Code Institute, or other nationally recognized association that the department has determined provides an examination and credentials whereby individuals can demonstrate their knowledge of various regulatory codes, standards and practices pertaining to underground storage tanks, or have passed another qualifying exam approved by the department. Washington registered professional engineers who are competent, by means of examination, experience, or education, to perform site assessments, are not required to be certified for site assessment work.

The purpose of WAC 173-360-600 through 173-360-630 is to set forth standards for certification and responsibilities for certified UST supervisors.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-600, filed 2/1/95, effective 3/4/95; 90-24-017, § 173-360-600, filed 11/28/90, effective 12/29/90.]

WAC 173-360-610 Scope. WAC 173-360-610 through 173-360-630 establishes requirements for:

Certification of UST supervisors who perform services on underground storage tank systems;

These rules apply to any person who performs the installation, retrofitting, decommissioning, testing, site check, site assessment, of underground storage tanks regulated by chapter 90.76 RCW.

These requirements do not apply to persons performing the activities specified in subsection (2) of this section for tanks which are exempt from the UST rule, as provided in WAC 173-360-110 (1) and (2).

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-610, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-610, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-610, filed 11/28/90, effective 12/29/90.]

WAC 173-360-620 Types of certifications. The department requires certifications in the following areas:

(1) Tank installation and retrofitting;

(2) Tank decommissioning;

(3) Tightness testing;

(4) Cathodic protection installation and testing; and

(5) Site assessment associated with tank closure.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-620, filed 2/1/95, effective 3/4/95.]

WAC 173-360-630 Responsibilities of certified UST supervisors. (1) Any certified UST supervisor shall comply with WAC 173-360-600 through 173-360-630, and comply with all federal and state regulations and procedures when performing tank services.

(2)(a) A checklist must be completed for each regulated activity performed. The certified UST supervisor shall sign the checklist provided by the department within thirty days following the completion of an underground storage tank installation, retrofit, decommissioning, or test.

(b) An as-built site plan, showing the location of completed tank system installations or retrofitted tank system, including adjacent structures, if present shall be submitted for installations and retrofits. The as-built site plan shall be submitted on the appropriate form provided by the department, or shall be an 8 1/2 inch by 11 inch single page drawing.

(3) A certified UST supervisor shall report to the department and the tank owner or operator the existence of any confirmed release from an underground tank system that poses a threat to human health and the environment. This report shall be provided to the tank owner or operator immediately, and to the department within seventy-two hours of the discovery of the condition. If the owner or operator are not immediately available, the report should be made immediately to the department.

(4) A certified UST supervisor shall be present on site at all times tank service activities are being carried out at a tank installation, retrofit, testing, decommissioning project unless otherwise determined by the department. These tasks may include but may not be limited to:

(a) Preparing the excavation immediately prior to receiving backfill and placement of the tank into the excavation;

(b) Any movement of the tank vessel, including but not limited to transferring the vessel from the vehicle used to transport it to the project site;

(c) Setting the tank and its associated piping into the excavation, including placing any anchoring devices and strapping, if any, and backfilling to the level of the tank;

(d) Placing and connecting the piping system to the tank vessel;

(e) Installing cathodic protection systems;

(f) All pressure testing of the underground storage tank system, including associated piping, performed during the installation or retrofitting;

(g) Completing the backfill and filling of the installation;

(h) Evaluating preparation for and installing any tank lining system;

(i) Tank purging or inerting;

(j) Removal of the tank, removal of sludge from the tank, and cleaning of the tank;

(k) Removing flammable vapors from tanks;

(l) Excavating around tanks for removal;

(m) Field installation and operational testing of cathodic protection systems;

(n) Inspecting of existing tank and piping systems for corrosion;

(o) Tank or line tightness testing;

(p) Inspection of existing tanks for structural integrity;

(q) Installation of release detection equipment; and

(r) Conducting a site assessment at tank closure.

(5) If a certified UST supervisor obtains knowledge, in the course of performing regulated activities, that a regulated underground storage tank has not been registered with the department, or is otherwise out of compliance with the requirements of this chapter, the individual shall inform the tank owner or operator of the notification requirement and any other applicable requirements.

(6) Proof of supervisor certification shall be available for inspection at any project site.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-630, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-630, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-630, filed 11/28/90, effective 12/29/90.]

WAC 173-360-670 Penalties. Any person or firm who violates this chapter is subject to a civil penalty not to exceed five thousand dollars for each tank per day of violation, pursuant to RCW 90.76.080(2).

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-670, filed 11/28/90, effective 12/29/90.]

Chapter 173-400 WAC

GENERAL REGULATIONS FOR AIR POLLUTION SOURCES

WAC

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PERMITTING OF MAJOR STATIONARY SOURCES AND MAJOR MODIFICATIONS TO MAJOR STATIONARY SOURCES

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173-400-080 Compliance schedules. [Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-080, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-080, filed 5/8/79; Order DE 76-38, § 173-400-080, filed 12/21/76. Formerly WAC 18-04-080.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-090 Sensitive area designation. [Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-090, filed 8/20/80; Order DE 76-38, § 173-400-090, filed 12/21/76. Formerly WAC 18-04-090.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-130 Regulatory actions. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-130, filed 5/8/79; Order DE 76-38, § 173-400-130, filed 12/21/76. Formerly WAC 18-04-130.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-135 Criminal penalties. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-135, filed 5/8/79.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-140 Appeals. [Order DE 76-38, § 173-400-140, filed 12/21/76. Formerly WAC 18-04-140.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-141 Prevention of significant deterioration (PSD). [Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-141, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-141, filed 9/13/96, effective 10/14/96; 93-18-007 (Order 93-03), § 173-400-141, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-141, filed 2/19/91, effective 3/22/91.] Repealed by 05-03-033 (Order 03-07), filed 1/10/05, effective 2/10/05. Statutory Authority: RCW 70.94.152.

173-400-150 Variance. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-150, filed 5/8/79; Order DE 76-38, § 173-400-150, filed 12/21/76. Formerly WAC 18-04-150.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-160 Maintenance of pay. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-160, filed 5/8/79.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-400-170 Requirements for boards and director. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-170, filed 5/8/79.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

WAC 173-400-010 Policy and purpose. (1) It is the policy of the department of ecology (ecology) under the authority vested in it by chapter 43.21A RCW to provide for the systematic control of air pollution from air contaminant sources and for the proper development of the state's natural resources.

(2) It is the purpose of this chapter to establish technically feasible and reasonably attainable standards and to establish rules generally applicable to the control and/or prevention of the emission of air contaminants.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-010, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-010, filed 4/15/83; Order DE 76-38, § 173-400-010, filed 12/21/76. Formerly WAC 18-04-010.]

WAC 173-400-020 Applicability. (1) The provisions of this chapter shall apply statewide.

(2) An authority may enforce this chapter and may also adopt standards or requirements. These standards or requirements may not be less stringent than the current state air quality rules and may be more stringent than the current regulations. Unless properly delegated by ecology, authorities do not have jurisdiction over the following sources:

(a) Specific source categories over which the state, by separate regulation, has assumed or hereafter does assume jurisdiction.

(b) Automobiles, trucks, aircraft.

(c) Those sources under the jurisdiction of the energy facility site evaluation council.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-020, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-020, filed

4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-020, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-020, filed 5/8/79; Order DE 76-38, § 173-400-020, filed 12/21/76. Formerly WAC 18-04-020.]

WAC 173-400-030 Definitions. Except as provided elsewhere in this chapter, the following definitions apply throughout the chapter:

(1) **"Actual emissions"** means the actual rate of emissions of a pollutant from an emission unit, as determined in accordance with (a) through (c) of this subsection.

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. Ecology or an authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) Ecology or an authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the emissions unit.

(c) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the emissions unit on that date.

(2) **"Adverse impact on visibility"** is defined in WAC 173-400-117.

(3) **"Air contaminant"** means dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substance, or any combination thereof. "Air pollutant" means the same as "air contaminant."

(4) **"Air pollution"** means the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities, and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property. For the purposes of this chapter, air pollution shall not include air contaminants emitted in compliance with chapter 17.21 RCW, the Washington Pesticide Application Act, which regulates the application and control of the use of various pesticides.

(5) **"Allowable emissions"** means the emission rate of a source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(a) The applicable standards as in 40 CFR Part 60, 61, 62, or 63;

(b) Any applicable SIP emissions limitation including those with a future compliance date; or

(c) The emissions rate specified as a federally enforceable approval condition, including those with a future compliance date.

(6) **"Ambient air"** means the surrounding outside air.

(7) **"Ambient air quality standard"** means an established concentration, exposure time, and frequency of occurrence of air contaminant(s) in the ambient air which shall not be exceeded.

(8) **"Approval order"** is defined in **"order of approval."**

(9) **"Attainment area"** means a geographic area designated by EPA at 40 CFR Part 81 as having attained the National Ambient Air Quality Standard for a given criteria pollutant.

(10) **"Authority"** means any air pollution control agency whose jurisdictional boundaries are coextensive with the boundaries of one or more counties.

(11) **"Begin actual construction"** means, in general, initiation of physical on-site construction activities on an emission unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipe work and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(12) **"Best available control technology (BACT)"** means an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of the "best available control technology" result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard under 40 CFR Part 60 and Part 61. Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under the definition of BACT in the Federal Clean Air Act as it existed prior to enactment of the Clean Air Act Amendments of 1990.

(13) **"Best available retrofit technology (BART)"** means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

(14) **"Bubble"** means a set of emission limits which allows an increase in emissions from a given emissions unit in exchange for a decrease in emissions from another emissions unit, pursuant to RCW 70.94.155 and WAC 173-400-120.

(15) **"Capacity factor"** means the ratio of the average load on equipment or a machine for the period of time considered, to the manufacturer's capacity rating of the machine or equipment.

(16) **"Class I area"** means any area designated under section 162 or 164 of the Federal Clean Air Act as a Class I area. The following areas are the Class I areas in Washington state:

(a) Alpine Lakes Wilderness;
(b) Glacier Peak Wilderness;
(c) Goat Rocks Wilderness;
(d) Mount Adams Wilderness;
(e) Mount Rainier National Park;
(f) North Cascades National Park;
(g) Olympic National Park;
(h) Pasayten Wilderness; and
(i) Spokane Indian Reservation.

(17) **"Combustion and incineration units"** means units using combustion for waste disposal, steam production, chemical recovery or other process requirements; but excludes outdoor burning.

(18)(a) **"Commence"** as applied to construction, means that the owner or operator has all the necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(b) For the purposes of this definition, "necessary preconstruction approvals" means those permits or orders of approval required under federal air quality control laws and regulations, including state, local and federal regulations and orders contained in the SIP.

(19) **"Concealment"** means any action taken to reduce the observed or measured concentrations of a pollutant in a gaseous effluent while, in fact, not reducing the total amount of pollutant discharged.

(20) **"Criteria pollutant"** means a pollutant for which there is established a National Ambient Air Quality Standard at 40 CFR Part 50. The criteria pollutants are carbon monoxide (CO), particulate matter, ozone (O_3) sulfur dioxide (SO_2), lead (Pb), and nitrogen dioxide (NO_2).

(21) **"Director"** means director of the Washington state department of ecology or duly authorized representative.

(22) **"Dispersion technique"** means a method which attempts to affect the concentration of a pollutant in the ambient air other than by the use of pollution abatement equipment or integral process pollution controls.

(23) **"Ecology"** means the Washington state department of ecology.

(24) **"Emission"** means a release of air contaminants into the ambient air.

(25) **"Emission reduction credit (ERC)"** means a credit granted pursuant to WAC 173-400-131. This is a voluntary reduction in emissions.

(26) **"Emission standard"** and **"emission limitation"** means a requirement established under the Federal Clean Air Act or chapter 70.94 RCW which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment work practice, or operational standard adopted under the Federal Clean Air Act or chapter 70.94 RCW.

(27) **"Emission threshold"** means an emission of a listed air contaminant at or above the following rates:

Air Contaminant	Annual Emission Rate
Carbon monoxide:	100 tons per year (tpy)
Nitrogen oxides:	40 tpy
Sulfur dioxide:	40 tpy
Particulate matter (PM):	25 tpy of PM emissions 15 tpy of PM-10 emissions
Volatile organic compounds:	40 tpy
Fluorides:	3 tpy
Lead:	0.6 tpy
Sulfuric acid mist:	7 tpy
Hydrogen sulfide (H_2S):	10 tpy
Total reduced sulfur (including H_2S):	10 tpy
Reduced sulfur compounds (including H_2S):	10 tpy

(28) **"Emissions unit"** or **"emission unit"** means any part of a stationary source or source which emits or would have the potential to emit any pollutant subject to regulation under the Federal Clean Air Act, chapter 70.94 or 70.98 RCW.

(29) **"Excess emissions"** means emissions of an air pollutant in excess of any applicable emission standard.

(30) **"Excess stack height"** means that portion of a stack which exceeds the greater of sixty-five meters or the calculated stack height described in WAC 173-400-200(2).

(31) **"Existing stationary facility (Facility)"** is defined in WAC 173-400-151.

(32) **"Federal Clean Air Act (FCAA)"** means the Federal Clean Air Act, also known as Public Law 88-206, 77 Stat. 392, December 17, 1963, 42 U.S.C. 7401 et seq., as last amended by the Clean Air Act Amendments of 1990, P.L. 101-549, November 15, 1990.

(33) **"Federal Class I area"** means any federal land that is classified or reclassified Class I. The following areas are federal Class I areas in Washington state:

(a) Alpine Lakes Wilderness;
(b) Glacier Peak Wilderness;
(c) Goat Rocks Wilderness;
(d) Mount Adams Wilderness;
(e) Mount Rainier National Park;
(f) North Cascades National Park;
(g) Olympic National Park; and
(h) Pasayten Wilderness.

(34) **"Federal land manager"** means the secretary of the department with authority over federal lands in the United States. This includes, but is not limited to, the U.S. Department of the Interior - National Park Service, the U.S. Department of the Interior - U.S. Fish and Wildlife Service, the U.S. Department of Agriculture - Forest Service, and/or the U.S. Department of the Interior - Bureau of Land Management.

(35) **"Federally enforceable"** means all limitations and conditions which are enforceable by EPA, including those requirements developed under 40 CFR Parts 60, 61, 62 and

63, requirements established within the Washington SIP, requirements within any approval or order established under 40 CFR 52.21 or under a SIP approved new source review regulation, and emissions limitation orders issued under WAC 173-400-091.

(36) **"Fossil fuel-fired steam generator"** means a device, furnace, or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

(37) **"Fugitive dust"** means a particulate emission made airborne by forces of wind, man's activity, or both. Unpaved roads, construction sites, and tilled land are examples of areas that originate fugitive dust. Fugitive dust is a type of fugitive emission.

(38) **"Fugitive emissions"** means emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(39) **"General process unit"** means an emissions unit using a procedure or a combination of procedures for the purpose of causing a change in material by either chemical or physical means, excluding combustion.

(40) **"Good engineering practice (GEP)"** refers to a calculated stack height based on the equation specified in WAC 173-400-200 (2)(a)(ii).

(41) **"Incinerator"** means a furnace used primarily for the thermal destruction of waste.

(42) **"In operation"** means engaged in activity related to the primary design function of the source.

(43) **"Lowest achievable emission rate (LAER)"** means for any source that rate of emissions which reflects the more stringent of:

(a) The most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed new or modified source demonstrates that such limitations are not achievable; or

(b) The most stringent emission limitation which is achieved in practice by such class or category of source.

In no event shall the application of this term allow a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable New Source Performance Standards.

(44) **"Mandatory Class I federal area"** means any area defined in Section 162(a) of the Federal Clean Air Act. The following areas are the mandatory Class I federal areas in Washington state:

(a) Alpine Lakes Wilderness;

(b) Glacier Peak Wilderness;

(c) Goat Rocks Wilderness;

(d) Mount Adams Wilderness;

(e) Mount Rainier National Park;

(f) North Cascades National Park;

(g) Olympic National Park; and

(h) Pasayten Wilderness;

(45) **"Masking"** means the mixing of a chemically nonreactive control agent with a malodorous gaseous effluent to change the perceived odor.

(46) **"Materials handling"** means the handling, transporting, loading, unloading, storage, and transfer of materials with no significant chemical or physical alteration.

(47) **"Modification"** means any physical change in, or change in the method of operation of, a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emissions of any air contaminant not previously emitted. The term modification shall be construed consistent with the definition of modification in Section 7411, Title 42, United States Code, and with rules implementing that section.

(48) **"National Ambient Air Quality Standard (NAAQS)"** means an ambient air quality standard set by EPA at 40 CFR Part 50 and includes standards for carbon monoxide (CO), particulate matter, ozone (O_3), sulfur dioxide (SO_2), lead (Pb), and nitrogen dioxide (NO_2).

(49) **"National Emission Standards for Hazardous Air Pollutants (NESHAPS)"** means the federal rules in 40 CFR Part 61.

(50) **"National Emission Standards for Hazardous Air Pollutants for Source Categories"** means the federal rules in 40 CFR Part 63.

(51) **"Natural conditions"** means naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.

(52) **"New source"** means:

(a) The construction or modification of a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted; and

(b) Any other project that constitutes a new source under the Federal Clean Air Act.

(53) **"New Source Performance Standards (NSPS)"** means the federal rules in 40 CFR Part 60.

(54) **"Nonattainment area"** means a geographic area designated by EPA at 40 CFR Part 81 as exceeding a National Ambient Air Quality Standard (NAAQS) for a given criteria pollutant. An area is nonattainment only for the pollutants for which the area has been designated nonattainment.

(55) **"Nonroad engine"** means:

(a) Except as discussed in (b) of this subsection, a nonroad engine is any internal combustion engine:

(i) In or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or

(ii) In or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or

(iii) That, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(b) An internal combustion engine is not a nonroad engine if:

(i) The engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Federal Clean Air Act; or

(ii) The engine is regulated by a New Source Performance Standard promulgated under section 111 of the Federal Clean Air Act; or

(iii) The engine otherwise included in (a)(iii) of this subsection remains or will remain at a location for more than twelve consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

(56) **"Notice of construction application"** means a written application to allow construction of a new source, modification of an existing stationary source or replacement or substantial alteration of control technology at an existing stationary source.

(57) **"Opacity"** means the degree to which an object seen through a plume is obscured, stated as a percentage.

(58) **"Outdoor burning"** means the combustion of material in an open fire or in an outdoor container, without providing for the control of combustion or the control of the emissions from the combustion. Wood waste disposal in wigwam burners is not considered outdoor burning.

(59) **"Order"** means any order issued by ecology or a local air authority pursuant to chapter 70.94 RCW, including, but not limited to RCW 70.94.332, 70.94.152, 70.94.153, 70.94.154, and 70.94.141(3), and includes, where used in the generic sense, the terms order, corrective action order, order of approval, and regulatory order.

(60) **"Order of approval"** or **"approval order"** means a regulatory order issued by a permitting authority to approve the notice of construction application for a proposed new source or modification, or the replacement or substantial alteration of control technology at an existing stationary source.

(61) **"Ozone depleting substance"** means any substance listed in Appendices A and B to Subpart A of 40 CFR Part 82.

(62) **"Particulate matter"** or **"particulates"** means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

(63) **"Particulate matter emissions"** means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method specified in Title 40, chapter I of the Code of Federal Regulations or by a test method specified in the SIP.

(64) **"Parts per million (ppm)"** means parts of a contaminant per million parts of gas, by volume, exclusive of water or particulates.

(65) **"Permitting authority"** means ecology or the local air pollution control authority with jurisdiction over the source.

(66) **"Person"** means an individual, firm, public or private corporation, association, partnership, political subdivision, municipality, or government agency.

(67) **"PM-10"** means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 CFR Part 50 Appendix J and designated in accordance with 40 CFR Part 53 or by an equivalent method designated in accordance with 40 CFR Part 53.

(68) **"PM-10 emissions"** means finely divided solid or liquid material, including condensible particulate matter, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternate method, specified in Appendix M of 40 CFR Part 51 or by a test method specified in the SIP.

(69) **"Potential to emit"** means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a source.

(70) **"Prevention of significant deterioration (PSD)"** means the program in WAC 173-400-700 to 173-400-750.

(71) **"Projected width"** means that dimension of a structure determined from the frontal area of the structure, projected onto a plane perpendicular to a line between the center of the stack and the center of the building.

(72) **"Reasonably attributable"** means attributable by visual observation or any other technique the state deems appropriate.

(73) **"Reasonably available control technology (RACT)"** means the lowest emission limit that a particular source or source category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. RACT is determined on a case-by-case basis for an individual source or source category taking into account the impact of the source upon air quality, the availability of additional controls, the emission reduction to be achieved by additional controls, the impact of additional controls on air quality, and the capital and operating costs of the additional controls. RACT requirements for any source or source category shall be adopted only after notice and opportunity for comment are afforded.

(74) **"Regulatory order"** means an order issued by ecology or permitting authority to an air contaminant source which applies to that source, any applicable provision of chapter 70.94 RCW, or the rules adopted thereunder, or, for sources regulated by a local air authority, the regulations of that authority.

(75) **"Secondary emissions"** means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the major stationary source or major modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

(a) Emissions from ships or trains located at the new or modified major stationary source; and

(b) Emissions from any off-site support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

(76) **"Source"** means all of the emissions unit(s) including quantifiable fugitive emissions, that are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control, whose activities are ancillary to the production of a single product or functionally related groups of products.

(77) **"Source category"** means all sources of the same type or classification.

(78) **"Stack"** means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct.

(79) **"Stack height"** means the height of an emission point measured from the ground-level elevation at the base of the stack.

(80) **"Standard conditions"** means a temperature of 20° (68° F) and a pressure of 760 mm (29.92 inches) of mercury.

(81) **"State implementation plan (SIP)"** or **"Washington SIP"** means the Washington SIP in 40 CFR Part 52, subpart WW. The SIP contains state, local and federal regulations and orders, the state plan and compliance schedules approved and promulgated by EPA, for the purpose of implementing, maintaining, and enforcing the National Ambient Air Quality Standards.

(82) **"Stationary source"** means any building, structure, facility, or installation which emits or may emit any air contaminant. This term does not include emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216(11) of the Federal Clean Air Act.

(83) **"Sulfuric acid plant"** means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge.

(84) **"Synthetic minor"** means any source whose potential to emit has been limited below applicable thresholds by means of a federally enforceable order, rule, or approval condition.

(85) **"Temporary source"** is a source of emissions (such as a nonroad engine) which is operated at a particular site for a limited period of time. A temporary source may or may not be a stationary source or a source as defined in subsections (76) and (82) of this section, respectively.

(86) **"Total reduced sulfur (TRS)"** means the sum of the sulfur compounds hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide, and any other organic sulfides emitted and measured by EPA method 16 in Appendix A to 40 CFR Part 60 or an EPA approved equivalent method and expressed as hydrogen sulfide.

(87) **"Total suspended particulate"** means particulate matter as measured by the method described in 40 CFR Part 50 Appendix B.

(88) **"Toxic air pollutant (TAP)"** or **"toxic air contaminant"** means any Class A or B toxic air pollutant listed in WAC 173-460-150 and 173-460-160. The term toxic air pollutant may include particulate matter and volatile organic compounds if an individual substance or a group of substances within either of these classes is listed in WAC 173-460-150 and/or 173-460-160. The term toxic air pollutant does not include particulate matter and volatile organic compounds as generic classes of compounds.

(89) **"Unclassifiable area"** means an area that cannot be designated attainment or nonattainment on the basis of available information as meeting or not meeting the National Ambient Air Quality Standard for the criteria pollutant and that is listed by EPA at 40 CFR Part 81.

(90) **"United States Environmental Protection Agency (USEPA)"** shall be referred to as EPA.

(91) **"Visibility impairment"** means any humanly perceptible change in visibility (light extinction, visual range, contrast, or coloration) from that which would have existed under natural conditions.

(92) **"Volatile organic compound (VOC)"** means any carbon compound that participates in atmospheric photochemical reactions.

(a) Exceptions. The following compounds are not a VOC: Acetone; carbon monoxide; carbon dioxide; carbonic acid; metallic carbides or carbonates; ammonium carbonate, methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro 1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1 chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane($(CF_3)_2CFCF_2OC_2H_5$); methyl acetate and perfluorocarbon compounds that fall into these classes:

(i) Cyclic, branched, or linear completely fluorinated alkanes;

(ii) Cyclic, branched, or linear completely fluorinated ethers with no unsaturations;

(iii) Cyclic, branched, or linear completely fluorinated tertiary amines with no unsaturations; and

(iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(b) For the purpose of determining compliance with emission limits, VOC will be measured by the appropriate methods in 40 CFR Part 60 Appendix A. Where the method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOC if the amount of the compounds is accurately quantified, and the exclusion is approved by ecology, the authority, or EPA.

(c) As a precondition to excluding these negligibly-reactive compounds as VOC or at any time thereafter, ecology or the authority may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of ecology or the authority, the amount of negligibly-reactive compounds in the source's emissions.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 07-11-039 (Order 06-03), § 173-400-030, filed 5/8/07, effective 6/8/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-030, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.-141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-030, filed 8/15/01, effective 9/15/01. Statutory Authority: RCW 70.94.152. 98-01-183 (Order 96-01), § 173-400-030, filed 12/23/97, effective 1/23/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-030, filed 9/13/96, effective 10/14/96; 95-07-126 (Order 93-40), § 173-400-030, filed 3/22/95, effective 4/22/95; 93-18-007 (Order 93-03), § 173-400-030, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-030, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-030, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-030, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-030, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-030, filed 5/8/79; Order DE 76-38, § 173-400-030, filed 12/21/76. Formerly WAC 18-04-030.]

WAC 173-400-035 Portable and temporary sources. (1) For portable sources which locate temporarily at particular sites, the owner(s) or operator(s) shall be allowed to operate at the temporary location providing that the owner(s) or operator(s) notifies **ecology** or the **authority** of intent to operate at the new location at least thirty days prior to starting the operation, and supplies sufficient information to enable **ecology** or the **authority** to determine that the operation will comply with the **emission standards** for a **new source,** and will not cause a violation of applicable **ambient air quality standards** and, if in a **nonattainment area,** will not interfere with scheduled attainment of **ambient standards.** The permission to operate shall be for a limited period of time (one year or less) and **ecology** or the **authority** may set specific conditions for operation during that period. A temporary source shall be required to comply with all applicable **emission standards.** A temporary or portable source that is considered a **major stationary source** within the meaning of WAC 173-400-113 must also comply with the requirements in WAC 173-400-141.

(2) This section applies statewide except where an authority has its own rule regulating such sources.

(3) Fees relating to this section can be found in chapter 173-455 WAC.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-400-035, filed 9/6/07, effective 10/7/07. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-035, filed 8/15/01, effective 9/15/01.]

WAC 173-400-040 General standards for maximum emissions. All sources and emissions units are required to meet the emission standards of this chapter. Where an emission standard listed in another chapter is applicable to a specific emissions unit, such standard will take precedent over a general emission standard listed in this chapter. When two or more emissions units are connected to a common stack and the operator elects not to provide the means or facilities to sample emissions from the individual emissions units, and the relative contributions of the individual emissions units to the common discharge are not readily distinguishable, then the emissions of the common stack must meet the most restrictive standard of any of the connected emissions units. Further, all emissions units are required to use reasonably available control technology (RACT) which may be determined for some sources or source categories to be more stringent than the applicable emission limitations of any chapter of Title 173 WAC. Where current controls are determined to be less than RACT, ecology or the authority shall, as provided in RCW 70.194.154 [RCW 70.94.154], define RACT for each source or source category and issue a rule or regulatory order requiring the installation of RACT.

(1) **Visible emissions.** No person shall cause or allow the emission for more than three minutes, in any one hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds twenty percent opacity except:

(a) When the emissions occur due to soot blowing/grate cleaning and the operator can demonstrate that the emissions will not exceed twenty percent opacity for more than fifteen minutes in any eight consecutive hours. The intent of this provision is to allow the soot blowing and grate cleaning necessary to the operation of boiler facilities. This practice, except for testing and trouble shooting, is to be scheduled for the same approximate times each day and ecology or the authority be advised of the schedule.

(b) When the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed twenty percent.

(c) When two or more emission units are connected to a common stack, ecology or the authority may allow or require the use of an alternate time period if it is more representative of normal operations.

(d) When an alternate opacity limit has been established per RCW 70.94.331 (2)(c).

(e) Exemptions from twenty percent opacity standard.

(i) Visible emissions reader certification testing. Visible emissions from the "smoke generator" used for testing and certification of visible emissions readers per the requirements of 40 CFR Part 60, Appendix A, Reference Method 9 and ecology methods 9A and 9B shall be exempt from compliance with the twenty percent opacity limitation while being used for certifying visible emission readers.

(ii) Visible emissions resulting from military obscurant training exercises is exempt from compliance with the twenty

percent opacity limitation provided the following criteria are met:

(A) No visible emissions shall cross the boundary of the military training site/reservation.

(B) The operation shall have in place methods, which have been reviewed and approved by the permitting authority, to detect changes in weather that would cause the obscurant to cross the site boundary either during the course of the exercise or prior to the start of the exercise. The approved methods shall include provisions that result in cancellation of the training exercise, cease the use of obscurants during the exercise until weather conditions would allow such training to occur without causing obscurant to leave the site boundary of the military site/reservation.

(iii) Visible emissions from fixed and mobile fire fighter training facilities while being used to train fire fighters and while complying with the requirements of chapter 173-425 WAC.

(2) **Fallout.** No person shall cause or allow the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

(3) **Fugitive emissions.** The owner or operator of any emissions unit engaging in materials handling, construction, demolition or other operation which is a source of fugitive emission:

(a) If located in an attainment area and not impacting any nonattainment area, shall take reasonable precautions to prevent the release of air contaminants from the operation.

(b) If the emissions unit has been identified as a significant contributor to the nonattainment status of a designated nonattainment area, the owner or operator shall be required to use reasonable and available control methods, which shall include any necessary changes in technology, process, or other control strategies to control emissions of the air contaminants for which nonattainment has been designated.

(4) **Odors.** Any person who shall cause or allow the generation of any odor from any source which may unreasonably interfere with any other property owner's use and enjoyment of his property must use recognized good practice and procedures to reduce these odors to a reasonable minimum.

(5) **Emissions detrimental to persons or property.** No person shall cause or allow the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.

(6) **Sulfur dioxide.**

No person shall cause or allow the emission of a gas containing sulfur dioxide from any emissions unit in excess of one thousand ppm of sulfur dioxide on a dry basis, corrected to seven percent oxygen for combustion sources, and based on the average of any period of sixty consecutive minutes, except:

When the owner or operator of an emissions unit supplies emission data and can demonstrate to ecology or the authority that there is no feasible method of reducing the concentration to less than one thousand ppm (on a dry basis, corrected to seven percent oxygen for combustion sources) and that the state and federal ambient air quality standards for sulfur dioxide will not be exceeded. In such cases, ecology or the authority may require specific ambient air monitoring stations be established, operated, and maintained by the owner or operator at mutually approved locations. All sampling results will be made available upon request and a monthly summary will be submitted to ecology or the authority.

(7) **Concealment and masking.** No person shall cause or allow the installation or use of any means which conceals or masks an emission of an air contaminant which would otherwise violate any provisions of this chapter.

(8) **Fugitive dust.**

(a) The owner or operator of a source of fugitive dust shall take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate the source to minimize emissions.

(b) The owner or operator of any existing source of fugitive dust that has been identified as a significant contributor to a PM-10 nonattainment area shall be required to use reasonably available control technology to control emissions. Significance will be determined by the criteria found in WAC 173-400-113 (2)(c).

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-040, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.-080. 01-17-062 (Order 99-06), § 173-400-040, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-040, filed 11/22/00, effective 12/23/00. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-040, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-040, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-040, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-040, filed 5/8/79; Order DE 76-38, § 173-400-040, filed 12/21/76. Formerly WAC 18-04-040.]

WAC 173-400-045 Control technology fees. Fees can be found in chapter 173-455 WAC.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-400-045, filed 9/6/07, effective 10/7/07. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-045, filed 9/13/96, effective 10/14/96. Statutory Authority: RCW 70.94.153 and 70.94.154. 94-17-070, § 173-400-045, filed 8/15/94, effective 9/15/94.]

WAC 173-400-050 Emission standards for combustion and incineration units. (1) Combustion and incineration emissions units must meet all requirements of WAC 173-400-040 and, in addition, no person shall cause or allow emissions of particulate matter in excess of 0.23 gram per dry cubic meter at standard conditions (0.1 grain/dscf), except, for an emissions unit combusting wood derived fuels for the production of steam. No person shall allow the emission of particulate matter in excess of 0.46 gram per dry cubic meter at standard conditions (0.2 grain/dscf), as measured by EPA method 5 in Appendix A to 40 CFR Part 60, (in effect on July 1, 2004) or approved procedures contained in "*Source Test Manual - Procedures For Compliance Testing*," state of Washington, department of ecology, as of July 12, 1990, on file at ecology.

(2) For any incinerator, no person shall cause or allow emissions in excess of one hundred ppm of total carbonyls as measured by Source Test Method 14 procedures contained in

"*Source Test Manual - Procedures for Compliance Testing*," state of Washington, department of ecology, as of July 12, 1990, on file at ecology. An applicable EPA reference method or other procedures to collect and analyze for the same compounds collected in the ecology method may be used if approved by the permitting authority or ecology prior to its use.

(a) **Incinerators** not subject to the requirements of chapter 173-434 WAC or WAC 173-400-050 (4) or (5), or requirements adopted by reference in WAC 173-400-075 (40 CFR 63 subpart EEE) and WAC 173-400-115 (40 CFR 60 subparts E, Ea, Eb, Ec, AAAA, and CCCC) shall be operated only during daylight hours unless written permission to operate at other times is received from the permitting authority.

(b) Total carbonyls means the concentration of organic compounds containing the =C=O radical as collected by the Ecology Source Test Method 14 contained in "*Source Test Manual - Procedures For Compliance Testing*," state of Washington, department of ecology, as of July 12, 1990, on file at ecology.

(3) Measured concentrations for combustion and incineration units shall be adjusted for volumes corrected to seven percent oxygen, except when ecology or the authority determines that an alternate oxygen correction factor is more representative of normal operations.

(4) **Commercial and industrial solid waste incineration units** constructed on or before November 30, 1999. (See WAC 173-400-115(2) for the requirements for a commercial and industrial solid waste incineration unit constructed after November 30, 1999, or modified or reconstructed after June 1, 2001.)

(a) Definitions.

(i) **"Commercial and industrial solid waste incineration (CISWI) unit"** means any combustion device that combusts commercial and industrial waste, as defined in this subsection. The boundaries of a CISWI unit are defined as, but not limited to, the commercial or industrial solid waste fuel feed system, grate system, flue gas system, and bottom ash. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the commercial and industrial solid waste hopper (if applicable) and extends through two areas: (A) The combustion unit flue gas system, which ends immediately after the last combustion chamber. (B) The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.

(ii) **"Commercial and industrial solid waste"** means solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility (including field erected, modular, and custom built incineration units operating with starved or excess air), or solid waste combusted in an air curtain incinerator without energy recovery that is a distinct operating unit of any commercial or industrial facility.

(b) Applicability. This section applies to incineration units that meet all three criteria:

(i) The incineration unit meets the definition of CISWI unit in this subsection.

(ii) The incineration unit commenced construction on or before November 30, 1999.

(iii) The incineration unit is not exempt under (c) of this subsection.

(c) The following types of incineration units are exempt from this subsection:

(i) *Pathological waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste as defined in 40 CFR 60.2265 (in effect on January 30, 2001) are not subject to this section if you meet the two requirements specified in (c)(i)(A) and (B) of this subsection.

(A) Notify the permitting authority that the unit meets these criteria.

(B) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit.

(ii) *Agricultural waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of agricultural wastes as defined in 40 CFR 60.2265 (in effect on January 30, 2001) are not subject to this subpart if you meet the two requirements specified in (c)(ii)(A) and (B) of this subsection.

(A) Notify the permitting authority that the unit meets these criteria.

(B) Keep records on a calendar quarter basis of the weight of agricultural waste burned, and the weight of all other fuels and wastes burned in the unit.

(iii) *Municipal waste combustion units.* Incineration units that meet either of the two criteria specified in (c)(iii)(A) and (B) of this subsection.

(A) Units are regulated under 40 CFR Part 60, subpart Ea or subpart Eb (in effect on July 1, 2000); Spokane County Air Pollution Control Authority Regulation 1, Section 6.17 (in effect on February 13, 1999); 40 CFR Part 60, subpart AAAA (adopted on December 6, 2000 and in effect on June 1, 2001); or WAC 173-400-050(5).

(B) Units burn greater than 30 percent municipal solid waste or refuse-derived fuel, as defined in 40 CFR Part 60, subparts Ea (in effect on July 1, 2000), Eb (in effect on July 1, 2000), and AAAA (adopted on December 6, 2000 and in effect on June 1, 2001), and WAC 173-400-050(5), and that have the capacity to burn less than 35 tons (32 megagrams) per day of municipal solid waste or refuse-derived fuel, if you meet the two requirements in (c)(iii)(B)(I) and (II) of this subsection.

(I) Notify the permitting authority that the unit meets these criteria.

(II) Keep records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight of all other fuels and wastes burned in the unit.

(iv) *Medical waste incineration units.* Incineration units regulated under 40 CFR Part 60, subpart Ec (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996) (in effect on July 1, 2000);

(v) *Small power production facilities.* Units that meet the three requirements specified in (c)(v)(A) through (C) of this subsection.

(A) The unit qualifies as a small power-production facility under section 3 (17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)).

(B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity.

(C) You notify the permitting authority that the unit meets all of these criteria.

(vi) *Cogeneration facilities.* Units that meet the three requirements specified in (c)(vi)(A) through (C) of this subsection.

(A) The unit qualifies as a cogeneration facility under section 3 (18)(B) of the Federal Power Act (16 U.S.C. 796 (18)(B)).

(B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.

(C) You notify the permitting authority that the unit meets all of these criteria.

(vii) *Hazardous waste combustion units.* Units that meet either of the two criteria specified in (c)(vii)(A) or (B) of this subsection.

(A) Units for which you are required to get a permit under section 3005 of the Solid Waste Disposal Act.

(B) Units regulated under subpart EEE of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors) (in effect on July 1, 2000).

(viii) *Materials recovery units.* Units that combust waste for the primary purpose of recovering metals, such as primary and secondary smelters;

(ix) *Air curtain incinerators.* Air curtain incinerators that burn only the materials listed in (c)(ix)(A) through (C) of this subsection are only required to meet the requirements under "Air Curtain Incinerators" in 40 CFR 60.2245 through 60.2260 (in effect on January 30, 2001).

(A) 100 percent wood waste.

(B) 100 percent clean lumber.

(C) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

(x) *Cyclonic barrel burners.* See 40 CFR 60.2265 (in effect on January 30, 2001).

(xi) *Rack, part, and drum reclamation units.* See 40 CFR 60.2265 (in effect on January 30, 2001).

(xii) *Cement kilns.* Kilns regulated under subpart LLL of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) (in effect on July 1, 2000).

(xiii) *Sewage sludge incinerators.* Incineration units regulated under 40 CFR Part 60, (Standards of Performance for Sewage Treatment Plants) (in effect on July 1, 2000).

(xiv) *Chemical recovery units.* Combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. The seven types of units described in (c)(xiv)(A) through (H) of this subsection are considered chemical recovery units.

(A) Units burning only pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process.

(B) Units burning only spent sulfuric acid used to produce virgin sulfuric acid.

(C) Units burning only wood or coal feedstock for the production of charcoal.

(D) Units burning only manufacturing by-product streams/residues containing catalyst metals which are reclaimed and reused as catalysts or used to produce commercial grade catalysts.

(E) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds.

(F) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes.

(G) Units burning only photographic film to recover silver.

(xv) *Laboratory analysis units.* Units that burn samples of materials for the purpose of chemical or physical analysis.

(d) Exceptions.

(i) Physical or operational changes to a CISWI unit made primarily to comply with this section do not qualify as a "modification" or "reconstruction" (as defined in 40 CFR 60.2815, in effect on January 30, 2001).

(ii) Changes to a CISWI unit made on or after June 1, 2001, that meet the definition of "modification" or "reconstruction" as defined in 40 CFR 60.2815 (in effect on January 30, 2001) mean the CISWI unit is considered a new unit and subject to WAC 173-400-115(2), which adopts 40 CFR Part 60, subpart CCCC by reference.

(e) A CISWI unit must comply with 40 CFR 60.2575 through 60.2875, in effect on January 30, 2001, which is adopted by reference. The federal rule contains these major components:

• Increments of progress towards compliance in 60.2575 through 60.2630;

• Waste management plan requirements in 60.2620 through 60.2630;

• Operator training and qualification requirements in 60.2635 through 60.2665;

• Emission limitations and operating limits in 60.2670 through 60.2685;

• Performance testing requirements in 60.2690 through 60.2725;

• Initial compliance requirements in 60.2700 through 60.2725;

• Continuous compliance requirements in 60.2710 through 60.2725;

• Monitoring requirements in 60.2730 through 60.2735;

• Recordkeeping and reporting requirements in 60.2740 through 60.2800;

• Title V operating permits requirements in 60.2805;

• Air curtain incinerator requirements in 60.2810 through 60.2870;

• Definitions in 60.2875; and

• Tables in 60.2875. In Table 1, the final control plan must be submitted before June 1, 2004, and final compliance must be achieved by June 1, 2005.

(i) Exception to adopting the federal rule. For purposes of this section, "administrator" includes the permitting authority.

(ii) Exception to adopting the federal rule. For purposes of this section, "you" means the owner or operator.

(iii) Exception to adopting the federal rule. For purposes of this section, each reference to "the effective date of state plan approval" means July 1, 2002.

(iv) Exception to adopting the federal rule. The Title V operating permit requirements in 40 CFR 2805(a) are not adopted by reference. Each CISWI unit, regardless of whether it is a major or nonmajor unit, is subject to the air operating permit regulation, chapter 173-401 WAC, beginning on July 1, 2002. See WAC 173-401-500 for the permit application requirements and deadlines.

(v) Exception to adopting the federal rule. The following compliance dates apply:

(A) The final control plan (Increment 1) must be submitted no later than July 1, 2003. (See Increment 1 in Table 1.)

(B) Final compliance (Increment 2) must be achieved no later than July 1, 2005. (See Increment 2 in Table 1.)

(5) **Small municipal waste combustion units** constructed on or before August 30, 1999. (See WAC 173-400-115(2) for the requirements for a municipal waste combustion unit constructed after August 30, 1999, or reconstructed or modified after June 6, 2001.)

(a) Definition. "Municipal waste combustion unit" means any setting or equipment that combusts, liquid, or gasified municipal solid waste including, but not limited to, field-erected combustion units (with or without heat recovery), modular combustion units (starved air- or excess-air), boilers (for example, steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air-curtain incinerators, or fluidized bed-fired), and pyrolysis/combustion units. Two criteria further define municipal waste combustion units:

(i) Municipal waste combustion units do not include the following units:

(A) Pyrolysis or combustion units located at a plastics or rubber recycling unit as specified under the exemptions in (d)(viii) and (ix) of this subsection.

(B) Cement kilns that combust municipal solid waste as specified under the exemptions in (d)(x) of this subsection.

(C) Internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

(ii) The boundaries of a municipal waste combustion unit are defined as follows. The municipal waste combustion unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustion unit water system. The municipal waste combustion unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine-generator set. The municipal waste combustion unit boundary starts at the municipal solid waste pit or hopper and extends through three areas:

(A) The combustion unit flue gas system, which ends immediately after the heat recovery equipment or, if there is no heat recovery equipment, immediately after the combustion chamber.

(B) The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.

(C) The combustion unit water system, which starts at the feed water pump and ends at the piping that exits the steam drum or superheater.

(b) Applicability. This section applies to a municipal waste combustion unit that meets these three criteria:

(i) The municipal waste combustion unit has the capacity to combust at least 35 tons per day of municipal solid waste but no more than 250 tons per day of municipal solid waste or refuse-derived fuel.

(ii) The municipal waste combustion unit commenced construction on or before August 30, 1999.

(iii) The municipal waste combustion unit is not exempt under (c) of this section.

(c) Exempted units. The following municipal waste combustion units are exempt from the requirements of this section:

(i) *Small municipal waste combustion units that combust less than 11 tons per day.* Units are exempt from this section if four requirements are met:

(A) The municipal waste combustion unit is subject to a federally enforceable order or order of approval limiting the amount of municipal solid waste combusted to less than 11 tons per day.

(B) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(C) The owner or operator of the unit sends a copy of the federally enforceable order or order of approval to the permitting authority.

(D) The owner or operator of the unit keeps daily records of the amount of municipal solid waste combusted.

(ii) *Small power production units.* Units are exempt from this section if four requirements are met:

(A) The unit qualifies as a small power production facility under section 3 (17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)).

(B) The unit combusts homogeneous waste (excluding refuse-derived fuel) to produce electricity.

(C) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(D) The owner or operator submits documentation to the permitting authority that the unit qualifies for the exemption.

(iii) *Cogeneration units.* Units are exempt from this section if four requirements are met:

(A) The unit qualifies as a small power production facility under section 3 (18)(C) of the Federal Power Act (16 U.S.C. 796 (18)(C)).

(B) The unit combusts homogeneous waste (excluding refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.

(C) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(D) The owner or operator submits documentation to the permitting authority that the unit qualifies for the exemption.

(iv) *Municipal waste combustion units that combust only tires.* Units are exempt from this section if three requirements are met:

(A) The municipal waste combustion unit combusts a single-item waste stream of tires and no other municipal waste (the unit can cofire coal, fuel oil, natural gas, or other nonmunicipal solid waste).

(B) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(C) The owner or operator submits documentation to the permitting authority that the unit qualifies for the exemption.

(v) *Hazardous waste combustion units.* Units are exempt from this section if the units have received a permit under section 3005 of the Solid Waste Disposal Act.

(vi) *Materials recovery units.* Units are exempt from this section if the units combust waste mainly to recover metals. Primary and secondary smelters may qualify for the exemption.

(vii) *Cofired units.* Units are exempt from this section if four requirements are met:

(A) The unit has a federally enforceable order or order of approval limiting municipal solid waste combustion to no more than 30 percent of total fuel input by weight.

(B) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(C) The owner or operator submits a copy of the federally enforceable order or order of approval to the permitting authority.

(D) The owner or operator records the weights, each quarter, of municipal solid waste and of all other fuels combusted.

(viii) *Plastics/rubber recycling units.* Units are exempt from this section if four requirements are met:

(A) The pyrolysis/combustion unit is an integrated part of a plastics/rubber recycling unit as defined in 40 CFR 60.1940 (in effect on February 5, 2001).

(B) The owner or operator of the unit records the weight, each quarter, of plastics, rubber, and rubber tires processed.

(C) The owner or operator of the unit records the weight, each quarter, of feed stocks produced and marketed from chemical plants and petroleum refineries.

(D) The owner or operator of the unit keeps the name and address of the purchaser of the feed stocks.

(ix) *Units that combust fuels made from products of plastics/rubber recycling plants.* Units are exempt from this section if two requirements are met:

(A) The unit combusts gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquified petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feed stocks produced by plastics/rubber recycling units.

(B) The unit does not combust any other municipal solid waste.

(x) *Cement kilns.* Cement kilns that combust municipal solid waste are exempt.

(xi) *Air curtain incinerators.* If an air curtain incinerator as defined under 40 CFR 60.1910 (in effect on February 5, 2001) combusts 100 percent yard waste, then those units must only meet the requirements under 40 CFR 60.1910 through 60.1930 (in effect on February 5, 2001).

(d) Exceptions.

(i) Physical or operational changes to an existing municipal waste combustion unit made primarily to comply with this section do not qualify as a modification or reconstruction, as those terms are defined in 40 CFR 60.1940 (in effect on February 5, 2001).

(ii) Changes to an existing municipal waste combustion unit made on or after June 6, 2001, that meet the definition of modification or reconstruction, as those terms are defined in 40 CFR 60.1940 (in effect on February 5, 2001), mean the unit is considered a new unit and subject to WAC 173-400-115(2), which adopts 40 CFR Part 60, subpart AAAA (in effect on June 6, 2001).

(e) Municipal waste combustion units are divided into two subcategories based on the aggregate capacity of the municipal waste combustion plant as follows:

(i) Class I units. Class I units are small municipal waste combustion units that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See the definition of "municipal waste combustion plant capacity" in 40 CFR 60.1940 (in effect on February 5, 2001) for the specification of which units are included in the aggregate capacity calculation.

(ii) Class II units. Class II units are small municipal waste combustion units that are located at municipal waste combustion plants with an aggregate plant combustion capacity less than or equal to 250 tons per day of municipal solid waste. See the definition of "municipal waste combustion plant capacity" in 40 CFR 60.1940 (in effect on February 5, 2001) for the specification of which units are included in the aggregate capacity calculation.

(f) Compliance option 1.

(i) A municipal solid waste combustion unit may choose to reduce, by the final compliance date of June 1, 2005, the maximum combustion capacity of the unit to less than 35 tons per day of municipal solid waste. The owner or operator must submit a final control plan and the notifications of achievement of increments of progress as specified in 40 CFR 60.1610 (in effect on February 5, 2001).

(ii) The final control plan must, at a minimum, include two items:

(A) A description of the physical changes that will be made to accomplish the reduction.

(B) Calculations of the current maximum combustion capacity and the planned maximum combustion capacity after the reduction. Use the equations specified in 40 CFR 60.1935 (d) and (e) (in effect on February 5, 2001) to calculate the combustion capacity of a municipal waste combustion unit.

(iii) An order or order of approval containing a restriction or a change in the method of operation does not qualify as a reduction in capacity. Use the equations specified in 40 CFR 60.1935 (d) and (e) (in effect on February 5, 2001) to calculate the combustion capacity of a municipal waste combustion unit.

(g) Compliance option 2. The municipal waste combustion unit must comply with 40 CFR 60.1585 through 60.-1905, and 60.1935 (in effect on February 5, 2001), which is adopted by reference.

(i) The rule contains these major components:

(A) Increments of progress towards compliance in 60.1585 through 60.1640;

(B) Good combustion practices - operator training in 60.1645 through 60.1670;

(C) Good combustion practices - operator certification in 60.1675 through 60.1685;

(D) Good combustion practices - operating requirements in 60.1690 through 60.1695;

(E) Emission limits in 60.1700 through 60.1710;

(F) Continuous emission monitoring in 60.1715 through 60.1770;

(G) Stack testing in 60.1775 through 60.1800;

(H) Other monitoring requirements in 60.1805 through 60.1825;

(I) Recordkeeping reporting in 60.1830 through 60.1855;

(J) Reporting in 60.1860 through 60.1905;

(K) Equations in 60.1935;

(L) Tables 2 through 8.

(ii) Exception to adopting the federal rule. For purposes of this section, each reference to the following is amended in the following manner:

(A) "State plan" in the federal rule means WAC 173-400-050(5).

(B) "You" in the federal rule means the owner or operator.

(C) "Administrator" includes the permitting authority.

(D) Table 1 in (h)(ii) of this subsection substitutes for Table 1 in the federal rule.

(E) "The effective date of the state plan approval" in the federal rule means December 6, 2002.

(h) Compliance schedule.

(i) Small municipal waste combustion units must achieve final compliance or cease operation not later than December 1, 2005.

(ii) Small municipal waste combustion units must comply with Table 1.

Table 1 Compliance Schedules and Increments of Progress

Affected units	Increment 1 (Submit final control plan)	Increment 2 (Award contracts)	Increment 3 (Begin on-site construction)	Increment 4 (Complete on-site construction)	Increment 5 (Final compliance)
All Class I units	August 6, 2003	April 6, 2004	October 6, 2004	October 6, 2005	November 6, 2005
All Class II units	September 6, 2003	Not applicable	Not applicable	Not applicable	May 6, 2005

(iii) Class I units must comply with these additional requirements:

(A) The owner or operator must submit the dioxins/furans stack test results for at least one test conducted during or after 1990. The stack test must have been conducted according to the procedures specified under 40 CFR 60.1790 (in effect on February 5, 2001).

(B) Class I units that commenced construction after June 26, 1987, must comply with the dioxins/furans and mercury limits specified in Tables 2 and 3 in 40 CFR Part 60, subpart BBBB (in effect on February 5, 2001) by the later of two dates:

(I) December 6, 2003; or

(II) One year following the issuance of an order of approval (revised construction approval or operation permit) if an order or order of approval or operation modification is required.

(i) Air operating permit. Applicability to chapter 173-401 WAC, the air operating permit regulation, begins on July 1, 2002. See WAC 173-401-500 for the permit application requirements and deadlines.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-050, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-050, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-050, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-050, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-050, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-050, filed 5/8/79; Order DE 76-38, § 173-400-050, filed 12/21/76. Formerly WAC 18-04-050.]

WAC 173-400-060 Emission standards for general process units. General process units are required to meet all applicable provisions of WAC 173-400-040 and, no person shall cause or allow the emission of particulate material from any general process operation in excess of 0.23 grams per dry cubic meter at standard conditions (0.1 grain/dscf) of exhaust gas. EPA test methods (in effect on February 20, 2001) from 40 CFR Parts 51, 60, 61, and 63 and any other approved test procedures which are contained in ecology's "*Source Test Manual - Procedures For Compliance Testing*" as of July 12, 1990, will be used to determine compliance.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-060, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-060, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-060, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-060, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-060, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-060, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-060, filed 8/20/80; Order DE 76-38, § 173-400-060, filed 12/21/76. Formerly WAC 18-04-060.]

WAC 173-400-070 Emission standards for certain source categories. Ecology finds that the reasonable regulation of sources within certain categories requires separate standards applicable to such categories. The standards set forth in this section shall be the maximum allowable standards for emissions units within the categories listed. Except as specifically provided in this section, such emissions units shall not be required to meet the provisions of WAC 173-400-040, 173-400-050 and 173-400-060.

(1) **Wigwam burners.**

(a) All wigwam burners shall meet all provisions of WAC 173-400-040 (2), (3), (4), (5), (6), (7), and WAC 173-

400-050(4) or 173-400-115 (40 CFR 60 subpart DDDD) as applicable.

(b) All wigwam burners shall use RACT. All emissions units shall be operated and maintained to minimize emissions. These requirements may include a controlled tangential vent overfire air system, an adequate underfire system, elimination of all unnecessary openings, a controlled feed and other modifications determined necessary by ecology or the permitting authority.

(c) It shall be unlawful to install or increase the existing use of any burner that does not meet all requirements for new sources including those requirements specified in WAC 173-400-040 and 173-400-050, except operating hours.

(d) Ecology may establish additional requirements for wigwam burners located in sensitive areas as defined by chapter 173-440 WAC. These requirements may include but shall not be limited to:

(i) A requirement to meet all provisions of WAC 173-400-040 and 173-400-050. Wigwam burners will be considered to be in compliance if they meet the requirements contained in WAC 173-400-040(1). An exception is made for a startup period not to exceed thirty minutes in any eight consecutive hours.

(ii) A requirement to apply BACT.

(iii) A requirement to reduce or eliminate emissions if ecology establishes that such emissions unreasonably interfere with the use and enjoyment of the property of others or are a cause of violation of ambient air standards.

(2) **Hog fuel boilers.**

(a) Hog fuel boilers shall meet all provisions of WAC 173-400-040 and 173-400-050(1), except that emissions may exceed twenty percent opacity for up to fifteen consecutive minutes once in any eight hours. The intent of this provision is to allow soot blowing and grate cleaning necessary to the operation of these units. This practice is to be scheduled for the same specific times each day and the permitting authority shall be notified of the schedule or any changes.

(b) All hog fuel boilers shall utilize RACT and shall be operated and maintained to minimize emissions.

(3) **Orchard heating.**

(a) Burning of rubber materials, asphaltic products, crankcase oil or petroleum wastes, plastic, or garbage is prohibited.

(b) It is unlawful to burn any material or operate any orchard-heating device that causes a visible emission exceeding twenty percent opacity, except during the first thirty minutes after such device or material is ignited.

(4) **Grain elevators.**

Any grain elevator which is primarily classified as a materials handling operation shall meet all the provisions of WAC 173-400-040 (2), (3), (4), and (5).

(5) **Catalytic cracking units.**

(a) All existing catalytic cracking units shall meet all provisions of WAC 173-400-040 (2), (3), (4), (5), (6), and (7) and:

(i) No person shall cause or allow the emission for more than three minutes, in any one hour, of an air contaminant from any catalytic cracking unit which at the emission point, or within a reasonable distance of the emission point, exceeds forty percent opacity.

(b) in addition to the applicable requirements specified in this

(ii) No person shall cause or allow the emission of particulate material in excess of 0.46 grams per dry cubic meter at standard conditions (0.20 grains/dscf) of exhaust gas.

(b) All new catalytic cracking units shall meet all provisions of WAC 173-400-115.

(6) **Other wood waste burners.**

(a) Wood waste burners not specifically provided for in this section shall meet all applicable provisions of WAC 173-400-040. In addition, wood waste burners subject to WAC 173-400-050(4) or 173-400-115 (40 CFR 60 subpart DDDD) must meet all applicable provisions of those sections.

(b) Such wood waste burners shall utilize RACT and shall be operated and maintained to minimize emissions.

(7) **Sulfuric acid plants.**

No person shall cause to be discharged into the atmosphere from a sulfuric acid plant, any gases which contain acid mist, expressed as H_2SO_4, in excess of 0.15 pounds per ton of acid produced. Sulfuric acid production shall be expressed as one hundred percent H_2SO_4.

(8) **Sewage sludge incinerators.** Standards for the incineration of sewage sludge found in 40 CFR Part 503 subparts A (General Provisions) and E (Incineration) in effect on July 1, 2004, are adopted by reference.

(9) **Municipal solid waste landfills constructed, reconstructed, or modified before May 30, 1991.** A municipal solid waste landfill (MSW landfill) is an entire disposal facility in a contiguous geographical space where household waste is placed in or on the land. A MSW landfill may also receive other types of waste regulated under Subtitle D of the Federal Recourse Conservation and Recovery Act including the following: Commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. A MSW landfill may be either publicly or privately owned. A MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion. All references in this subsection to 40 CFR Part 60 rules mean those rules in effect on July 1, 2000.

(a) Applicability. These rules apply to each MSW landfill constructed, reconstructed, or modified before May 30, 1991; and the MSW landfill accepted waste at any time since November 8, 1987 or the landfill has additional capacity for future waste deposition. (See WAC 173-400-115(2) for the requirements for MSW landfills constructed, reconstructed, or modified on or after May 30, 1991.) Terms in this subsection have the meaning given them in 40 CFR 60.751, except that every use of the word "administrator" in the federal rules referred to in this subsection includes the "permitting authority."

(b) Exceptions. Any physical or operational change to an MSW landfill made solely to comply with these rules is not considered a modification or rebuilding.

(c) Standards for MSW landfill emissions.

(i) A MSW landfill having a design capacity less than 2.5 million megagrams or 2.5 million cubic meters must comply with the requirements of 40 CFR 60.752(a) in addition to the applicable requirements specified in this section.

(ii) A MSW landfill having design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must comply with the requirements of 40 CFR 60.752 section.

(d) Recordkeeping and reporting. A MSW landfill must follow the recordkeeping and reporting requirements in 40 CFR 60.757 (submittal of an initial design capacity report) and 40 CFR 60.758 (recordkeeping requirements), as applicable, except as provided for under (d)(i) and (ii).

(i) The initial design capacity report for the facility is due before September 20, 2001.

(ii) The initial nonmethane organic compound (NMOC) emissions rate report is due before September 20, 2001.

(e) Test methods and procedures.

(i) A MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must calculate the landfill nonmethane organic compound emission rates following the procedures listed in 40 CFR 60.754, as applicable, to determine whether the rate equals or exceeds 50 megagrams per year.

(ii) Gas collection and control systems must meet the requirements in 40 CFR 60.752 (b)(2)(ii) through the following procedures:

(A) The systems must follow the operational standards in 40 CFR 60.753.

(B) The systems must follow the compliance provisions in 40 CFR 60.755 (a)(1) through (a)(6) to determine whether the system is in compliance with 40 CFR 60.752 (b)(2)(ii).

(C) The system must follow the applicable monitoring provisions in 40 CFR 60.756.

(f) Conditions. Existing MSW landfills that meet the following conditions must install a gas collection and control system:

(i) The landfill accepted waste at any time since November 8, 1987, or the landfill has additional design capacity available for future waste deposition;

(ii) The landfill has design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exception values. Any density conversions shall be documented and submitted with the report; and

(iii) The landfill has a nonmethane organic compound (NMOC) emission rate of 50 megagrams per year or greater.

(g) Change in conditions. After the adoption date of this rule, a landfill that meets all three conditions in (e) of this subsection must comply with all the requirements of this section within thirty months of the date when the conditions were met. This change will usually occur because the NMOC emission rate equaled or exceeded the rate of 50 megagrams per year.

(h) Gas collection and control systems.

(i) Gas collection and control systems must meet the requirements in 40 CFR 60.752 (b)(2)(ii).

(ii) The design plans must be prepared by a licensed professional engineer and submitted to the permitting authority within one year after the adoption date of this section.

(iii) The system must be installed within eighteen months after the submittal of the design plans.

(iv) The system must be operational within thirty months after the adoption date of this section.

(v) The emissions that are collected must be controlled in one of three ways:

(A) An open flare designed and operated according to 40 CFR 60.18;

(B) A control system designed and operated to reduce NMOC by 98 percent by weight; or

(C) An enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, dry basis to three percent oxygen, or less.

(i) Air operating permit.

(i) A MSW landfill that has a design capacity less than 2.5 million megagrams or 2.5 million cubic meters on January 7, 2000, is not subject to the air operating permit regulation, unless the landfill is subject to chapter 173-401 WAC for some other reason. If the design capacity of an exempted MSW landfill subsequently increases to equal or exceed 2.5 million megagrams or 2.5 million cubic meters by a change that is not a modification or reconstruction, the landfill is subject to chapter 173-401 WAC on the date the amended design capacity report is due.

(ii) A MSW landfill that has a design capacity equal to or greater than 2.5 million megagrams or 2.5 million cubic meters on January 7, 2000, is subject to chapter 173-401 WAC beginning on the effective date of this section. (Note: Under 40 CFR 62.14352(e), an applicable MSW landfill must have submitted its application so that by April 6, 2001, the permitting authority was able to determine that it was timely and complete. Under 40 CFR 70.7(b), no source may operate after the time that it is required to submit a timely and complete application.)

(iii) When a MSW landfill is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit for the landfill if the landfill is not subject to chapter 173-401 WAC for some other reason and if either of the following conditions are met:

(A) The landfill was never subject to the requirement for a control system under 40 CFR 62.14353; or

(B) The landfill meets the conditions for control system removal specified in 40 CFR 60.752 (b)(2)(v).

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-070, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-070, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-070, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-070, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-070, filed 9/13/96, effective 10/14/96; 91-05-064 (Order 90-06), § 173-400-070, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-070, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-070, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-070, filed 5/8/79; Order DE 76-38, § 173-400-070, filed 12/21/76. Formerly WAC 18-04-070.]

WAC 173-400-075 Emission standards for sources emitting hazardous air pollutants. (1) National emission standards for hazardous air pollutants (NESHAPs). 40 CFR Part 61 and Appendices in effect on October 1, 2006, is adopted by reference. The term "administrator" in 40 CFR Part 61 includes the permitting authority.

(2) The permitting authority may conduct source tests and require access to records, books, files, and other information specific to the control, recovery, or release of those pollutants regulated under 40 CFR Parts 61, 62, 63 and/or 65 in

order to determine the status of compliance of sources of these contaminants and to carry out its enforcement responsibilities.

(3) Source testing, monitoring, and analytical methods for sources of hazardous air pollutants must conform with the requirements of 40 CFR Parts 61, 62, 63 and/or 65.

(4) This section does not apply to any source operating under a waiver granted by EPA or an exemption granted by the president of the United States.

(5) Where EPA has delegated to the permitting authority, the authority to receive reports under 40 CFR Parts 61 or 63, from the affected facility in lieu of providing such report to EPA, the affected facility is required to provide such reports only to the permitting authority unless otherwise requested in writing by the permitting authority or EPA.

(6) **Maximum achievable control technology (MACT) standards.** MACT standards are officially known as National Emission Standards for Hazardous Air Pollutants for Source Categories.

(a) Adopt by reference.

40 CFR Part 63 and Appendices in effect on October 1, 2006, is adopted by reference. Exceptions are listed in (6)(b) of this section.

The following list of subparts to 40 CFR 63 which are shown as blank or reserved as of the date listed above, is provided for informational purposes only: Subparts K, P, V, Z, FF, NN, ZZ, AAA, BBB, FFF, KKK, SSS, WWW, YYY, ZZZ, BBBB, LLLL, and OOOOO.

(b) Exceptions to adopting 40 CFR Part 63 by reference.

(i) The term "administrator" in 40 CFR Part 63 includes the permitting authority.

(ii) The following subparts of 40 CFR Part 63 are not adopted by reference:

(A) Subpart C: List of Hazardous Air Pollutants, Petition Process, Lesser Quantity Designations, Source Category List.

(B) Subpart E: Approval of State Programs and Delegation of Federal Authorities.

(C) Subpart M: National Perchloroethylene Emission Standards for Dry Cleaning Facilities as it applies to nonmajor sources.

(7) **Consolidated requirements for the synthetic organic chemical manufacturing industry.** 40 CFR Part 65, in effect on October 1, 2006, is adopted by reference.

(8) **Emission standards for perchloroethylene dry cleaners.**

(a) **Applicability.**

(i) This section applies to all dry cleaning systems that use perchloroethylene (PCE). Table 1 divides dry cleaning facilities into 3 regulatory source categories by the type of equipment they use and the volume of PCE purchased. Each dry cleaning system must follow the applicable requirements in Table 1:

TABLE 1. PCE Dry Cleaner Source Categories

Dry cleaning facilities with:	Small area source purchases less than:	Large area source purchases between:	Major source purchases more than:
(1) Only Dry-to-Dry Machines	140 gallons PCE/yr	140-2,100 gallons PCE/yr	2,100 gallons PCE/yr
(2) Only Transfer Machines	200 gallons PCE/yr	200-1,800 gallons PCE/yr	1,800 gallons PCE/yr
(3) Both Dry-to-Dry and Transfer Machines	140 gallons PCE/yr	140-1,800 gallons PCE/yr	1,800 gallons PCE/yr

(ii) Major sources. In addition to the requirements in this section, a dry cleaning system that is considered a major source according to Table 1 must follow the federal requirements for major sources in 40 CFR Part 63, Subpart M (in effect on July 1, 2001).

(b) **Operations and maintenance record.**

(i) Each dry cleaning facility must keep an operations and maintenance record that is available upon request.

(ii) The information in the operations and maintenance record must be kept on-site for five years.

(iii) The operations and maintenance record must contain the following information:

(A) Inspection: The date and result of each inspection of the dry cleaning system. The inspection must note the condition of the system and the time any leaks were observed.

(B) Repair: The date, time, and result of each repair of the dry cleaning system.

(C) Refrigerated condenser information. If you have a refrigerated condenser, enter this information:

(I) The air temperature at the inlet of the refrigerated condenser;

(II) The air temperature at the outlet of the refrigerated condenser;

(III) The difference between the inlet and outlet temperature readings; and

(IV) The date the temperature was taken.

(D) Carbon adsorber information. If you have a carbon adsorber, enter this information:

(I) The concentration of PCE in the exhaust of the carbon adsorber; and

(II) The date the concentration was measured.

(E) A record of the volume of PCE purchased each month must be entered by the first of the following month;

(F) A record of the total amount of PCE purchased over the previous twelve months must be entered by the first of each month;

(G) All receipts of PCE purchases; and

(H) A record of any pollution prevention activities that have been accomplished.

(c) **General operations and maintenance requirements.**

(i) Drain cartridge filters in their housing or other sealed container for at least twenty-four hours before discarding the cartridges.

(ii) Close the door of each dry cleaning machine except when transferring articles to or from the machine.

(iii) Store all PCE, and wastes containing PCE, in a closed container with no perceptible leaks.

(iv) Operate and maintain the dry cleaning system according to the manufacturer's specifications and recommendations.

(v) Keep a copy on-site of the design specifications and operating manuals for all dry cleaning equipment.

(vi) Keep a copy on-site of the design specifications and operating manuals for all emissions control devices.

(vii) Route the PCE gas-vapor stream from the dry cleaning system through the applicable equipment in Table 2:

TABLE 2. Minimum PCE Vapor Vent Control Requirements

Small area source	Large area source	Major source
Refrigerated condenser for all machines installed after September 21, 1993.	Refrigerated condenser for all machines.	Refrigerated condenser with a carbon adsorber for all machines installed after September 21, 1993.

(d) **Inspection.**

(i) The owner or operator must inspect the dry cleaning system at a minimum following the requirements in Table 3:

TABLE 3. Minimum Inspection Frequency

Small area source	Large area source	Major source
Once every 2 weeks.	Once every week.	Once every week.

(ii) An inspection must include an examination of these components for condition and perceptible leaks:

(A) Hose and pipe connections, fittings, couplings, and valves;

(B) Door gaskets and seatings;

(C) Filter gaskets and seatings;

(D) Pumps;

(E) Solvent tanks and containers;

(F) Water separators;

(G) Muck cookers;

(H) Stills;

(I) Exhaust dampers; and

(J) Cartridge filter housings.

(iii) The dry cleaning system must be inspected while it is operating.

(iv) The date and result of each inspection must be entered in the operations and maintenance record at the time of the inspection.

(e) **Repair.**

(i) Leaks must be repaired within twenty-four hours of detection if repair parts are available.

(ii) If repair parts are unavailable, they must be ordered within two working days of detecting the leak.

(iii) Repair parts must be installed as soon as possible, and no later than five working days after arrival.

(iv) The date and time each leak was discovered must be entered in the operations and maintenance record.

(v) The date, time, and result of each repair must be entered in the operations and maintenance record at the time of the repair.

(f) **Requirements for systems with refrigerated condensers.** A dry cleaning system using a refrigerated condenser must meet all of the following requirements:

(i) Outlet air temperature.

(A) Each week the air temperature sensor at the outlet of the refrigerated condenser must be checked.

(B) The air temperature at the outlet of the refrigerated condenser must be less than or equal to 45°F (7.2°C) during the cool-down period.

(C) The air temperature must be entered in the operations and maintenance record manual at the time it is checked.

(D) The air temperature sensor must meet these requirements:

(I) An air temperature sensor must be permanently installed on a dry-to-dry machine, dryer or reclaimer at the outlet of the refrigerated condenser. The air temperature sensor must be installed by September 23, 1996, if the dry cleaning system was constructed before December 9, 1991.

(II) The air temperature sensor must be accurate to within 2°F (1.1°C).

(III) The air temperature sensor must be designed to measure at least a temperature range from 32°F (0°C) to 120°F (48.9°C); and

(IV) The air temperature sensor must be labeled "RC outlet."

(ii) Inlet air temperature.

(A) Each week the air temperature sensor at the inlet of the refrigerated condenser installed on a washer must be checked.

(B) The inlet air temperature must be entered in the operations and maintenance record at the time it is checked.

(C) The air temperature sensor must meet these requirements:

(I) An air temperature sensor must be permanently installed on a washer at the inlet of the refrigerated condenser. The air temperature sensor must be installed by September 23, 1996, if the dry cleaning system was constructed before December 9, 1991.

(II) The air temperature sensor must be accurate to within 2°F (1.1°C).

(III) The air temperature sensor must be designed to measure at least a temperature range from 32°F (0°C) to 120°F (48.9°C).

(IV) The air temperature sensor must be labeled "RC inlet."

(iii) For a refrigerated condenser used on the washer unit of a transfer system, the following are additional requirements:

(A) Each week the difference between the air temperature at the inlet and outlet of the refrigerated condenser must be calculated.

(B) The difference between the air temperature at the inlet and outlet of a refrigerated condenser installed on a washer must be greater than or equal to 20°F (11.1°C).

(C) The difference between the inlet and outlet air temperature must be entered in the operations and maintenance record each time it is checked.

(iv) A converted machine with a refrigerated condenser must be operated with a diverter valve that prevents air drawn into the dry cleaning machine from passing through the refrigerated condenser when the door of the machine is open;

(v) The refrigerated condenser must not vent the air-PCE gas-vapor stream while the dry cleaning machine drum is rotating or, if installed on a washer, until the washer door is opened; and

(vi) The refrigerated condenser in a transfer machine may not be coupled with any other equipment.

(g) **Requirements for systems with carbon adsorbers.** A dry cleaning system using a carbon adsorber must meet all of the following requirements:

(i) Each week the concentration of PCE in the exhaust of the carbon adsorber must be measured at the outlet of the carbon adsorber using a colorimetric detector tube.

(ii) The concentration of PCE must be written in the operations and maintenance record each time the concentration is checked.

(iii) If the dry cleaning system was constructed before December 9, 1991, monitoring must begin by September 23, 1996.

(iv) The colorimetric tube must meet these requirements:

(A) The colorimetric tube must be able to measure a concentration of 100 parts per million of PCE in air.

(B) The colorimetric tube must be accurate to within 25 parts per million.

(C) The concentration of PCE in the exhaust of the carbon adsorber must not exceed 100 ppm while the dry cleaning machine is venting to the carbon adsorber at the end of the last dry cleaning cycle prior to desorption of the carbon adsorber.

(v) If the dry cleaning system does not have a permanently fixed colorimetric tube, a sampling port must be provided within the exhaust outlet of the carbon adsorber. The sampling port must meet all of these requirements:

(A) The sampling port must be easily accessible;

(B) The sampling port must be located 8 stack or duct diameters downstream from a bend, expansion, contraction or outlet; and

(C) The sampling port must be 2 stack or duct diameters upstream from a bend, expansion, contraction, inlet or outlet.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 07-11-039 (Order 06-03), § 173-400-075, filed 5/8/07, effective 6/8/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-075, filed 1/10/05, effective 2/10/05. Statutory Authority: RCW 70.94.331. 02-15-068 (Order 02-09), § 173-400-075, filed 7/11/02, effective 8/11/02. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-075, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-075, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW 70.94.860, 70.94.-510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-075, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-075, filed 9/13/96, effective 10/14/96; 93-05-044 (Order 92-34), § 173-400-075, filed 2/17/93, effective 3/20/93; 91-05-064 (Order 90-06), § 173-400-075, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-075, filed 3/6/85. Statutory Authority: Chapter 70.94 RCW. 84-10-019 (Order DE 84-8), § 173-400-075, filed 4/26/84. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-075, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-075, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-075, filed 5/8/79; Order DE 76-38, § 173-400-075, filed 12/21/76. Formerly WAC 18-04-075.]

WAC 173-400-081 Startup and shutdown. In promulgating technology-based emission standards and making control technology determinations (e.g., BACT, RACT, LAER, BART) ecology and the authorities shall consider any physical constraints on the ability of a source to comply with the applicable standard during startup or shutdown. Where ecology or the authority determines that the source or source category, operated and maintained in accordance with good air pollution control practice, is not capable of achieving continuous compliance with an emission standard during startup or shutdown, ecology or the authority shall include in the standard appropriate emission limitations, operating parameters, or other criteria to regulate the performance of the source during startup or shutdown conditions. In modeling the emissions of a source for purposes of demonstrating attainment or maintenance of national ambient air quality standards, ecology and the authorities shall take into account any incremental increase in allowable emissions under startup or shutdown conditions authorized by an emission limitation or other operating parameter adopted under this rule. Any emission limitation or other parameter adopted under this rule which increases allowable emissions during startup or shutdown conditions over levels authorized in an approved state implementation plan shall not take effect until approved by EPA as a SIP amendment.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-081, filed 8/20/93, effective 9/20/93.]

WAC 173-400-091 Voluntary limits on emissions. (1) Upon request by the owner or operator of a source, ecology or the authority with jurisdiction over the source shall issue a regulatory order that limits the source's potential to emit any air contaminant or contaminants to a level agreed to by the owner or operator and ecology or the authority with jurisdiction over the source.

(2) A condition contained in an order issued under this section shall be less than the source's otherwise allowable annual emissions of a particular contaminant under all applicable requirements of the chapter 70.94 RCW and the FCAA, including any standard or other requirement provided for in the Washington state implementation plan. The term "condition" refers to limits on production or other limitations, in addition to emission limitations.

(3) Any order issued under this section shall include monitoring, recordkeeping and reporting requirements sufficient to ensure that the source complies with any condition established under this section. Monitoring requirements shall use terms, test methods, units, averaging periods, and other statistical conventions consistent with the requirements of WAC 173-400-105.

(4) Any order issued under this section shall be subject to the notice and comment procedures under WAC 173-400-171.

(5) The terms and conditions of a regulatory order issued under this section shall be federally enforceable, upon approval of this section as an element of the Washington state implementation plan. Any proposed deviation from a condition contained in an order issued under this section shall require revision or revocation of the order.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-091, filed 8/20/93, effective 9/20/93.]

WAC 173-400-099 Registration program. (1) Program purpose.

(a) The registration program is a program to develop and maintain a current and accurate record of air contaminant sources. Information collected through the registration program is used to evaluate the effectiveness of air pollution control strategies and to verify source compliance with applicable air pollution requirements.

(b) Permit program sources, as defined in RCW 70.94.-030(17), are not required to comply with the registration requirements of WAC 173-400-100 through 173-400-104.

(2) Program components. The components of the registration program consist of:

(a) Initial registration and annual or other periodic reports from stationary source owners providing information on location, size, height of contaminant outlets, processes employed, nature and quantity of the air contaminant emissions, and other information that is relevant to air pollution and available or reasonably capable of being assembled. For purposes of this chapter, information relevant to air pollution may include air pollution requirements established by rule, regulatory order, or ordinance pursuant to chapter 70.94 RCW.

(b) On-site inspections necessary to verify compliance with registration requirements.

(c) Data storage and retrieval systems necessary for support of the registration program.

(d) Emission inventory reports and emission reduction credits computed from information provided by source owners pursuant to registration requirements.

(e) Staff review, including engineering analysis for accuracy and currentness of information provided by source owners pursuant to registration program requirements.

(f) Clerical and other office support in direct furtherance of the registration program.

(g) Administrative support provided in directly carrying out the registration program.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-099, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-099, filed 3/22/95, effective 4/22/95.]

WAC 173-400-100 Source classifications. (1) **Source classification list.** In counties without a local authority, or for sources under the jurisdiction of ecology, the owner or operator of each source within the following source categories shall register the source with ecology:

(a) Agricultural chemical facilities engaging in the manufacturing of liquid or dry fertilizers or pesticides;

(b) Agricultural drying and dehydrating operations;

(c) Any category of stationary source that includes an emissions unit subject to a new source performance standard (NSPS) under 40 CFR Part 60, other than Subpart AAA (Standards of Performance for New Residential Wood Heaters);

(d) Any stationary source, that includes an emissions unit subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP) under 40 CFR Part 61, other than:

(i) Subpart M (National Emission Standard for Asbestos); or

(ii) Sources or emission units emitting only radionuclides, which are required to obtain a license under WAC 246-247-060, and are subject to 40 CFR Part 61, subparts H and/or I, and that are not subject to any other part of 40 CFR 61, 62, or 63, or any other parts of this section;

(e) Any source, or emissions unit subject to a National Emission Standard for Hazardous Air Pollutants for Source Categories (Maximum Achievable Control Technology (MACT) standard) under 40 CFR Part 63;

(f) Any source, stationary source or emission unit with an emission rate of one or more pollutants equal to or greater than an "emission threshold" defined in WAC 173-400-030;

(g) Asphalt and asphalt products production facilities;

(h) Brick and clay manufacturing plants, including tiles and ceramics;

(i) Casting facilities and foundries, ferrous and nonferrous;

(j) Cattle feedlots with operational facilities which have an inventory of one thousand or more cattle in operation between June 1 and October 1, where vegetation forage growth is not sustained over the majority of the lot during the normal growing season;

(k) Chemical manufacturing plants;

(l) Composting operations, including commercial, industrial and municipal, but exempting residential composting activities;

(m) Concrete product manufacturers and ready mix and premix concrete plants;

(n) Crematoria or animal carcass incinerators;

(o) Dry cleaning plants;

(p) Materials handling and transfer facilities that generate fine particulate, which may include pneumatic conveying, cyclones, baghouses, and industrial housekeeping vacuuming systems that exhaust to the atmosphere;

(q) Flexible vinyl and urethane coating and printing operations;

(r) Grain, seed, animal feed, legume, and flour processing operations, and handling facilities;

(s) Hay cubers and pelletizers;

(t) Hazardous waste treatment and disposal facilities;

(u) Ink manufacturers;

(v) Insulation fiber manufacturers;

(w) Landfills, active and inactive, including covers, gas collections systems or flares;

(x) Metal plating and anodizing operations;

(y) Metallic and nonmetallic mineral processing plants, including rock crushing plants;

(z) Mills such as lumber, plywood, shake, shingle, woodchip, veneer operations, dry kilns, pulpwood insulating board, or any combination thereof;

(aa) Mineralogical processing plants;
(bb) Other metallurgical processing plants;
(cc) Paper manufacturers;
(dd) Petroleum refineries;
(ee) Petroleum product blending operations;
(ff) Plastics and fiberglass product fabrication facilities;
(gg) Rendering plants;
(hh) Soil and ground water remediation projects;
(ii) Surface coating manufacturers;
(jj) Surface coating operations including: Automotive, metal, cans, pressure sensitive tape, labels, coils, wood, plastic, rubber, glass, paper and other substrates;
(kk) Synthetic fiber production facilities;
(ll) Synthetic organic chemical manufacturing industries;
(mm) Tire recapping facilities;
(nn) Wastewater treatment plants;
(oo) Any source that has elected to opt-out of the operating permit program by limiting its potential-to-emit (synthetic minor) or is required to report periodically to demonstrate nonapplicability to EPA requirements under Sections 111 or 112 of Federal Clean Air Act.

(2) **Equipment classification list.** In counties without a local authority, the owner or operator of the following equipment shall register the source with ecology:

(a) Boilers, all solid and liquid fuel burning boilers with the exception of those utilized for residential heating;
(b) Boilers, all gas fired boilers above 10 million British thermal units per hour input;
(c) Chemical concentration evaporators;
(d) Degreasers of the cold or vapor type in which more than five percent of the solvent is comprised of halogens or such aromatic hydrocarbons as benzene, ethylbenzene, toluene or xylene;
(e) Ethylene oxide (ETO) sterilizers;
(f) Flares utilized to combust any gaseous material;
(g) Fuel burning equipment with a heat input of more than 1 million Btu per hour; except heating, air conditioning systems, or ventilating systems not designed to remove contaminants generated by or released from equipment;
(h) Incinerators designed for a capacity of one hundred pounds per hour or more;
(i) Ovens, burn-out and heat-treat;
(j) Stationary internal combustion engines and turbines rated at five hundred horsepower or more;
(k) Storage tanks for organic liquids associated with commercial or industrial facilities with capacities equal to or greater than 40,000 gallons;
(l) Vapor collection systems within commercial or industrial facilities;
(m) Waste oil burners above 0.5 mm Btu heat output;
(n) Woodwaste incinerators;
(o) Commercial and industrial solid waste incineration units subject to WAC 173-400-050(4);
(p) Small municipal waste combustion units subject to WAC 173-400-050(5).

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-100, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-100, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-100, filed 3/22/95, effective 4/22/95; 93-18-007 (Order 93-03), § 173-400-100, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-100, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-100, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-100, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-100, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-100, filed 5/8/79; Order DE 76-38, § 173-400-100, filed 12/21/76. Formerly WAC 18-04-100.]

WAC 173-400-101 Registration issuance. (1) General. Any person operating or responsible for the operation of an air contaminant source for which registration and reporting are required shall register the source emission unit with ecology or the authority. The owner or operator shall make reports containing information as may be required by ecology or the authority concerning location, size and height of contaminant outlets, processes employed, nature and quantity of the air contaminant emission and such other information as is relevant to air pollution and available or reasonably capable of being assembled.

(2) Registration form. Registration information shall be provided on forms supplied by ecology or the authority and shall be completed and returned within the time specified on the form. Emission units within the facility shall be listed separately unless ecology or the authority determines that certain emission units may be combined into process streams for purposes of registration and reporting.

(3) Signatory responsibility. The owner, operator, or their designated management representative shall sign the registration form for each source. The owner or operator of the source shall be responsible for notifying ecology or the authority of the existence of the source, and for the accuracy, completeness, and timely submittal of registration reporting information and any accompanying fee.

(4) Operational and maintenance plan. Owners or operators of registered sources within ecology's jurisdiction shall maintain an operation and maintenance plan for process and control equipment. The plan shall reflect good industrial practice and shall include a record of performance and periodic inspections of process and control equipment. In most instances, a manufacturer's operations manual or an equipment operation schedule may be considered a sufficient operation and maintenance plan. The plan shall be reviewed and updated by the source owner or operator at least annually. A copy of the plan shall be made available to ecology upon request.

(5) Report of closure. A report of closure shall be filed with ecology or the authority within ninety days after operations producing emissions permanently cease at any applicable source under this section.

(6) Report of change of ownership. A new owner or operator shall report to ecology or the authority within ninety days of any change of ownership or change in operator.

(7) Operating permit program source exemption. Permit program sources, as defined in RCW 70.94.030(17), are not required to comply with the registration requirements of WAC 173-400-100 through 173-400-104.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-101, filed 3/22/95, effective 4/22/95; 94-10-042 (Order 93-39), § 173-400-101, filed 4/29/94, effective 5/30/94.]

WAC 173-400-102 Scope of registration and reporting requirements. (1) **Administrative options.** A source in a listed source category that is located in a county without an active local authority will be addressed in one of several ways:

(a) The source will be required to register and report once each year. The criteria for identifying these sources are listed in subsection (2) of this section.

(b) The source will be required to register and report once every three years. The criteria for identifying these sources are listed in subsection (3) of this section.

(c) The source will be exempted from registration program requirements. The criteria for identifying these sources are listed in subsection (4) of this section.

(2) **Sources requiring annual registration and inspections.** An owner or operator of a source in a listed source category that meets any of the following criteria shall register and report once each year:

(a) The source emits one or more air pollutants at rates greater than the "emission threshold" rates defined in WAC 173-400-030;

(b) Annual registration and reporting is necessary to comply with federal reporting requirements or emission standards; or

(c) Annual registration and reporting is required in a reasonably available control technology determination for the source category; or

(d) The director of ecology determines that the source poses a potential threat to human health and the environment.

(3) **Sources requiring periodic registration and inspections.** An owner or operator of a source in a listed source category that meets any of the following criteria shall register and report once every three years:

(a) The source emits one or more air pollutants at rates greater than the emission rates listed in subsection (5) of this section and all air pollutants at rates less than the "emission threshold" rates defined in WAC 173-400-030; or

(b) The source emits measurable amounts of one or more Class A or Class B toxic air pollutants listed in WAC 173-460-150 and 173-460-160.

(4) **Sources exempt from registration program requirements.** Any source included in a listed source category that is located in a county without an active local air authority shall not be required to register if ecology determines the following:

(a) The source emits pollutants below emission rates specified in subsection (5) of this section; and

(b) The source or emission unit does not emit measurable amounts of Class A or Class B toxic air pollutants specified in WAC 173-460-150 and 173-460-160.

(5) **Criteria for defining exempt sources.** The following emission rates will be used to identify listed sources that are exempt from registration program requirements:

Pollutant	Tons/Year
Carbon Monoxide	5.0
Nitrogen oxides	2.0
Sulfur dioxide	2.0
Particulate Matter (PM)	1.25
Fine Particulate **(PM10)**	0.75
Volatile organic compounds (VOC)	2.0
Lead	0.005

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-102, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-102, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-102, filed 3/22/95, effective 4/22/95.]

WAC 173-400-103 Emission estimates. (1) Procedure for estimating emissions. In counties without an active local air pollution control authority, registration may include an estimate of actual emissions taking into account equipment, operating conditions, and air pollution control measures. Registration may also include a flowchart of plant processes, operational parameters, and specifications of air pollution control equipment. The emissions estimate shall be based upon actual test data or, in the absence of such data, upon procedures acceptable to ecology. Any emission data submitted to ecology shall be verifiable using currently accepted engineering criteria. The following procedures may be used to estimate emissions from individual sources or emissions units:

(a) Source-specific testing data;

(b) Mass balance calculations;

(c) A published, verifiable emission factor that is applicable to the source;

(d) Other engineering calculations; or

(e) Other procedures to estimate emissions that are acceptable to ecology.

(2) Owner or operator review. Ecology will provide the owner or operator of the source an opportunity to review any emission estimates prepared by ecology. An owner or operator may submit additional information and any justification for not using the methods listed above. This information will be evaluated by ecology to determine whether it is based on currently accepted engineering criteria. If none of the above methods are available or applicable to the source, an appropriate method will be established and approved by ecology on a case-by-case basis.

[Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-103, filed 3/22/95, effective 4/22/95.]

WAC 173-400-104 Registration fees. Fees can be found in chapter 173-455 WAC.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-400-104, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-104, filed 1/10/05, effective 2/10/05. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-104, filed 11/22/00, effective 12/23/00. Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-104, filed 3/22/95, effective 4/22/95.]

WAC 173-400-105 Records, monitoring, and reporting. The owner or operator of a source shall upon notification by the director of ecology, maintain records on the type and quantity of emissions from the source and other information deemed necessary to determine whether the source is in compliance with applicable emission limitations and control measures.

(1) Emission inventory. The owner(s) or operator(s) of any air contaminant source shall submit an inventory of emissions from the source each year. The inventory will include stack and fugitive emissions of particulate matter, PM-10, PM-2.5, sulfur dioxide, oxides of nitrogen, carbon monoxide, total reduced sulfur compounds (TRS), fluorides, lead, VOCs, ammonia, and other contaminants. The format for the submittal of these inventories will be specified by the permitting authority or ecology. When submittal of emission inventory information is requested, the emissions inventory shall be submitted no later than one hundred five days after the end of the calendar year. The owner(s) or operator(s) shall maintain records of information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards. Emission estimates used in the inventory may be based on the most recent published EPA emission factors for a source category, or other information available to the owner(s) or operator(s), whichever is the better estimate.

(2) **Monitoring.** Ecology shall conduct a continuous surveillance program to monitor the quality of the ambient atmosphere as to concentrations and movements of air contaminants. As a part of this program, the director of ecology or an authorized representative may require any source under the jurisdiction of ecology to conduct stack and/or ambient air monitoring and to report the results to ecology.

(3) **Investigation of conditions.** Upon presentation of appropriate credentials, for the purpose of investigating conditions specific to the control, recovery, or release of air contaminants into the atmosphere, personnel from ecology or an authority shall have the power to enter at reasonable times upon any private or public property, excepting nonmultiple unit private dwellings housing one or two families.

(4) **Source testing.** To demonstrate compliance, ecology or the authority may conduct or require that a test be conducted of the source using approved EPA methods from 40 CFR parts 51, 60, 61 and 63 (in effect on October 1, 2006), or procedures contained in "*Source Test Manual - Procedures for Compliance Testing*," state of Washington, department of ecology, as of July 12, 1990, on file at ecology. The operator of a source may be required to provide the necessary platform and sampling ports for ecology personnel or others to perform a test of an emissions unit. Ecology shall be allowed to obtain a sample from any emissions unit. The operator of the source shall be given an opportunity to observe the sampling and to obtain a sample at the same time.

(5) **Continuous monitoring and recording.** Owners and operators of the following categories of sources shall install, calibrate, maintain and operate equipment for continuously monitoring and recording those emissions specified.

(a) Fossil fuel-fired steam generators.

(i) Opacity, except where:

(A) Steam generator capacity is less than two hundred fifty million BTU per hour heat input; or

(B) Only gaseous fuel is burned.

(ii) Sulfur dioxide, except where steam generator capacity is less than two hundred fifty million BTU per hour heat input or if sulfur dioxide control equipment is not required.

(iii) Percent oxygen or carbon dioxide where such measurements are necessary for the conversion of sulfur dioxide continuous emission monitoring data.

(iv) General exception. These requirements do not apply to a fossil fuel-fired steam generator with an annual average capacity factor of less than thirty percent, as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to ecology or the authority by the owner(s) or operator(s).

(b) **Sulfuric acid plants.** Sulfur dioxide where production capacity is more than three hundred tons per day, expressed as one hundred percent acid, except for those facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

(c) Fluid bed catalytic cracking units catalyst regenerators at petroleum refineries. Opacity where fresh feed capacity is more than twenty thousand barrels per day.

(d) Wood residue fuel-fired steam generators.

(i) Opacity, except where steam generator capacity is less than one hundred million BTU per hour heat input.

(ii) Continuous monitoring equipment. The requirements of (e) of this subsection do not apply to wood residue fuel-fired steam generators, but continuous monitoring equipment required by (d) of this subsection shall be subject to approval by ecology.

(e) Owners and operators of those sources required to install continuous monitoring equipment under this subsection shall demonstrate to ecology or the authority, compliance with the equipment and performance specifications and observe the reporting requirements contained in 40 CFR Part 51, Appendix P, Sections 3, 4 and 5 (in effect on July 1, 2004).

(f) Special considerations. If for reason of physical plant limitations or extreme economic situations, ecology determines that continuous monitoring is not a reasonable requirement, alternative monitoring and reporting procedures will be established on an individual basis. These will generally take the form of stack tests conducted at a frequency sufficient to establish the emission levels over time and to monitor deviations in these levels.

(g) Exemptions. This subsection (5) does not apply to any equipment subject to: Continuous emissions monitoring requirement imposed by standard or requirement under 40 CFR Parts 60, 61, 62, 63, or 75 or a permitting authority's adoption by reference of such federal standards.

(h) Monitoring system malfunctions. A source may be temporarily exempted from the monitoring and reporting requirements of this chapter during periods of monitoring system malfunctions provided that the source owner(s) or operator(s) shows to the satisfaction of the permitting authority that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

(6) Change in raw materials or fuels for sources not subject to requirements of the operating permit program. Any change or series of changes in raw material or fuel which will result in a cumulative increase in emissions of sulfur dioxide of forty tons per year or more over that stated in the initial inventory required by subsection (1) of this section shall require the submittal of sufficient information to ecology or the authority to determine the effect of the increase upon ambient concentrations of sulfur dioxide. Ecology or the authority may issue regulatory orders requiring controls to reduce the effect of such increases. Cumulative changes in

raw material or fuel of less than 0.5 percent increase in average annual sulfur content over the initial inventory shall not require such notice.

(7) No person shall make any false material statement, representation or certification in any form, notice or report required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit or order in force pursuant thereto.

(8) No person shall render inaccurate any monitoring device or method required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 07-11-039 (Order 06-03), § 173-400-105, filed 5/8/07, effective 6/8/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-105, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-105, filed 8/15/01, effective 9/15/01. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-105, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-105, filed 9/13/96, effective 10/14/96; 93-18-007 (Order 93-03), § 173-400-105, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-105, filed 2/19/91, effective 3/22/91; 87-20-019 (Order 87-12), § 173-400-105, filed 9/30/87.]

WAC 173-400-107 Excess emissions. (1) The owner or operator of a source shall have the burden of proving to ecology or the authority or the decision-making authority in an enforcement action that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under subsections (4), (5) and (6) of this section.

(2) Excess emissions determined to be unavoidable under the procedures and criteria in this section shall be excused and not subject to penalty.

(3) Excess emissions which represent a potential threat to human health or safety or which the owner or operator of the source believes to be unavoidable shall be reported to ecology or the authority as soon as possible. Other excess emissions shall be reported within thirty days after the end of the month during which the event occurred or as part of the routine emission monitoring reports. Upon request by ecology or the authority, the owner(s) or operator(s) of the source(s) shall submit a full written report including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

(4) Excess emissions due to startup or shutdown conditions shall be considered unavoidable provided the source reports as required under subsection (3) of this section and adequately demonstrates that the excess emissions could not have been prevented through careful planning and design and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

(5) Maintenance. Excess emissions due to scheduled maintenance shall be considered unavoidable if the source reports as required under subsection (3) of this section and adequately demonstrates that the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.

(6) Excess emissions due to upsets shall be considered unavoidable provided the source reports as required under subsection (3) of this section and adequately demonstrates that:

(a) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;

(b) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(c) The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-107, filed 8/20/93, effective 9/20/93.]

WAC 173-400-110 New source review (NSR). In lieu of filing a notice of construction application under this section, the owner or operator may apply for coverage under an applicable general order of approval issued under WAC 173-400-560. Coverage under a general order of approval satisfies the requirement for new source review under RCW 70.94.-152.

(1) **Applicability.**

(a) This section, WAC 173-400-112 and 173-400-113 apply statewide except where an authority has adopted its own new source review rule.

(b) This section applies to sources as defined in RCW 70.94.030(21), but does not include nonroad engines. Nonroad engines are regulated under WAC 173-400-035.

(2) **Projects subject to NSR - notice of construction application.**

(a) A notice of construction application must be filed by the owner or operator and an order of approval issued by the permitting authority prior to the establishment of any new source, except for the following:

(i) Those sources exempt under subsection (4) or (5) of this section; and

(ii) A source regulated under WAC 173-400-035.

For purposes of this section "establishment" shall mean to begin actual construction, as that term is defined in WAC 173-400-030, and "new source" shall include any modification to an existing stationary source, as defined in WAC 173-400-030.

(b) Regardless of any other subsection of this section, a notice of construction application must be filed and an order of approval issued by the permitting authority prior to establishment of any of the following new sources:

(i) Any project that qualifies as construction, reconstruction or modification of an affected facility, within the meaning of 40 CFR Part 60 (New Source Performance Standards), except Part AAA, Wood stoves (in effect on February 20, 2001);

(ii) Any project that qualifies as a new or modified source within the meaning of 40 CFR 61.02 (National Emission Standards for Hazardous Air Pollutants) (in effect on July 1, 2004), except for asbestos demolition and renovation

projects subject to 40 CFR 61.145, and except from sources or emission units emitting only radionuclides, which are required to obtain a license under WAC 246-247-060, and are subject to 40 CFR Part 61, subparts H and/or I;

(iii) Any project that qualifies as a new source within the meaning of 40 CFR 63.2 (National Emission Standards for Hazardous Air Pollutants for Source Categories) (in effect on October 1, 2006);

(iv) Any project that qualifies as a new major stationary source, or a major modification to a major stationary source subject to the requirements of WAC 173-400-112;

(v) Any modification to a stationary source that requires an increase either in a plant-wide cap or in a unit specific emission limit.

(c) An applicant filing a notice of construction application for a project described in WAC 173-400-117(2), Special protection requirements for Class I areas, must send a copy of the application to the responsible federal land manager.

(3) **Modifications.** New source review of a modification shall be limited to the emission unit or units proposed to be added to an existing source or modified and the air contaminants whose emissions would increase as a result of the modification; provided, however, that review of a major modification must comply with WAC 173-400-112 and/or 173-400-720, as applicable.

(4) **Emission unit and activity exemptions.**

Except as provided in subsection (2) of this section, establishment of a new emission unit that falls within one of the categories listed below is exempt from new source review. Modification of any emission unit listed below is exempt from new source review, provided that the modified unit continues to fall within one of the listed categories. The installation or modification of a unit exempt under this subsection does not require the filing of a notice of construction application.

(a) Maintenance/construction:

(i) Cleaning and sweeping of streets and paved surfaces;

(ii) Concrete application, and installation;

(iii) Dredging wet spoils handling and placement;

(iv) Paving application and maintenance, excluding asphalt plants;

(v) Plant maintenance and upkeep activities (grounds keeping, general repairs, routine house keeping, routine plant painting, welding, cutting, brazing, soldering, plumbing, retarring roofs, etc.);

(vi) Plumbing installation, plumbing protective coating application and maintenance activities;

(vii) Roofing application;

(viii) Insulation application and maintenance, excluding products for resale;

(ix) Janitorial services and consumer use of janitorial products.

(b) Storage tanks:

Note: It can be difficult to determine requirements for storage tanks. Ecology strongly recommends that an owner or operator contact the permitting authority to determine the exemption status of storage tanks prior to their installation.

(i) Lubricating oil storage tanks except those facilities that are wholesale or retail distributors of lubricating oils;

(ii) Polymer tanks and storage devices and associated pumping and handling equipment, used for solids dewatering and flocculation;

(iii) Storage tanks, reservoirs, pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions;

(iv) Process and white water storage tanks;

(v) Operation, loading and unloading of storage tanks and storage vessels, with lids or other appropriate closure and less than 260 gallon capacity (35 cft);

(vi) Operation, loading and unloading of storage tanks, ≤ 1100 gallon capacity, with lids or other appropriate closure, not for use with materials containing toxic air pollutants, as defined in chapter 173-460 WAC, max. VP 550 mm Hg @21°C;

(vii) Operation, loading and unloading storage of butane, propane, or liquefied petroleum gas with a vessel capacity less than 40,000 gallons;

(viii) Tanks, vessels and pumping equipment, with lids or other appropriate closure for storage or dispensing of aqueous solutions of inorganic salts, bases and acids.

(c) A project with combined aggregate heat inputs of combustion units, ≤ all of the following:

(i) ≤ 500,000 Btu/hr using coal with ≤ 0.5% sulfur or other fuels with ≤ 0.5% sulfur;

(ii) ≤ 500,000 Btu/hr used oil, per the requirements of RCW 70.94.610;

(iii) ≤ 400,000 Btu/hr wood waste or paper;

(iv) < 1,000,000 Btu/hr using kerosene, #1, or #2 fuel oil and with ≤0.05% sulfur;

(v) ≤ 4,000,000 Btu/hr using natural gas, propane, or LPG.

(d) Material handling:

(i) Continuous digester chip feeders;

(ii) Grain elevators not licensed as warehouses or dealers by either the Washington state department of agriculture or the U.S. Department of Agriculture;

(iii) Storage and handling of water based lubricants for metal working where organic content of the lubricant is ≤ 10%;

(iv) Equipment used exclusively to pump, load, unload, or store high boiling point organic material in tanks less than one million gallon, material with initial atmospheric boiling point not less than 150°C or vapor pressure not more than 5 mm Hg @21°C, with lids or other appropriate closure.

(e) Water treatment:

(i) Septic sewer systems, not including active wastewater treatment facilities;

(ii) NPDES permitted ponds and lagoons used solely for the purpose of settling suspended solids and skimming of oil and grease;

(iii) De-aeration (oxygen scavenging) of water where toxic air pollutants as defined in chapter 173-460 WAC are not emitted;

(iv) Process water filtration system and demineralizer vents;

(v) Sewer manholes, junction boxes, sumps and lift stations associated with wastewater treatment systems;

(vi) Demineralizer tanks;

(vii) Alum tanks;

(viii) Clean water condensate tanks.

(f) Environmental chambers and laboratory equipment:

(i) Environmental chambers and humidity chambers not using toxic air pollutant gases, as regulated under chapter 173-460 WAC;

(ii) Gas cabinets using only gases that are not toxic air pollutants regulated under chapter 173-460 WAC;

(iii) Installation or modification of a single laboratory fume hood;

(iv) Laboratory calibration and maintenance equipment.

(g) Monitoring/quality assurance/testing:

(i) Equipment and instrumentation used for quality control/assurance or inspection purpose;

(ii) Hydraulic and hydrostatic testing equipment;

(iii) Sample gathering, preparation and management;

(iv) Vents from continuous emission monitors and other analyzers.

(h) Miscellaneous:

(i) Single-family residences and duplexes;

(ii) Plastic pipe welding;

(iii) Primary agricultural production activities including soil preparation, planting, fertilizing, weed and pest control, and harvesting;

(iv) Comfort air conditioning;

(v) Flares used to indicate danger to the public;

(vi) Natural and forced air vents and stacks for bathroom/toilet activities;

(vii) Personal care activities;

(viii) Recreational fireplaces including the use of barbecues, campfires, and ceremonial fires;

(ix) Tobacco smoking rooms and areas;

(x) Noncommercial smokehouses;

(xi) Blacksmith forges for single forges;

(xii) Vehicle maintenance activities, not including vehicle surface coating;

(xiii) Vehicle or equipment washing (see (c) of this subsection for threshold for boilers);

(xiv) Wax application;

(xv) Oxygen, nitrogen, or rare gas extraction and liquefaction equipment not including internal and external combustion equipment;

(xvi) Ozone generators and ozonation equipment;

(xvii) Solar simulators;

(xviii) Ultraviolet curing processes, to the extent that toxic air pollutant gases as defined in chapter 173-460 WAC are not emitted;

(xix) Electrical circuit breakers, transformers, or switching equipment installation or operation;

(xx) Pulse capacitors;

(xxi) Pneumatically operated equipment, including tools and hand held applicator equipment for hot melt adhesives;

(xxii) Fire suppression equipment;

(xxiii) Recovery boiler blow-down tank;

(xxiv) Screw press vents;

(xxv) Drop hammers or hydraulic presses for forging or metal working;

(xxvi) Production of foundry sand molds, unheated and using binders less than 0.25% free phenol by sand weight;

(xxvii) Kraft lime mud storage tanks and process vessels;

(xxviii) Lime grits washers, filters and handling;

(xxix) Lime mud filtrate tanks;

(xxx) Lime mud water;

(xxxi) Stock cleaning and pressurized pulp washing down process of the brown stock washer;

(xxxii) Natural gas pressure regulator vents, excluding venting at oil and gas production facilities and transportation marketing facilities;

(xxxiii) Nontoxic air pollutant, as defined in chapter 173-460 WAC, solvent cleaners less than 10 square feet air-vapor interface with solvent vapor pressure not more than 30 mm Hg @21°C;

(xxxiv) Surface coating, aqueous solution or suspension containing ≤ 1% (by weight) VOCs, and/or toxic air pollutants as defined in chapter 173-460 WAC;

(xxxv) Cleaning and stripping activities and equipment using solutions having ≤ 1% VOCs (by weight); on metallic substances, acid solutions are not exempt;

(xxxvi) Dip coating operations, using materials less than 1% VOCs (by weight) and/or toxic air pollutants as defined in chapter 173-460 WAC.

(5) **Exemptions based on emissions.**

(a) Except as provided in subsection (2) of this section and in this subsection:

(i) A new emissions unit that has a potential to emit below each of the levels listed in the table contained in (d) of this subsection is exempt from new source review provided that the conditions of (b) of this subsection are met.

(ii) A modification to an existing emissions unit that increases the unit's actual emissions by less than each of the threshold levels listed in the table contained in (d) of this subsection is exempt from new source review provided that the conditions of (b) of this subsection are met.

(b) The owner or operator seeking to exempt a project from new source review under this section shall notify, and upon request, file a brief project summary with the permitting authority prior to beginning actual construction on the project. If the permitting authority determines that the project will have more than a de minimus impact on air quality, the permitting authority may require the filing of a notice of construction application. The permitting authority may require the owner or operator to demonstrate that the emissions increase from the new emissions unit is smaller than all of the levels listed below.

(c) The owner/operator may begin actual construction on the project thirty-one days after the permitting authority receives the summary, unless the permitting authority notifies the owner/operator within thirty days that the proposed new source requires a notice of construction application.

(d) Exemption level table:

POLLUTANT	LEVEL (TONS PER YEAR)
(a) Total Suspended Particulates	1.25
(b) PM-10	0.75
(c) Sulfur Oxides	2.0
(d) Nitrogen Oxides	2.0
(e) Volatile Organic Compounds, total	2.0
(f) Carbon Monoxide	5.0
(g) Lead	0.005
(h) Ozone Depleting Substances (in effect on July 1, 2000), total	1.0

POLLUTANT	LEVEL (TONS PER YEAR)
(i) Toxic Air Pollutants	As specified in chapter 173-460 WAC.

(6) **Application processing - completeness determination.**

(a) Within thirty days after receiving a notice of construction application, the permitting authority shall either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application.

(b) For a project subject to the Special protection requirements for federal Class I areas in WAC 173-400-117(2), a completeness determination includes a determination that the application includes all information required for review of that project under WAC 173-400-117(3).

(7) **Final determination.**

(a) Within sixty days of receipt of a complete notice of construction application, the permitting authority shall either issue a final decision on the application or for those projects subject to public notice under WAC 173-400-171(1), initiate notice and comment on a proposed decision, followed as promptly as possible by a final decision.

(b) A person seeking approval to construct or modify a source that requires an operating permit may elect to integrate review of the operating permit application or amendment required under chapter 173-401 WAC and the notice of construction application required by this section. A notice of construction application designated for integrated review shall be processed in accordance with operating permit program procedures and deadlines in chapter 173-401 WAC and must also comply with WAC 173-400-171.

(c) Every final determination on a notice of construction application shall be reviewed and signed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority.

(d) If the new source is a major stationary source or the change is a major modification subject to the requirements of WAC 173-400-112, the permitting authority shall:

(i) Submit any control technology determination included in a final order of approval for a major source or a major modification to a major stationary source in a nonattainment area to the RACT/BACT/LAER clearinghouse maintained by EPA; and

(ii) Send a copy of the final approval order to EPA.

(8) **Appeals.** Any conditions contained in an order of approval, or the denial of a notice of construction application may be appealed to the pollution control hearings board as provided in chapter 43.21B RCW. The permitting authority shall promptly mail copies of each order approving or denying a notice of construction application to the applicant and to any other party who submitted timely comments on the application, along with a notice advising parties of their rights of appeal to the pollution control hearings board.

(9) **Construction time limitations.** Approval to construct or modify a stationary source becomes invalid if construction is not commenced within eighteen months after receipt of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The permitting authority may extend the eighteen-month period upon a satisfactory showing that an extension is justified. The extension of a project that is either a major stationary source in a nonattainment area or a major modification in a nonattainment area must also require LAER as it exists at the time of the extension. This provision does not apply to the time period between construction of the approved phases of a phased construction project. Each phase must commence construction within eighteen months of the projected and approved commence construction date.

(10) **Change of conditions.**

(a) The owner or operator may request, at any time, a change in conditions of an approval order and the permitting authority may approve the request provided the permitting authority finds that:

(i) The change in conditions will not cause the source to exceed an emissions standard;

(ii) No ambient air quality standard will be exceeded as a result of the change;

(iii) The change will not adversely impact the ability of ecology or the authority to determine compliance with an emissions standard;

(iv) The revised order will continue to require BACT, as defined at the time of the original approval, for each new source approved by the order except where the Federal Clean Air Act requires LAER; and

(v) The revised order meets the requirements of WAC 173-400-110, 173-400-112, 173-400-113 and 173-400-720, as applicable.

(b) Actions taken under this subsection are subject to the public involvement provisions of WAC 173-400-171.

(c) This rule does not prescribe the exact form such requests must take. However, if the request is filed as a notice of construction application, that application must be acted upon using the timelines found in subsections (6) and (7) of this section. The fee schedule found in WAC 173-400-116 shall also apply to requests filed as notice of construction applications.

(11) **Enforcement.** All persons who receive an order of approval must comply with all approval conditions contained in the order of approval.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 07-11-039 (Order 06-03), § 173-400-110, filed 5/8/07, effective 6/8/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-110, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.-141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-110, filed 8/15/01, effective 9/15/01. Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-400-110, filed 7/21/98, effective 8/21/98. Statutory Authority: RCW 70.94.152. 98-01-183 (Order 96-01), § 173-400-110, filed 12/23/97, effective 1/23/98. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-110, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-110, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-110, filed 4/15/83. Statutory Authority: RCW 70.94.331, 70.94.-510, and 70.94.785. 81-03-002 (Order DE 80-53), § 173-400-110, filed 1/8/81. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-110, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-110, filed 5/8/79; Order DE 76-38, § 173-400-110, filed 12/21/76. Formerly WAC 18-04-110.]

WAC 173-400-112 Requirements for new sources in nonattainment areas. (1) **Definitions.** The following definitions apply to this section:

(a) **"Major modification,"** for the purposes of WAC 173-400-112, means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Federal Clean Air Act.

(i) Any net emissions increase that is considered significant for volatile organic compounds or nitrogen oxides shall be considered significant for ozone.

(ii) A physical change or change in the method of operation shall not include:

(A) Routine maintenance, repair and replacement;

(B) Use of an alternative fuel or raw material by reason of an order under section 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(C) Use of an alternative fuel by reason of an order or rule under section 125 of the Federal Clean Air Act;

(D) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste; (E) Use of an alternative fuel or raw material by a source which:

(I) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit or approval order condition which was established after December 12, 1976, pursuant to 40 CFR 52.21 or a SIP approved new source review regulation; or

(II) The source is approved to use under any permit or approval order issued under WAC 173-400-112;

(iii) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit or approval order condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or a SIP approved new source review regulation.

(iv) Any change in ownership at a source.

(v) The addition, replacement, or use of a pollution control project (as defined in 40 CFR 51.165 (a)(1)(xxv), in effect on July 1, 2001) at an existing electric utility steam generating unit, unless the permitting authority determines that such addition, replacement, or use renders the unit less environmentally beneficial, or except:

(A) When the permitting authority has reason to believe that the pollution control project would result in a significant net emissions increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of title I of the Federal Clean Air Act, if any; and

(B) The permitting authority determines that the increase will cause or contribute to a violation of any National Ambient Air Quality Standard or PSD increment, or visibility limitation.

(vi) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(A) The SIP; and

(B) Other requirements necessary to attain and maintain the National Ambient Air Quality Standard during the project and after it is terminated.

(b) **"Major stationary source,"** for the purposes of WAC 173-400-112, means:

(i) Any stationary source of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Federal Clean Air Act, except that lower emissions thresholds shall apply as follows:

(A) 70 tons per year of PM-10 in any "serious" nonattainment area for PM-10.

(B) 50 tons per year of carbon monoxide in any "serious" nonattainment area for carbon monoxide where stationary sources contribute significantly to carbon monoxide levels in the area.

(ii) Any physical change that would occur at a stationary source not qualifying under (b)(i) of this subsection as a major stationary source, if the change would constitute a major stationary source by itself.

(iii) A major stationary source that is major for volatile organic compounds or NOx shall be considered major for ozone.

(iv) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this paragraph whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources or the source is a major stationary source due to (b)(i)(A) or (b)(i)(B)of this subsection:

(A) Coal cleaning plants (with thermal dryers);

(B) Kraft pulp mills;

(C) Portland cement plants;

(D) Primary zinc smelters;

(E) Iron and steel mills;

(F) Primary aluminum ore reduction plants;

(G) Primary copper smelters;

(H) Municipal incinerators capable of charging more than 50 tons of refuse per day;

(I) Hydrofluoric, sulfuric, or nitric acid plants;

(J) Petroleum refineries;

(K) Lime plants;

(L) Phosphate rock processing plants;

(M) Coke oven batteries;

(N) Sulfur recovery plants;

(O) Carbon black plants (furnace process);

(P) Primary lead smelters;

(Q) Fuel conversion plants;

(R) Sintering plants;

(S) Secondary metal production plants;

(T) Chemical process plants;

(U) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(V) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(W) Taconite ore processing plants;

(X) Glass fiber processing plants;

(Y) Charcoal production plants;

(Z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; and

(AA) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Federal Clean Air Act.

(c) **"Net emissions increase,"** for the purposes of WAC 173-400-112, means:

(i) The amount by which the sum of the following exceeds zero:

(A) Any increase in actual emissions from a particular physical change or change in method of operation at a source; and

(B) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs.

(iii) An increase or decrease in actual emissions is creditable only if:

(A) It occurred no more than one year prior to the date of submittal of a complete notice of construction application for the particular change, or it has been documented by an emission reduction credit (ERC). Any emissions increases occurring between the date of issuance of the ERC and the date when a particular change becomes operational shall be counted against the ERC.

(B) The permitting authority has not relied on it in issuing any permit or order of approval for the source under this section or a previous SIP approved nonattainment area new source review regulation, which order or permit is in effect when the increase in actual emissions from the particular change occurs.

(iv) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(v) A decrease in actual emissions is creditable only to the extent that:

(A) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(B) It is federally enforceable at and after the time that actual construction on the particular change begins;

(C) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(D) The permitting authority has not relied on it in issuing any permit or order of approval under this section or a SIP approved nonattainment area new source review regulation; or the permitting authority has not relied on it in demonstrating attainment or reasonable further progress.

(vi) An increase that results from a physical change at a source occurs when the emission unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty days.

(d) **"Significant,"** for purposes of WAC 173-400-112, means, in reference to a net emissions increase or the potential of a major stationary source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate	
Carbon monoxide:	100 tons per year (tpy)
Nitrogen oxides:	40 tpy
Sulfur dioxide:	40 tpy
Volatile organic compounds:	40 tpy
Lead:	0.6 tpy
PM-10:	15 tpy

(e) **"Stationary source"** and **"source"** for the purposes of WAC 173-400-112 means any building, structure, facility or installation which emits or may emit a regulated NSR pollutant. A stationary source (or source) does not include emissions resulting directly for an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in section 216 of the Federal Clean Air Act.

(f) **"Building, structure facility or installation"** means for the purposes of WAC 173-400-112, all the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual*, as amended by the 1977 supplement.

(2) The permitting authority that is reviewing an application to establish a new source in a nonattainment area shall issue the order of approval if it determines that the proposed project satisfies each of the following requirements:

(a) The proposed new source or modification will comply with all applicable new source performance standards, national emission standards for hazardous air pollutants, national emission standards for hazardous air pollutants for source categories, emission standards adopted under chapter 70.94 RCW and, for sources regulated by an authority, the applicable emission standards of that authority.

(b) The proposed new source will employ BACT for all air contaminants, except that if the new source is a major stationary source or the proposed modification is a major modification it will achieve LAER for the air contaminants for which the area has been designated nonattainment and for which the proposed new source or modification is major.

(c) The proposed new source will not cause any ambient air quality standard to be exceeded, will not violate the requirements for reasonable further progress established by the SIP and will comply with WAC 173-400-113(3) for all air contaminants for which the area has not been designated nonattainment.

(d) If the proposed new source is a major stationary source or the proposed modification is a major modification, the permitting authority has determined, based on review of an analysis performed by the source of alternative sites, sizes, production processes, and environmental control techniques, that the benefits of the project significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

(e) If the proposed new source or the proposed modification is major for the air contaminant for which the area is designated nonattainment, allowable emissions from the proposed new source or modification of that air contaminant are

offset by reductions in actual emissions from existing sources in the nonattainment area. Emission offsets must be sufficient to ensure that total allowable emissions from existing major stationary sources in the nonattainment area, new or modified sources which are not major stationary sources, and the proposed new or modified source will be less than total actual emissions from existing sources (before submitting the application) so as to represent (when considered together with the nonattainment provisions of section 172 of the Federal Clean Air Act) reasonable further progress. All offsetting emission reductions must satisfy the following requirements:

(i) The proposed new level of allowable emissions of the source or emissions unit(s) providing the reduction must be less than the current level of actual emissions of that source or emissions unit(s). No emission reduction can be credited for actual emissions which exceed the current allowable emissions of the source or emissions unit(s) providing the reduction. Emission reductions imposed by local, state, or federal regulations, regulatory orders, or permits required by the Federal Clean Air Act, including the SIP, cannot be credited.

(ii) The emission reductions must provide for a net air quality benefit. For marginal ozone nonattainment areas, the total emissions of volatile organic compounds or total emissions of nitrogen oxides are reduced by a ratio of 1.1 to 1 for the area in which the new source is located. For any other nonattainment area, the emissions offsets must provide a positive net air quality benefit in the nonattainment area. Determinations on whether emissions offsets provide a positive net air quality benefit will be made in accordance with the guidelines contained in 40 CFR 51 Appendix S (in effect on July 1, 2004).

(iii) If the offsets are provided by another source, the reductions in emissions from that source must be federally enforceable by the time the order of approval for the new or modified source is effective. An emission reduction credit issued under WAC 173-400-131 may be used to satisfy some or all of the offset requirements of this subsection.

(f) If the proposed new source is a major stationary source or the proposed modification is a major modification, the owner or operator has demonstrated that all major stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in Washington are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards under the Federal Clean Air Act, including all rules in the SIP.

(g) If the proposed new source is a major stationary source within the meaning of WAC 173-400-720, or the proposed modification is a major modification within the meaning of WAC 173-400-720, it meets the requirements of the PSD program in WAC 173-400-720 for all air contaminants for which the area has not been designated nonattainment.

(h) If the proposed new source or modification will emit any toxic air pollutants regulated under chapter 173-460 WAC, the source meets all applicable requirements of that chapter.

(i) If the proposed new source is a major stationary source within the meaning of WAC 173-400-720, or the proposed modification is a major modification within the meaning of WAC 173-400-720, the project meets the special protection requirements for federal Class I areas in WAC 173-400-117.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-112, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-112, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-112, filed 8/20/93, effective 9/20/93.]

WAC 173-400-113 Requirements for new sources in attainment or unclassifiable areas. The permitting authority that is reviewing an application to establish a new source or modification in an attainment or unclassifiable area shall issue an order of approval if it determines that the proposed project satisfies each of the following requirements:

(1) The proposed new source or modification will comply with all applicable new source performance standards, national emission standards for hazardous air pollutants, national emission standards for hazardous air pollutants for source categories, emission standards adopted under chapter 70.94 RCW and, for sources regulated by an authority, the applicable emission standards of that authority.

(2) The proposed new source or modification will employ BACT for all pollutants not previously emitted or whose emissions would increase as a result of the new source or modification.

(3) Allowable emissions from the proposed new source or modification will not delay the attainment date for an area not in attainment nor cause or contribute to a violation of any ambient air quality standard. This requirement will be considered to be met if the projected impact of the allowable emissions from the proposed new source or the projected impact of the increase in allowable emissions from the proposed modification at any location within a nonattainment area does not exceed the following levels for the pollutants for which the area has been designated nonattainment:

Pollutant	Annual Average	24-Hour Average	8-Hour Average	3-Hour Average	1-Hour Average
CO-	-		0.5 mg/m^3	-	2 mg/m^3
SO_2	1.0 $\mu g/m^3$	5 $\mu g/m^3$	-	25 $\mu g/m^3$	30 $\mu g/m^3$
PM_{10}	1.0 $\mu g/m^3$	5 $\mu g/m^3$	-	-	-
NO_2	1.0 $\mu g/m^3$	-	-	-	-

An offsetting emission reduction may be used to satisfy some or all of the requirements of this subsection.

(4) If the proposed new source is a major stationary source or the proposed modification is a major modification, it meets all applicable requirements of WAC 173-400-720 through 173-400-750.

(5) If the proposed new source or the proposed modification will emit any toxic air pollutants regulated under chapter 173-460 WAC, the source meets all applicable requirements of that program.

(6) If the proposed new source is a major stationary source or the proposed modification is a major modification, the project meets the special protection requirements for federal Class I areas of WAC 173-400-117.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-113, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-113, filed 8/15/01, effective

9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-113, filed 8/20/93, effective 9/20/93.]

WAC 173-400-114 Requirements for replacement or substantial alteration of emission control technology at an existing stationary source. (1) Any **person** proposing to replace or substantially alter the **emission** control technology installed on an existing **stationary source** or **emission unit** shall file a **notice of construction application** with the appropriate **authority**, or with **ecology** in areas or for **sources** over which **ecology** has jurisdiction. Replacement or substantial alteration of control technology does not include routine maintenance, repair or similar parts replacement.

(2) For projects not otherwise reviewable under WAC 173-400-110, **ecology** or the **authority** may:

(a) Require that the owner or operator employ **RACT** for the affected **emission unit;**

(b) Prescribe reasonable operation and maintenance conditions for the control equipment; and

(c) Prescribe other requirements as authorized by chapter 70.94 RCW.

(3) Within thirty days of receipt of a **notice of construction application** under this section **ecology** or the **authority** shall either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application. Within thirty days of receipt of a complete **notice of construction application** under this section **ecology** or the **authority** shall either issue an **order of approval** or a proposed **RACT** determination for the proposed project.

(4) Construction shall not **"commence,"** as defined in WAC 173-400-030, on a project subject to review under this section until **ecology** or the **authority** issues a final **order of approval.** However, any **notice of construction application** filed under this section shall be deemed to be approved without conditions if **ecology** or the **authority** takes no action within thirty days of receipt of a complete **notice of construction application.**

(5) Approval to replace or substantially alter **emission** control technology shall become invalid if construction is not **commenced** within eighteen months after receipt of such approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. **Ecology** or the **authority** may extend the eighteen-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen months of the projected and approved commencement date.

[Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-114, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-114, filed 8/20/93, effective 9/20/93.]

WAC 173-400-115 Standards of performance for new sources. NSPS. Standards of performance for new sources are called New Source Performance Standards, or NSPS.

(1) **Adoption by reference.**

(a) 40 CFR Part 60 and Appendices in effect on October 1, 2006, is adopted by reference. Exceptions are listed in subsection (1)(b) of this section.

The following list of subparts to 40 CFR Part 60 which are shown as blank or reserved in the Code of Federal Regulations as of the date listed above, is provided for informational purposes only:

40 CFR Part 60, subparts FF, II, JJ, OO, YY, ZZ, CCC, EEE, MMM, XXX, YYY, ZZZ, GGGG, JJJJ, Appendix E, and Appendix H.

(b) Exceptions to adopting 40 CFR Part 60 by reference.

(i) The term "administrator" in 40 CFR Part 60 includes the permitting authority.

(ii) The following sections and subparts of 40 CFR Part 60 are not adopted by reference:

(A) 40 CFR 60.5 (determination of construction or modification);

(B) 40 CFR 60.6 (review of plans);

(C) 40 CFR Part 60, subpart B (Adoption and Submittal of State Plans for Designated Facilities), and subparts C, Cb, Cc, Cd, Ce, BBBB, DDDD, FFFF, HHHH (emission guidelines); and

(D) 40 CFR Part 60, Appendix G, Provisions for an Alternative Method of Demonstrating Compliance With 40 CFR 60.43 for the Newton Power Station of Central Illinois Public Service Company.

(2) Where EPA has delegated to the permitting authority, the authority to receive reports under 40 CFR Part 60, from the affected facility in lieu of providing such report to EPA, the affected facility is required to provide such reports only to the permitting authority unless otherwise requested in writing by the permitting authority or EPA.

Note: Under RCW 80.50.020(14), larger energy facilities subject to subparts D, Da, GG, J, K, Kb, Y, KKK, LLL, and QQQ are regulated by the energy facility site evaluation council (EFSEC).

[Statutory Authority: RCW 70.94.395 and 70.94.331. 07-11-039 (Order 06-03), § 173-400-115, filed 5/8/07, effective 6/8/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-115, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.-141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-115, filed 8/15/01, effective 9/15/01. Statutory Authority: [RCW 70.94.331, 70.94.510 and chapter 70.94 RCW.] 00-23-130 (Order 98-27), § 173-400-115, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW 70.94.785. 98-22-019 (Order 98-02), § 173-400-115, filed 10/23/98, effective 11/23/98. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-115, filed 9/13/96, effective 10/14/96; 93-05-044 (Order 92-34), § 173-400-115, filed 2/17/93, effective 3/20/93; 91-05-064 (Order 90-06), § 173-400-115, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. 85-06-046 (Order 84-48), § 173-400-115, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-400-115, filed 4/15/83; 82-16-019 (Order DE 82-20), § 173-400-115, filed 7/27/82. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-115, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-115, filed 5/8/79; Order DE 76-38, § 173-400-115, filed 12/21/76. Formerly WAC 18-04-115.]

WAC 173-400-116 New source review fees. Fees can be found in chapter 173-455 WAC.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-400-116, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-116, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141,

[70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-116, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 96-19-054 (Order 94-35), § 173-400-116, filed 9/13/96, effective 10/14/96. Statutory Authority: RCW 70.94.153 and 70.94.154. 94-17-070, § 173-400-116, filed 8/15/94, effective 9/15/94.]

WAC 173-400-117 Special protection requirements for federal Class I areas. (1) **Definitions.** The following definitions apply to this section:

(a) **"Adverse impact on visibility"** means visibility impairment that interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairment, and how these factors correlate with:

(i) Times of visitor use of the federal Class I area; and

(ii) The frequency and timing of natural conditions that reduce visibility.

(b) The terms "major stationary source," "major modification," and "net emissions increase" are as provided in WAC 173-400-720.

(2) **Applicability.** The requirements of this section apply to all of the following permitting actions:

(a) A PSD permit application for a new major stationary source or a major modification; or

(b) Submittal of a notice of construction application for a major stationary source or a major modification to a stationary source in a nonattainment area, as either of those terms are defined in WAC 173-400-720.

(3) **Contents and distribution of application.**

(a) The application shall include an analysis of the anticipated impacts of the project on visibility in any federal Class I area.

(b) The applicant must mail a copy of the application for the project and all amendments to the application to the permitting authority, EPA and to the responsible federal land managers. Ecology will provide a list of the names and addresses of the federal land manager.

(4) **Notice to federal land manager.**

(a) The permitting authority shall send a copy of the completeness determination to the responsible federal land manager.

(b) If, prior to receiving a notice of construction application or a PSD permit application, the permitting authority receives notice of a project described in subsection (2) of this section that may affect visibility in a federal Class I area, the permitting authority shall notify the responsible federal land manager within thirty days of the notification.

(5) **Analysis by federal land manager.**

(a) The permitting authority will consider any demonstration presented by the responsible federal land manager that emissions from a proposed new major stationary source or the net emissions increase from a proposed major modification described in subsection (2) of this section would have an adverse impact on visibility in any federal Class I area, provided that the demonstration is received by the permitting authority within thirty days of the federal land manager's receipt of the complete application.

(b) If the permitting authority concurs with the federal land manager's demonstration, the PSD permit or approval order for the project either shall be denied, or conditions shall be included in the approval order to prevent the adverse impact.

(c) If the permitting authority finds that the federal land manager's analysis does not demonstrate that the project will have an adverse impact on visibility in a federal Class I area, the permitting authority either shall explain its decision in the public notice required by WAC 173-400-730, or, in the case of public notice of proposed action on a PSD permit application, state that an explanation of the decision appears in the Technical Support Document for the proposed permit.

(6) **Additional requirements for projects that require a PSD permit.**

(a) For sources impacting federal Class I areas, the permitting authority shall provide notice to EPA of every action related to consideration of the PSD permit.

(b) The permitting authority shall consider any demonstration received from the responsible federal land manager prior to the close of the public comment period on a proposed PSD permit that emissions from the proposed new major stationary source or the net emissions increase from a proposed major modification would have an adverse impact on the air quality-related values (including visibility) of any mandatory Class I federal area.

(c) If the permitting authority concurs with the demonstration, the PSD permit either shall be denied, or conditions shall be included in the PSD permit to prevent the adverse impact.

(7) **Additional requirements for projects located in nonattainment areas.** In reviewing a PSD permit application or notice of construction application for a new major stationary source or major modification proposed for construction in an area classified as nonattainment, the permitting authority must ensure that the source's emissions will be consistent with making reasonable progress toward meeting the national goal of preventing any future, and remedying any existing, impairment of visibility by human-caused air pollution in mandatory Class I federal areas. In determining the need for approval order conditions to meet this requirement, the permitting authority may take into account the costs of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source.

(8) **Monitoring.** The permitting authority may require post-construction monitoring of the impact from the project. The monitoring shall be limited to the impacts on visibility in any federal Class I area near the proposed project.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-117, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-117, filed 8/15/01, effective 9/15/01.]

WAC 173-400-118 Designation of Class I, II, and III areas. (1) **Designation.**

(a) Lands within the exterior boundaries of Indian reservations may be proposed for redesignation by an Indian governing body or EPA. This restriction does not apply to nontrust lands within the 1873 Survey Area of the Puyallup Indian Reservation.

(b) All areas of the state must be designated either Class I, II or III.

(i) The following areas are the Class I areas in Washington state:

(A) Alpine Lakes Wilderness;

(B) Glacier Peak Wilderness;

(C) Goat Rocks Wilderness;

(D) Adams Wilderness;

(E) Mount Rainier National Park;

(F) North Cascades National Park;

(G) Olympic National Park;

(H) Pasayten Wilderness; and

(I) Spokane Indian Reservation.[1]

(ii) All other areas of the state are Class II, but may be redesignated as provided in subsections (2) and (3) of this section.

1. EPA redesignated this land based on a request from the Spokane Tribal Council. See 40 CFR 52.2497 and 56 FR 14862, April 12, 1991, for details.

(2) **Restrictions on area classifications.**

(a) Except for the Spokane Indian Reservation, the Class I areas listed in subsection (1) of this section may not be redesignated.

(b) Except as provided in (a) of this subsection, the following areas that exceed 10,000 acres in size may be redesignated as Class I or II:

(i) Areas in existence on August 7, 1977:

(A) A national monument;

(B) A national primitive area;

(C) A national preserve;

(D) A national wild and scenic river;

(E) A national wildlife refuge;

(F) A national lakeshore or seashore; or

(G) A national recreation area.

(ii) Areas established after August 7, 1977:

(A) A national park;

(B) A national wilderness area; or

(C) Areas proposed by ecology for designation or redesignation.

(3) **Redesignation of area classifications.**

(a) Ecology shall propose the redesignation of an area classification as a revision to the SIP.

(b) Ecology may submit to EPA a proposal to redesignate areas of the state as Class I or II if:

(i) Ecology followed the public involvement procedures in WAC 173-400-171;

(ii) Ecology explained the reasons for the proposed redesignation, including a description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation;

(iii) Ecology made available for public inspection at least thirty days before the hearing the explanation of the reasons for the proposed redesignation;

(iv) Ecology notified other states, tribal governing bodies, and federal land managers (as defined in 40 CFR 52.21 (b)(24)) whose lands may be affected by the proposed redesignation at least thirty days prior to the public hearing;

(v) Ecology consulted with the elected leadership of local governments in the area covered by the proposed redesignation before proposing the redesignation; and

(vi) Ecology followed these procedures when a redesignation includes any federal lands:

(A) Ecology notified in writing the appropriate federal land manager on the proposed redesignation. Ecology allowed forty-five days for the federal land manager to confer with ecology and to submit written comments.

(B) Ecology responded to any written comments from the federal land manager that were received within forty-five days of notification. Ecology's response was available to the public in advance of the notice of the hearing.

(I) Ecology sent the written comments of the federal land manager, along with ecology's response to those comments, to the public location as required in WAC 173-400-171 (2)(a).

(II) If ecology disagreed with the federal land manager's written comments, ecology published a list of any inconsistency between the redesignation and the comments of the federal land manager, together with the reasons for making the redesignation against the recommendation of the federal land manager.

(c) Ecology may submit to EPA a proposal to redesignate any area other than an area to which subsection (1) of this section applies as Class III if:

(i) The redesignation followed the public involvement requirements of WAC 173-400-171 and 173-400-118(3);

(ii) The redesignation has been specifically approved by the governor of Washington state, after consultation with the appropriate committees of the legislature if it is in session, or with the leadership of the legislature, if it is not in session;

(iii) The redesignation has been approved by local governments representing a majority of the residents of the area to be redesignated. The local governments enacted legislation or passed resolutions concurring in the redesignation;

(iv) The redesignation would not cause, or contribute to, a concentration of any air contaminant which would exceed any maximum allowable increase permitted under the classification of any other area or any National Ambient Air Quality Standard; and

(v) A PSD permit under WAC 173-400-720 for a new major stationary source or major modification could be issued only if the area in question were redesignated as Class III, and material submitted as part of that application was available for public inspection prior to any public hearing on redesignation of the area as Class III.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-118, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.-080. 01-17-062 (Order 99-06), § 173-400-118, filed 8/15/01, effective 9/15/01.]

WAC 173-400-120 Bubble rules. (1) Applicability. The owner(s) or operator(s) of any source(s) may apply for a bubble for any contaminant regulated by state or federal law for which the emission requirement may be stated as an allowable limit in weight of contaminant per unit time for the emissions units involved.

(2) Conditions. A bubble may be authorized provided the following conditions have been demonstrated to the satisfaction of the permitting authority.

(a) The contaminants exchanged must be of the same type, that is, PM_{10} for PM_{10}, sulfur dioxide for sulfur dioxide, etc.

(b) The bubble will not interfere with the attainment and maintenance of air quality standards. No bubble shall be authorized in a nonattainment area unless there is an EPA-approved SIP which demonstrates attainment for that area.

(c) The bubble will not result in a delay in compliance by any source, nor a delay in any existing enforcement action.

(d) The bubble will not supersede NSPS, NESHAPS, BACT, or LAER. The emissions of hazardous contaminants shall not be increased.

(e) The bubble will not result in an increase in the sum of actual emission rates of the contaminant involved from the emissions units involved.

(f) A bubble may not be authorized only for opacity limits. However, if the emission limit for particulates for a given emissions unit is increased as part of a bubble, the opacity limit for the given emissions unit may be increased subject to the following limitations:

(i) The new opacity limit shall be specific for the given emissions unit;

(ii) The new opacity limit shall be consistent with the new particulates limit;

(iii) An opacity greater than sixty percent shall never be authorized;

(iv) If the given emissions unit emits or has the potential to emit one hundred tons per year or more of particulate matter, the opacity shall be monitored continuously.

(g) The emission limits of the bubble are equivalent to existing limits in enforceability.

(h) Concurrent with or prior to the authorization of a bubble, each emission unit involved in a bubble shall receive or have received a regulatory order or permit that establishes total allowable emissions from the source for the contaminant being bubbled, expressed as weight of the contaminant per unit time.

(i) There will be no net adverse impact upon air quality from the establishment of new emission requirements for a specific source or emissions unit. Determination of net adverse impact shall include but not be limited to public perception of opacity and public perception of odorous contaminants.

(j) Specific situations may require additional demonstration as requested by the permitting authority.

(3) Jurisdiction. Whenever a bubble application involves emissions units, some of which are under the jurisdiction of an authority, approval will require concurrence by both authorities. The new emission limits for each emissions unit will be enforced by the authority of original jurisdiction.

(4) Additional information. Within thirty days, after the receipt of a bubble application and all supporting data and documentation, the permitting authority may require the submission of additional information needed to review the application.

(5) Approval. Within thirty days after all the required information has been received, the permitting authority shall approve or deny the application, based on a finding that conditions in subsection (2)(a) through (j) of this section have been satisfied or not. If the application is approved, a regulatory order or equivalent document shall be issued which includes new allowable emissions limits expressed in weight of pollutant per unit time for each emissions unit affected by the bubble. The regulatory order or equivalent document shall include any conditions required to assure that subsection (2)(a) through (j) of this section will be satisfied. If the bubble depends in whole or in part upon the shutdown of equipment, the regulatory order or equivalent document must prohibit operation of the affected equipment. The regulatory order establishing the bubble is subject to the public involvement requirements of WAC 173-400-171.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-120, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-120, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-120, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 89-02-055 (Order 88-39), § 173-400-120, filed 1/3/89; 83-09-036 (Order DE 83-13), § 173-400-120, filed 4/15/83. Statutory Authority: RCW 70.94.331. 80-11-059 (Order DE 80-14), § 173-400-120, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-012 (Order DE 78-21), § 173-400-120, filed 5/8/79; Order DE 76-38, § 173-400-120, filed 12/21/76. Formerly WAC 18-04-120.]

WAC 173-400-131 Issuance of emission reduction credits. (1) **Applicability.** The owner or operator of any source may apply to the permitting authority for an emission reduction credit (ERC) if the source proposes to reduce its actual emissions rate for any contaminant regulated by state or federal law for which the emission requirement may be stated as an allowable limit in weight of contaminant per unit time for the emissions units involved.

(2) **Time of application.** The application for an ERC must be made prior to or within one hundred eighty days after the emission reduction has been accomplished.

(3) **Conditions.** An ERC may be authorized provided the following conditions have been demonstrated to the satisfaction of the permitting authority.

(a) The quantity of emissions in the ERC shall be less than or equal to the old allowable emissions rate or the old actual emissions rate, whichever is the lesser, minus the new allowable emissions rate.

(b) The ERC application must include a description of all the changes that are required to accomplish the claimed emissions reduction, such as, new control equipment, process modifications, limitation of hours of operation, permanent shutdown of equipment, specified control practices, etc.

(c) The ERC must be large enough to be readily quantifiable relative to the source strength of the emissions unit(s) involved.

(d) No part of the emission reductions claimed for credit shall have been used as part of a determination of net emission increase, nor as part of an offsetting transaction under WAC 173-400-112 (2)(d), nor as part of a bubble transaction under WAC 173-400-120, nor to satisfy NSPS, NESHAPS, for Source Categories, BACT, or LAER.

(e) Concurrent with or prior to the authorization of an ERC, the applicant shall receive (have received) a regulatory order or permit that establishes total allowable emissions from the source or emissions unit of the contaminant for which the ERC is requested, expressed as weight of contaminant per unit time.

(f) The use of any ERC shall be consistent with all other federal, state, and local requirements of the program in which it is used.

(4) **Additional information.** Within thirty days after the receipt of an ERC application and all supporting data and

documentation, the permitting authority may require the submission of additional information needed to review the application.

(5) **Approval.** Within thirty days after all required information has been received, the permitting authority shall approve or deny the application, based on a finding that conditions in subsection (3)(a) through (e) of this section have been satisfied or not. If the application is approved, the permitting authority shall:

(a) Issue a regulatory order or equivalent document to assure that the emissions from the source will not exceed the allowable emission rates claimed in the ERC application, expressed in weight of pollutant per unit time for each emission unit involved. The regulatory order or equivalent document shall include any conditions required to assure that subsection (3)(a) through (e) of this section will be satisfied. If the ERC depends in whole or in part upon the shutdown of equipment, the regulatory order or equivalent document must prohibit operation of the affected equipment; and

(b) Issue a certificate of emission reduction credit. The certificate shall specify the issue date, the contaminants involved, the emission decrease expressed as weight of pollutant per unit time, the nonattainment area involved, if applicable, and the person to whom the certificate is issued.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-131, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.-080. 01-17-062 (Order 99-06), § 173-400-131, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-131, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-131, filed 2/19/91, effective 3/22/91.]

WAC 173-400-136 Use of emission reduction credits (ERC). (1) **Permissible use.** An ERC may be used to satisfy the requirements for authorization of a bubble under WAC 173-400-120; as a part of a determination of "net emissions increase;" or as an offsetting reduction to satisfy the requirements for new source review in WAC 173-400-112 or 173-400-113(3).

(2) **Surrender of ERC certificate.** When an ERC is used under subsection (1) of this section, the certificate for the ERC must be surrendered to the permitting authority. If only a portion of the ERC is used, the amended certificate will be returned to the owner.

(3) **Conditions of use.**

(a) An ERC may be used only for the air contaminants for which it was issued.

(b) The permitting authority may impose additional conditions of use to account for temporal and spatial differences between the emissions units that generated the ERC and the emissions units that use the ERC.

(4) **Sale of an ERC.** An ERC may be sold or otherwise transferred to a person other than the person to whom it was originally issued. Within thirty days after the transfer of ownership, the certificate must be surrendered to the issuing authority. After receiving the certificate, the issuing authority shall reissue the certificate to the new owner.

(5) **Redemption period.** An unused ERC expires ten years after date of original issue.

(6) **Discount due to change in SIP.** If reductions in emissions beyond those identified in the SIP are required to meet an ambient air quality standard, if the standard cannot be met through controls on operating sources, and if the plan must be revised, an ERC may be discounted by the permitting authority after public involvement according to WAC 173-400-171. This discount shall not exceed the percentage of additional emission reduction needed to reach attainment.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-136, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.-080. 01-17-062 (Order 99-06), § 173-400-136, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-136, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-136, filed 2/19/91, effective 3/22/91.]

WAC 173-400-151 Retrofit requirements for visibility protection. (1) The requirements of this section apply to an existing stationary facility. An "existing stationary facility" means a stationary source of air contaminants that meets all of these conditions:

(a) The stationary source must have the potential to emit 250 tons per year or more of any air contaminant. Fugitive emissions, to the extent quantifiable, must be counted in determining the potential to emit; and

(b) The stationary source was not in operation prior to August 7, 1962, and was in existence on August 7, 1977; and

(c) Is in one of the following 26 source categories:

Fossil-fuel fired steam electric plants of more than 250 million British thermal units per hour heat input,	Coke oven batteries,
Coal cleaning plants (thermal dryers),	Sulfur recovery plants,
Kraft pulp mills,	Carbon black plants (furnace process),
Portland cement plants,	Primary lead smelters,
Primary zinc smelters,	Fuel conversion plants,
Iron and steel mill plants,	Sintering plants,
Primary aluminum ore reduction plants,	Secondary metal production facilities,
Primary copper smelters,	Chemical process plants,
Municipal incinerators capable of charging more than 250 tons of refuse per day,	Fossil-fuel boilers of more than 250 million British thermal units per hour heat input,
Hydrofluoric, sulfuric, and nitric acid plants,	Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels,
Petroleum refineries,	Taconite ore processing facilities,
Lime plants,	Glass fiber processing plants, and
Phosphate rock processing plants,	Charcoal production facilities.

(d) For purposes of determining whether a stationary source is an existing stationary facility, the term "building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities

shall be considered as part of the same major group (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual, 1972*, as amended in the 1977 supplement.

(2) Ecology shall identify each existing stationary facility which may reasonably be anticipated to cause or contribute to visibility impairment in any mandatory Class 1 federal area in Washington and any adjacent state.

(3) For each existing stationary facility identified under subsection (2) of this section, ecology, in consultation with the permitting authority shall determine BART for each air contaminant of concern and any additional air pollution control technologies that are to be required to reduce impairment from the existing stationary facility.

(4) Each existing stationary facility shall apply BART as new technology for control of the air contaminant becomes reasonably available if:

(a) The existing stationary facility emits the air contaminant contributing to visibility impairment;

(b) Controls representing BART for that air contaminant have not previously been required under this section; and

(c) The impairment of visibility in any mandatory Class 1 federal area is reasonably attributable to the emissions of the air contaminant.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-151, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.-080. 01-17-062 (Order 99-06), § 173-400-151, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-151, filed 2/19/91, effective 3/22/91.]

WAC 173-400-161 Compliance schedules. (1) **Issuance.** Whenever a source is found to be in violation of an emission standard or other provision of this chapter, ecology or the authority may issue a regulatory order requiring that the source be brought into compliance within a specified time. The order shall contain a schedule for installation, with intermediate benchmark dates and a final completion date, and shall constitute a compliance schedule. Requirements for public involvement (WAC 173-400-171) must be met.

(2) **Federal action.** A source shall be considered to be in compliance with this chapter if all the provisions of its individual compliance schedule included with a regulatory order are being met. Such compliance does not preclude federal enforcement action by the EPA until and unless the schedule is submitted and adopted as an amendment to the state implementation plan.

(3) **Penalties for delayed compliance.** Sources on a compliance schedule but not meeting emissions standards may be subject to penalties as provided in the Federal Clean Air Act.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-161, filed 2/19/91, effective 3/22/91.]

WAC 173-400-171 Public involvement. (1) **Internet notification of receipt of an application.**

(a) For applications and actions not subject to a mandatory public notice and comment period per subsection (2)(a) of this section, the permitting authority will either:

(i) Post on the permitting authority's internet web site an announcement of the receipt of notice of construction applications and other proposed actions; or

(ii) Follow the public involvement process found in subsection (3) of this section.

(b) For internet notification, notice shall remain on the permitting authority's web site for a minimum of fifteen consecutive days. The internet posting shall include notice of the receipt of the application, the type of proposed action, and a statement that the public may request a public comment period on the proposed action.

(c) Requests for a public comment period shall be submitted to the permitting authority in writing via letter, fax, or electronic mail within fifteen days of its internet posting. A public notice and comment period shall be provided pursuant to subsections (3) and (4) of this section for any application or proposed action that receives such a request. Any application or proposed action for which a public comment period is not requested may be processed without further public involvement at the end of the fifteen-day comment period.

(d) Any application or proposed action that automatically requires a public comment period pursuant to subsection (2) of this section or for which the agency proposes to have a public comment period does not have to be announced on the permitting authorities' internet web site.

(2) **Actions subject to public notice and comment.**

(a) The permitting authority must provide public notice and a public comment period before approving or denying any of the following types of applications or other actions:

(i) Notice of construction application for any new or modified source, including the initial application for operation of a portable source, if an increase in emissions of any air pollutant at a rate above the emission threshold rate (defined in WAC 173-400-030) or any increase in a pollutant regulated under chapter 173-460 WAC which will increase above the small quantity emission rate listed in WAC 173-460-080 (2)(e) would result; or

(ii) Any use of a modified or substituted air quality model, other than a guideline model in Appendix W of 40 CFR Part 51 (in effect on October 1, 2006) as part of review under WAC 173-400-110, 173-400-112, 173-400-113, 173-400-117, or 173-400-720; or

(iii) Any order to determine RACT; or

(iv) An order to establish a compliance schedule or a variance; or

(v) An order to demonstrate the creditable height of a stack which exceeds the GEP formula height and sixty-five meters, by means of a fluid model or a field study, for the purposes of establishing an emission limitation; or

(vi) An order to authorize a bubble; or

(vii) Any action to discount the value of an ERC issued to a source per WAC 173-400-136(6); or

(viii) Any regulatory order to establish BART for an existing stationary facility; or

(ix) Notice of construction application or regulatory order used to establish a creditable emission reduction; or

(x) An order issued under WAC 173-400-091 that establishes limitations on a source's potential to emit; or

(xi) The original issuance and the issuance of all revisions to a general order of approval issued under WAC 173-400-560; or

(xii) Any extension of the deadline to begin actual construction of a "major stationary source" or "major modification" in a nonattainment area; or

(xiii) Exception. PSD actions, under WAC 173-400-730 and 173-400-740 are not required to follow the procedures in this section. The public involvement for these projects shall follow the procedures in WAC 173-400-730(4) and 173-400-740.

(b) Ecology must provide notice on the following ecology only actions:

(i) A Washington state recommendation that will be submitted by the director of ecology to EPA for approval of a SIP revision, including plans for attainment, maintenance, and visibility protection; or

(ii) A Washington state recommendation to EPA for designation or redesignation of an area as attainment, nonattainment, or unclassifiable; or

(iii) A Washington state recommendation to EPA for a change of boundaries of an attainment or nonattainment area; or

(iv) A Washington state recommendation to EPA for redesignation of an area under WAC 173-400-118.

(c) The permitting authority will provide public notice before approving or denying any application or other action for which the permitting authority determines there is substantial public interest.

(d) A notice of construction application designated for integrated review with an application to issue or modify an operating permit shall be processed in accordance with the operating permit program procedures and deadlines. A project designated for integrated review that includes a notice of construction application for a major modification in a nonattainment area, or a notice of construction application for a major stationary source in a nonattainment area must also comply with public notice requirements in this section. A project designated for integrated review that includes a PSD permit application must also comply with the requirements in WAC 173-400-730 and 173-400-740.

(3) **Public notice.** Public notice shall be made only after all information required by the permitting authority has been submitted and after applicable preliminary determinations, if any, have been made. The applicant or other initiator of the action must pay the cost of providing public notice. Public notice shall include:

(a) Availability for public inspection. The information submitted by the applicant, and any applicable preliminary determinations, including analyses of the effects on air quality, must be available for public inspection in at least one location near the proposed project. Exemptions from this requirement include information protected from disclosure under any applicable law, including, but not limited to, RCW 70.94.205 and chapter 173-03 WAC.

(i) For a redesignation of a class II area under WAC 173-400-118, ecology must make available for public inspection at least thirty days before the hearing the explanation of the reasons for the proposed redesignation.

(ii) For a revision of the SIP subject to subsection (2)(b)(iii) of this section, ecology must make available for public inspection the information related to the action at least thirty days before the hearing.

(b) Newspaper publication. Public notice of the proposed project must be published in a newspaper of general circulation in the area of the proposed project and must include:

(i) The name and address of the owner or operator and the facility;

(ii) A brief description of the proposal;

(iii) The location of the documents made available for public inspection;

(iv) A thirty-day period for submitting written comment to the permitting authority;

(v) A statement that a public hearing may be held if the permitting authority determines within a thirty-day period that significant public interest exists or for those actions listed in WAC 173-400-171 (5)(b) with a mandatory public hearing requirement, the time, date, and location of the public hearing.

(vi) The length of the public comment period in the event of a public hearing;

(vii) For projects subject to special protection requirements for federal Class I areas in WAC 173-400-117 (5)(c), public notice shall either explain the permitting authority's decision or state that an explanation of the decision appears in the support document for the proposed order of approval; and

(viii) For a redesignation of an area under WAC 173-400-118, public notice shall state that an explanation of the reasons for the proposed redesignation is available for review at the public location.

(c) Notifying EPA. A copy of the public notice will be sent to the EPA Region 10 regional administrator.

(d) Additional public notice requirements for a SIP revision. For a revision to the SIP that is submitted by the director of ecology, ecology must publish the public notice required by subsection (3)(b) of this section in the *Washington State Register* in advance of the date of the public hearing.

(4) **Public comment.**

(a) The public comment period must be at least the thirty-day period for written comment specified in the public notice.

(b) If a public hearing is held, the public comment period must extend through the hearing date.

(c) The permitting authority shall make no final decision on any application or action of any type described in subsection (1) of this section until the public comment period has ended and any comments received during the public comment period have been considered.

(5) **Public hearings.**

(a) The applicant, any interested governmental entity, any group, or any person may request a public hearing within the thirty-day public comment period. A request must indicate the interest of the entity filing it and why a hearing is warranted. The permitting authority may hold a public hearing if it determines significant public interest exists. The permitting authority will determine the location, date, and time of the public hearing.

(b) Ecology must hold a hearing on the following ecology only actions:

(i) A Washington state recommendation to EPA that will be submitted by the director of ecology for approval of a SIP revision;

(ii) A Washington state recommendation to EPA for a change of boundaries of an attainment or nonattainment area;

(iii) A Washington state recommendation to EPA for designation of an area as attainment, nonattainment, or unclassifiable; and

(iv) A Washington state recommendation to EPA to redesignate an area under WAC 173-400-118.

(c) Ecology must provide at least thirty days prior notice of a hearing required under subsection (4)(b) of this section.

(6) **Other requirements of law.** Whenever procedures permitted or mandated by law will accomplish the objectives of public notice and opportunity for comment, those procedures may be used in lieu of the provisions of this section.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 07-11-039 (Order 06-03), § 173-400-171, filed 5/8/07, effective 6/8/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-171, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.-141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-400-171, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 95-07-126 (Order 93-40), § 173-400-171, filed 3/22/95, effective 4/22/95; 93-18-007 (Order 93-03), § 173-400-171, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-171, filed 2/19/91, effective 3/22/91.]

WAC 173-400-175 Public information. All information, except information protected from disclosure under any applicable law, including, but not limited to, RCW 70.94.205, is available for public inspection at the issuing agency. This includes copies of notice of construction applications, orders, and applications to modify orders.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-175, filed 1/10/05, effective 2/10/05.]

WAC 173-400-180 Variance. Any person who owns or is in control of a plant, building, structure, establishment, process, or equipment may apply to ecology for a variance from provisions of this chapter governing the quality, nature, duration, or extent of discharges of air contaminants in accordance with the provisions of RCW 70.94.181.

(1) **Jurisdiction.** Sources in any area over which a local air pollution control authority has jurisdiction shall make application to that authority rather than ecology. Variances to state rules shall require ecology's approval prior to being issued by an authority. Ecology or the authority may grant such variance, but only after public involvement per WAC 173-400-171.

(2) **Full faith and credit.** Variances granted in compliance with state and federal laws by an authority for sources under their jurisdiction will be accepted as variances to this regulation.

(3) **EPA concurrence.** No variance or renewal shall be construed to set aside or delay any requirements of the Federal Clean Air Act except with the approval and written concurrence of the USEPA.

(4) Fees relating to this section can be found in chapter 173-455 WAC.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-400-180, filed 9/6/07, effective 10/7/07. Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-180, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-180, filed 2/19/91, effective 3/22/91.]

WAC 173-400-190 Requirements for nonattainment areas. The development of specific requirements for nonattainment areas shall include consultation with local government in the area and shall include public involvement per WAC 173-400-171.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-190, filed 2/19/91, effective 3/22/91.]

WAC 173-400-200 Creditable stack height and dispersion techniques. (1) Applicability. These provisions shall apply to all sources except:

(a) Stacks for which construction had commenced on or before December 31, 1970, except where pollutants are being emitted from such stacks used by sources which were constructed, or reconstructed, or for which major modifications were carried out after December 31, 1970;

(b) Coal-fired steam electric generating units subject to the provisions of Section 118 of the Federal Clean Air Act, which commenced operation before July 1, 1957, and for whose stacks construction commenced before February 8, 1974;

(c) Flares;

(d) Outdoor burning for agricultural or silvicultural purposes as covered under the smoke management plan;

(e) Residential wood combustion and open burning for which episodic restrictions apply.

These provisions shall not be construed to limit the actual stack height.

(2) Prohibitions. No source may use dispersion techniques or excess stack height to meet ambient air quality standards or PSD increment limitations.

(a) Excess stack height. Excess stack height is that portion of a stack which exceeds the greater of:

(i) Sixty-five meters, measured from the ground level elevation at the base of the stack; or

(ii) $H_g = H + 1.5L$

where: H_g = "good engineering practice" (GEP) stack height, measured from the ground level elevation at the base of the stack,
H = height of nearby structure(s) measured from the ground level elevation at the base of the stack,
L = lesser dimension, height or projected width, of nearby structure(s), subject to the proviso below.

"Nearby," as used in this subsection for purposes of applying the GEP formula means that distance up to five times the lesser of the height or the width dimension of a structure, but not greater than 0.8 kilometer (1/2 mile).

(b) Dispersion techniques. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise. This does not include:

(i) The reheating of a gas stream, following the use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;

(ii) The merging of gas streams where:

(A) The source was originally designed and constructed with such merged gas streams, as demonstrated by the source owner(s) or operator(s).

(B) Such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion shall apply only to the emission limitation for the pollutant affected by such change in operation.

(C) Before July 8, 1985, such merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons, and not primarily motivated by an intent to gain emissions credit for greater dispersion.

(3) Exception. EPA, ecology, or a permitting authority may require the use of a field study or fluid model to verify the creditable stack height for the source. This also applies to a source seeking credit after the effective date of this rule for an increase in existing stack height up to that established by the GEP formula. A fluid model or field study shall be performed according to the procedures described in the EPA Guideline for Determination of Good Engineering Practice Height (Technical Support Document of the Stack Height Regulations). The creditable height demonstrated by a fluid model or field study shall ensure that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

(a) "Nearby," as used in this subsection for conducting a field study or fluid model, means not greater than 0.8 km, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to ten times the maximum height of the feature, not to exceed two miles if such feature achieves a height 0.8 km from the stack that is at least forty percent of the GEP stack height or twenty-six meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

(b) "Excessive concentration" is defined for the purpose of determining creditable stack height under this subsection and means a maximum ground-level concentration owing to a significant downwash effect which contributes to excursion over an ambient air quality standard. For sources subject to PSD review (WAC 173-400-720 and 40 CFR 52.21) an excessive concentration alternatively means a maximum ground-level concentration owing to a significant downwash effect which contributes to excursion over a PSD increment. The emission rate used in this demonstration shall be the emission rate specified in the state implementation plan, or in the absence of such, the actual emission rate of the source. "Significant downwash effect" means a maximum ground-level concentration due to emissions from a stack due in whole or in part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least forty percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-200, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-200, filed 2/19/91, effective 3/22/91.]

WAC 173-400-205 Adjustment for atmospheric conditions. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant is prohibited, except as directed according to air pollution episode regulations.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-205, filed 2/19/91, effective 3/22/91.]

WAC 173-400-210 Emission requirements of prior jurisdictions. Any emissions unit that was under the jurisdiction of an authority and now is under the jurisdiction of ecology, shall meet all emission requirements that were applicable prior to transfer of jurisdiction if those standards are more stringent than the standards of this chapter or the specific chapter relating to that source.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-210, filed 2/19/91, effective 3/22/91.]

WAC 173-400-220 Requirements for board members. (1) **Public interest.** A majority of the members of any ecology or authority board shall represent the public interest. A majority of the members of such boards, shall not derive any significant portion of their income from persons subject to enforcement orders pursuant to the state and federal clean air acts. An elected public official and the board shall be presumed to represent the public interest. In the event that a member derives a significant portion of his/her income from persons subject to enforcement orders, he/she shall delegate sole responsibility for administration of any part of the program which involves these persons to an assistant.

(2) **Disclosure.** Each member of any ecology or authority board shall adequately disclose any potential conflict of interest in any matter prior to any action or consideration thereon, and the member shall remove themselves from participation as a board member in any action or voting on such matter.

(3) **Define significant income.** For the purposes of this section, "significant portion of income" shall mean twenty percent of gross personal income for a calendar year. In the case of a retired person, "significant portion of income" shall mean fifty percent of income in the form of pension or retirement benefits from a single source other than Social Security. Income derived from employment with local or state government shall not be considered in the determination of "significant portion of income."

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-220, filed 2/19/91, effective 3/22/91.]

WAC 173-400-230 Regulatory actions. Ecology may take any of the following regulatory actions to enforce this chapter to meet the provisions of RCW 43.21B.300 which is incorporated by reference.

(1) **Enforcement actions by ecology—Notice to violators.** At least thirty days prior to the commencement of any formal enforcement action under RCW 70.94.430 and 70.94.-431, the department of ecology shall cause written notice to be served upon the alleged violator or violators. The notice shall specify the provision of this chapter or the rule or regulation alleged to be violated, and the facts alleged to constitute a violation thereof, and may include an order that necessary corrective action be taken within a reasonable time. In

lieu of an order, ecology may require that the alleged violator or violators appear before it for the purpose of providing ecology information pertaining to the violation or the charges complained of. Every notice of violation shall offer to the alleged violator an opportunity to meet with ecology prior to the commencement of enforcement action.

(2) **Civil penalties.**

(a) In addition to or as an alternate to any other penalty provided by law, any person who violates any of the provisions of chapter 70.94 or 70.120 RCW, or any of the rules in force under such chapters may incur a civil penalty in an amount as set forth in RCW 70.94.431. Each such violation shall be a separate and distinct offense, and in case of a continuing violation, each day's continuance shall be a separate and distinct violation.

Any person who fails to take action as specified by an order issued pursuant to this chapter shall be liable for a civil penalty as set forth by RCW 70.94.431 for each day of continued noncompliance.

(b) Penalties incurred but not paid shall accrue interest, beginning on the ninety-first day following the date that the penalty becomes due and payable, at the highest rate allowed by RCW 19.52.020 on the date that the penalty becomes due and payable. If violations or penalties are appealed, interest shall not begin to accrue until the thirty-first day following final resolution of the appeal.

The maximum penalty amounts established in RCW 70.94.431 may be increased annually to account for inflation as determined by the state office of the economic and revenue forecast council.

(c) Each act of commission or omission which procures, aids, or abets in the violation shall be considered a violation under the provisions of this section and subject to the same penalty. The penalties provided in this section shall be imposed pursuant to RCW 43.21B.300.

(d) All penalties recovered under this section by ecology shall be paid into the state treasury and credited to the air pollution control account established in RCW 70.94.015 or, if recovered by the authority, shall be paid into the treasury of the authority and credited to its funds. If a prior penalty for the same violation has been paid to a local authority, the penalty imposed by ecology under subsection (a) of this section shall be reduced by the amount of the payment.

(e) To secure the penalty incurred under this section, the state or the authority shall have a lien on any vessel used or operated in violation of this chapter which shall be enforced as provided in RCW 60.36.050.

(f) Public or private entities that are recipients or potential recipients of ecology grants, whether for air quality related activities or not, may have such grants rescinded or withheld by ecology for failure to comply with provisions of this chapter.

(g) In addition to other penalties provided by this chapter, persons knowingly under-reporting emissions or other information used to set fees, or persons required to pay emission or permit fees who are more than ninety days late with such payments may be subject to a penalty equal to three times the amount of the original fee owed.

(3) **Assurance of discontinuance.** Personnel of ecology or an authority may accept an assurance of discontinuance of any act or practice deemed in violation of this chapter. Any such assurance shall specify a time limit during which discontinuance is to be accomplished. Failure to perform the terms of any such assurance shall constitute prima facie proof of a violation of this chapter or any order issued thereunder which make the alleged act or practice unlawful for the purpose of securing an injunction or other relief from the superior court.

(4) **Restraining orders, injunctions.** Whenever any person has engaged in, or is about to engage in, any acts or practices which constitute or will constitute a violation of any provision of this chapter, the director, after notice to such person and an opportunity to comply, may petition the superior court of the county wherein the violation is alleged to be occurring or to have occurred for a restraining order or a temporary or permanent injunction or another appropriate order.

(5) **Emergency episodes.** Ecology may issue such orders as authorized by chapter 173-435 WAC via chapter 70.94 RCW, whenever an air pollution episode forecast is declared.

(6) **Compliance orders.** Ecology may issue a compliance order in conjunction with a notice of violation. The order shall require the recipient of the notice of violation either to take necessary corrective action or to submit a plan for corrective action and a date when such action will be initiated.

[Statutory Authority: Chapter 70.94 RCW. 93-05-044 (Order 92-34), § 173-400-230, filed 2/17/93, effective 3/20/93; 91-05-064 (Order 90-06), § 173-400-230, filed 2/19/91, effective 3/22/91.]

WAC 173-400-240 Criminal penalties. Persons in violation of Title 173 WAC may be subject to the provisions of RCW 70.94.430.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-240, filed 2/19/91, effective 3/22/91.]

WAC 173-400-250 Appeals. Decisions and orders of ecology or an authority may be appealed to the pollution control hearings board pursuant to chapter 43.21B RCW and chapter 371-08 WAC.

[Statutory Authority: Chapter 70.94 RCW. 93-18-007 (Order 93-03), § 173-400-250, filed 8/20/93, effective 9/20/93; 91-05-064 (Order 90-06), § 173-400-250, filed 2/19/91, effective 3/22/91.]

WAC 173-400-260 Conflict of interest. All board members and officials acting or voting on decisions affecting air pollution sources, must comply with the Federal Clean Air Act, as it pertains to conflict of interest, and 40 CFR 103(d) which is incorporated by reference.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-400-260, filed 2/19/91, effective 3/22/91.]

WAC 173-400-560 General order of approval. In lieu of filing a notice of construction application under WAC 173-400-110, the owner or operator may apply for coverage under a general order of approval issued under this section. Coverage under a general order of approval satisfies the requirement for new source review under RCW 70.94.152.

(1) **Issuance of general orders of approval.** A permitting authority may issue a general order of approval applicable to a specific type of emission unit or source, not including nonroad engines as defined in section 216 of the Federal

Clean Air Act, subject to the conditions in this section. A general order of approval shall identify criteria by which an emission unit or source may qualify for coverage under the associated general order of approval and shall include terms and conditions under which the owner or operator agrees to install and/or operate the covered emission unit or source. At a minimum, these terms and conditions shall include:

(a) Applicable emissions limitations and/or control requirements;

(b) Best available control technology;

(c) Appropriate operational restrictions, such as:

(i) Criteria related to the physical size of the unit(s) covered;

(ii) Criteria related to raw materials and fuels used;

(iii) Criteria related to allowed or prohibited locations; and

(iv) Other similar criteria determined by a permitting authority;

(d) Monitoring, reporting and recordkeeping requirements to ensure compliance with the applicable emission limits and control requirements;

(e) Appropriate initial and periodic emission testing requirements;

(f) Compliance with chapter 173-460 WAC, and WAC 173-400-112 (2)(c) or 173-400-113(3) as applicable;

(g) Compliance with 40 CFR Parts 60, 61, 62, and 63; and

(h) The application and approval process to obtain coverage under the specific general order of approval.

(2) **Public comment.** A permitting authority shall provide an opportunity for public comment on a proposed new general order of approval or modification of an existing general order of approval in accordance with WAC 173-400-171.

(3) **Modification of general orders of approval.** A permitting authority may review and modify a general order of approval at any time. Only the permitting authority that issued a general order of approval may modify that general order of approval. Modifications to general orders of approval shall follow the procedures of this regulation and shall only take effect prospectively.

(4) **Application for coverage under a general order of approval.**

(a) In lieu of applying for an individual order of approval under WAC 173-400-110, an owner or operator of an emission unit or source may apply for and receive coverage from a permitting authority under a general order of approval if:

(i) The owner or operator of the emission unit or source applies for coverage under a general order of approval in accordance with this regulation and any conditions of the approval related to application for and granting coverage under the general order of approval;

(ii) The emission unit or source meets all the qualifications listed in the requested general order of approval;

(iii) The requested emission unit or source is not part of a new major stationary source or major modification subject to the requirements of WAC 173-400-112 or 173-400-720; and

(iv) The requested emission unit or source does not trigger applicability of the operating permit program under chapter 173-401 WAC or trigger a required modification of an existing operating permit.

(b) Owners or operators of emission units or sources applying for coverage under a general order of approval shall do so using the forms supplied by a permitting authority and include the required fee. The application must include all information necessary to determine qualification for, and to assure compliance with, a general order of approval.

(c) An application shall be incomplete until a permitting authority has received any required fees.

(d) The owner or operator of a new source or modification of an existing source that qualifies for coverage under a general order of approval may not begin actual construction of the new source or modification until its application for coverage has been approved or accepted under the procedures established in subsection (5) of this section.

(5) **Processing applications for coverage under a general order of approval.** Each general order of approval shall include a section on how an applicant is to request coverage and how the permitting authority will grant coverage. The section of the general order of approval will include either the method in (a) or (b) of this subsection to describe the process for the applicant to be granted coverage.

(a) Within thirty days of receipt of an application for coverage under a general order of approval, the permitting authority shall notify an applicant in writing that the application is incomplete, approved, or denied. If an application is incomplete, the permitting authority shall notify an applicant of the information needed to complete the application. If an application is denied, the permitting authority shall notify an applicant of the reasons why the application is denied. Coverage under a general order of approval is effective as of the date of issuance of approval by the permitting authority.

(b) The applicant is approved for coverage under the general order of approval thirty-one days after an application for coverage is received by the permitting authority, unless the owner or operator receives a letter from the permitting authority, postmarked within thirty days of when the application for coverage was received by the permitting authority, notifying the owner or operator that the emissions unit or source does not qualify for coverage under the general order of approval. The letter denying coverage shall notify the applicant of the disqualification and the reasons why coverage is denied.

(6) **Termination of coverage under a general order of approval.** An owner or operator who has received approval of an application for coverage under a general order of approval may later request to be excluded from coverage under that general order of approval by applying to the same permitting authority for an individual order of approval, under WAC 173-400-110, or for coverage under another general order of approval. If the same permitting authority issues an individual order of approval or other permit or order serving the same purpose as the original general order of approval, or approves coverage under a different general order of approval, coverage under the original general order of approval is automatically terminated, effective on the effective date of the individual order of approval, order or permit or new general order of approval.

(7) **Failure to qualify or comply.** An owner or operator who requests and is granted approval for coverage under a general order of approval shall be subject to enforcement action for establishment of a new source in violation of WAC

173-400-110 a decision to grant coverage under a general order of approval was based upon erroneous information submitted by the applicant.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-560, filed 1/10/05, effective 2/10/05.]

PERMITTING OF MAJOR STATIONARY SOURCES AND MAJOR MODIFICATIONS TO MAJOR STATIONARY SOURCES

WAC 173-400-700 Review of major stationary sources of air pollution. (1) The following sections are to be used by ecology when reviewing and permitting new major stationary sources and major modifications to major stationary sources located in attainment or unclassified areas in Washington.

(2) WAC 173-400-700 through 173-400-750 apply statewide except:

(a) Where the authority has received delegation of the federal PSD program from EPA or has a SIP approved PSD program.

(b) To projects under the jurisdiction of the energy facility site evaluation council site certification process pursuant to chapter 80.50 RCW.

(c) Applications or requests to designate an emissions unit as a Clean Unit under 40 CFR 52.21(y), to permit a Pollution Control Project under 40 CFR 52.21 (z)(5), or to establish an actual Plantwide Applicability Limit under 40 CFR 52.21(aa) shall be processed by the authority where the authority has received delegation from EPA to administer the relevant alternative PSD applicability tests.

(3) The construction of a major stationary source or major modification subject to the permitting requirements of the following section might also be subject to the permitting program in WAC 173-400-110.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-700, filed 1/10/05, effective 2/10/05.]

WAC 173-400-710 Definitions. (1) The definitions in WAC 173-400-030 are to be used in WAC 173-400-700 through 173-400-750 unless:

(a) A term is defined differently in WAC 173-400-710 for use in the major source permitting requirements in WAC 173-400-700 through 173-400-750; or

(b) A term is defined differently in the federal program requirements adopted by reference in WAC 173-400-720.

(2) All usage of the term "source" in WAC 173-400-710 through 173-400-750 and in 40 CFR 52.21 as adopted by reference is to be interpreted to mean "stationary source" as defined in 40 CFR 52.21 (b)(5). A stationary source (or source) does not include emissions resulting directly from an internal combustion engine for transportation purposes from a nonroad engine or nonroad vehicle as defined in section 216 of the Federal Clean Air Act.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 07-11-039 (Order 06-03), § 173-400-710, filed 5/8/07, effective 6/8/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-710, filed 1/10/05, effective 2/10/05.]

WAC 173-400-720 Prevention of significant deterioration (PSD). (1) No major stationary source or major modification to which the requirements of this section apply shall begin actual construction without having received a PSD permit.

(2) **Early planning encouraged.** In order to develop an appropriate application, the source should engage in an early planning process to assess the needs of the facility. An opportunity for a preapplication meeting with ecology is available to any potential applicant.

(3) **Enforcement.** Ecology or the permitting authority with jurisdiction over the source under chapter 173-401 WAC, the Operating permit regulation, shall:

(a) Receive all reports required in the PSD permit;

(b) Enforce the requirement to apply for a PSD permit when one is required; and

(c) Enforce the conditions in the PSD permit.

(4) **Applicable requirements.**

(a) A PSD permit must assure compliance with the following requirements:

(i) Allowable emissions from the proposed major stationary source or major modification will not delay the attainment date for an area not in attainment nor cause or contribute to a violation of any ambient air quality standard. This requirement will be considered to be met if the projected impact of the allowable emissions from the proposed major stationary source or the projected impact of the increase in allowable emissions from the proposed major modification at any location within a nonattainment area does not exceed the following levels for the pollutants for which the area has been designated nonattainment:

Pollutant	Annual Average	24-Hour Average	8-Hour Average	3-Hour Average	1-Hour Average
CO-	-		0.5 mg/m^3	-	2 mg/m^3
SO_2	1.0 µg/m^3	5 µg/m^3	-	25 µg/m^3	30 µg/m^3
PM_{10}	1.0 µg/m^3	5 µg/m^3	-	-	-
NO_2	1.0 µg/m^3	-	-	-	-

An offsetting emission reduction may be used to satisfy some or all of the requirements of this subsection.

(ii) WAC 173-400-117 - Special protection requirements for federal Class I areas;

(iii) WAC 173-400-730 - Prevention of significant deterioration application processing;

(iv) WAC 173-400-740 - Prevention of significant deterioration public involvement requirements; and

(v) The following subparts of 40 CFR 52.21, in effect on October 1, 2006, which are adopted by reference. Exceptions are listed in (b)(i), (ii), and (iii) of this subsection:

Section	Title
40 CFR 52.21 (a)(2)	Applicability Procedures.
40 CFR 52.21 (b)	Definitions.
40 CFR 52.21 (c)	Ambient air increments.
40 CFR 52.21 (d)	Ambient air ceilings.
40 CFR 52.21 (h)	Stack heights.
40 CFR 52.21 (i)	Review of major stationary sources and major modifications - source applicability and exemptions.
40 CFR 52.21 (j)	Control technology review.
40 CFR 52.21 (k)	Source impact analysis.
40 CFR 52.21 (l)	Air quality models.
40 CFR 52.21 (m)	Air quality analysis.

Section	Title
40 CFR 52.21 (n)	Source information.
40 CFR 52.21 (o)	Additional impact analysis.
40 CFR 52.21 (r)	Source obligation.
40 CFR 52.21 (v)	Innovative control technology.
40 CFR 52.21 (w)	Permit rescission.
40 CFR 52.21 (x)	Vacated by federal Court Decision.
40 CFR 52.21 (y)	Vacated by federal Court Decision.
40 CFR 52.21 (z)	Vacated by federal Court Decision.
40 CFR 52.21 (aa)	Actuals Plantwide Applicability Limitation.
40 CFR 52.21 (bb)	Severability clause.
40 CFR 52.21 (cc)	Vacated by federal Court Decision.

(b) Exceptions to adopting 40 CFR 52.21 by reference.

(i) Every use of the word "administrator" in 40 CFR 52.21 means ecology except for the following:

(A) In 40 CFR 52.21 (b)(17), the definition of federally enforceable, "administrator" means the EPA administrator.

(B) In 40 CFR 52.21 (l)(2), air quality models, "administrator" means the EPA administrator.

(C) In 40 CFR 52.21 (b)(43) the definition of prevention of significant deterioration program, "administrator" means the EPA administrator.

(D) In 40 CFR 52.21 (b)(48)(ii)(c) related to regulations promulgated by the administrator, "administrator" means the EPA administrator.

(E) In 40 CFR 52.21 (b)(50)(i) related to the definition of a regulated NSR pollutant, "administrator" means the EPA administrator.

(ii) Each reference in 40 CFR 52.21(i) to "paragraphs (j) through (r) of this section" is amended to state "paragraphs (j) through (o) of this section, paragraph (r) of this section, WAC 173-400-117, 173-400-720, and 173-400-730."

(iii) The following paragraphs replace the designated paragraphs of 40 CFR 52.21:

(A) In 40 CFR 52.21 (b)(1)(i)(a) and (b)(1)(iii)(h), the size threshold for municipal waste incinerators is changed to 50 tons of refuse per day.

(B) 40 CFR 52.21 (b)(23)(i) After the entry for municipal solid waste landfills emissions, add Ozone Depleting Substances: 100 tpy.

(C) 40 CFR 52.21 (r)(6) "The provisions of this paragraph (r)(6) apply to projects at an existing emissions unit at a major stationary source (other than projects at a Clean Unit or at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in paragraphs 40 CFR 52.21 (b)(41)(ii)(a) through (c) for calculating projected actual emissions.

(i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(A) A description of the project;

(B) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph 40 CFR 52.21 (b)(41)(ii)(c) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(ii) The owner or operator shall submit a copy of the information set out in paragraph 40 CFR 52.21 (r)(6)(i) to the permitting authority before beginning actual construction. This information may be submitted in conjunction with any NOC application required under the provisions of WAC 173-400-110. Nothing in this paragraph (r)(6)(ii) shall be construed to require the owner or operator of such a unit to obtain any PSD determination from the permitting authority before beginning actual construction.

(iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph 40 CFR 52.21 (r)(6)(i)(b); and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit that regulated NSR pollutant at such emissions unit.

(iv) The owner or operator shall submit a report to the permitting authority within 60 days after the end of each year during which records must be generated under paragraph 40 CFR 52.21 (r)(6)(iii) setting out the unit's annual emissions during the calendar year that preceded submission of the report.

(v) The owner or operator shall submit a report to the permitting authority if the annual emissions, in tons per year, from the project identified in paragraph 40 CFR 52.21 (r)(6)(i), exceed the baseline actual emissions (as documented and maintained pursuant to paragraph 40 CFR 52.21 (r)(6)(i)(c)), by a significant amount (as defined in paragraph 40 CFR 52.21 (b)(23)) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph 40 CFR 52.21 (r)(6)(i)(c). Such report shall be submitted to the permitting authority within 60 days after the end of such year. The report shall contain the following:

(a) The name, address and telephone number of the major stationary source;

(b) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of this section; and

(c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection)."

(D) 40 CFR 52.21 (r)(7) The owner or operator of the source shall submit the information required to be documented and maintained pursuant to paragraphs 40 CFR 52.21 (r)(6)(iv) and (v) annually within 60 days after the anniversary date of the original analysis. The original analysis and annual reviews shall also be available for review upon a

request for inspection by the permitting authority or the general public pursuant to the requirements contained in 40 CFR 70.4 (b)(3)(viii).

(E) 40 CFR 52.21 (aa)(2)(ix) PAL permit means the PSD permit, an ecology issued order of approval issued under WAC 173-400-110, or regulatory order issued under WAC 173-400-091 issued by ecology that establishes a PAL for a major stationary source.

(F) 40 CFR 52.21 (aa)(5) Public participation requirements for PALs. PALs for existing major stationary sources shall be established, renewed, or expired through the public participation process in WAC 173-400-171. A request to increase a PAL shall be processed in accordance with the application processing and public participation process in WAC 173-400-730 and 173-400-740.

(G) 40 CFR 52.21 (aa)(9)(i)(b) Ecology, after consultation with the permitting authority, shall decide whether and how the PAL allowable emissions will be distributed and issue a revised order, order of approval or PSD permit incorporating allowable limits for each emissions unit, or each group of emissions units, as ecology determines is appropriate.

(H) 40 CFR 52.21 (aa)(14) Reporting and notification requirements. The owner or operator shall submit semiannual monitoring reports and prompt deviation reports to the permitting authority in accordance with the requirements in chapter 173-401 WAC. The reports shall meet the requirements in paragraphs 40 CFR 52.21 (aa)(14)(i) through (iii).

(I) 40 CFR 52.21 (aa)(14)(ii) Deviation report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to WAC 173-401-615 (3)(b) and within the time limits prescribed shall satisfy this reporting requirement. The reports shall contain the information found at WAC 173-401-615(3).

[Statutory Authority: RCW 70.94.395 and 70.94.331. 07-11-039 (Order 06-03), § 173-400-720, filed 5/8/07, effective 6/8/07. Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-720, filed 1/10/05, effective 2/10/05.]

WAC 173-400-730 Prevention of significant deterioration application processing procedures. (1) **Application submittal.**

(a) The applicant shall submit an application that provides complete information adequate for ecology to determine compliance with all PSD program requirements.

(b) The applicant shall submit complete copies of its PSD application or an application to increase a PAL, distributed in the following manner:

(i) Three copies to ecology: Air Quality Program, P.O. Box 47600, Olympia, WA 98504-7600.

(ii) One copy to each of the following federal land managers:

(A) U.S. Department of the Interior - National Park Service; and

(B) U.S. Department of Agriculture - U.S. Forest Service.

(iii) One copy to the permitting authority with authority over the source under chapter 173-401 WAC.

(iv) One copy to EPA.

(c) Application submittal and processing for requests for a Clean Unit designation under 40 CFR 52.21(y), a pollution control project exemption under 40 CFR 52.21(z) or the initial request, renewal or expiration of a PAL under 40 CFR 52.21(aa) shall be done as provided in WAC 173-400-720 (4)(b)(iii).

(2) **Application processing.**

(a) Completeness determination.

(i) Within thirty days after receiving a PSD permit application, ecology shall either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application. Ecology may request additional information clarifying aspects of the application after it has been determined to be complete.

(ii) The effective date of the application is the date on which ecology notifies the applicant that the application is complete pursuant to (a)(i) of this subsection.

(iii) If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied and appropriate enforcement action taken.

(iv) The permitting authority shall send a copy of the completeness determination to the responsible federal land manager.

(b) Preparation and issuance of the preliminary determination.

(i) When the application has been determined to be complete, ecology shall begin developing the preliminary determination to approve or deny the application.

(ii) Within one year after receipt of a complete application, ecology shall provide the applicant with a preliminary determination along with a technical support document and a public notice.

(c) Issuance of the final determination.

(i) Ecology shall make no final decision until the public comment period has ended and all comments received during the public comment period have been considered.

(ii) As expeditiously as possible after the close of the public comment period, or hearing if one is held, ecology shall prepare and issue the final determination.

(d) The effective date of a final determination is one of the following dates:

(i) If no comments on the preliminary determination were received, the date of issuance; or

(ii) If comments were received, thirty days after receipt of the final determination; or

(iii) A later date as specified within the PSD permit approval.

(3) **PSD technical support document.** Ecology shall develop a technical support document for each preliminary PSD determination. The preliminary technical support document will be updated prior to issuance of the final determination to reflect changes to the final determination based on comments received. The technical support document shall include the following information:

(a) A brief description of the major stationary source, major modification, or activity subject to review;

(b) The physical location, ownership, products and processes involved in the major stationary source or major modification subject to review;

(c) The type and quantity of pollutants proposed to be emitted into the air;

(d) A brief summary of the BACT options considered and the reasons why the selected BACT level of control was selected;

(e) A brief summary of the basis for the permit approval conditions;

(f) A statement on whether the emissions will or will not cause a state and national ambient air quality standard to be exceeded;

(g) The degree of increment consumption expected to result from the source or modification;

(h) An analysis of the impacts on air quality related values in federal Class I areas and other Class I areas affected by the project; and

(i) An analysis of the impacts of the proposed emissions on visibility in any federal Class I area following the requirements in WAC 173-400-117.

(4) **Appeals.** A PSD permit, any conditions contained in a PSD permit, or the denial of PSD permit may be appealed to the pollution control hearings board as provided in chapter 43.21B RCW. A PSD permit issued under the terms of a delegation agreement can be appealed to the EPA's environmental appeals board as provided in 40 CFR 124.13 and 40 CFR 124.19.

(5) **Construction time limitations.**

(a) Approval to construct or modify a major stationary source becomes invalid if construction is not commenced within eighteen months of the effective date of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The time period between construction of the approved phases of a phased construction project cannot be extended. Each phase must commence construction within eighteen months of the projected and approved commencement date.

(b) Ecology may extend the eighteen-month effective period of a PSD permit upon a satisfactory showing that an extension is justified. A request to extend the effective time to begin or complete actual construction under a PSD permit may be submitted. The request may result from the cessation of on-site construction before completion or failure to begin actual construction of the project(s) covered by the PSD permit.

(i) Request requirements.

(A) A written request for the extension, submitted by the PSD permit holder, as soon as possible prior to the expiration of the current PSD permit.

(B) An evaluation of BACT and an updated ambient impact, including an increment analysis, for all pollutants subject to the approval conditions in the PSD permit.

(ii) Duration of extensions.

(A) No single extension of time shall be longer than eighteen months.

(B) The cumulative time prior to beginning actual construction under the original PSD permit and all approved time extensions shall not exceed fifty-four months.

(iii) Issuance of an extension.

(A) Ecology may approve and issue an extension of the current PSD permit.

(B) The extension of approval shall reflect any revised BACT limitations based on the evaluation of BACT presented in the request for extension and other information available to ecology.

(C) The issuance of an extension is subject to the public involvement requirements in WAC 173-400-740.

(iv) For the extension of a PSD permit, ecology must prepare a technical support document consistent with WAC 173-400-730(3) only to the extent that those criteria apply to a request to extend the construction time limitation.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-730, filed 1/10/05, effective 2/10/05.]

WAC 173-400-740 PSD permitting public involvement requirements. (1) **Actions requiring notification of the public.** Ecology must provide public notice before approving or denying any of the following types of actions related to implementation of the PSD program contained in WAC 173-400-720:

(a) Any preliminary determination to approve or disapprove a PSD permit application; or

(b) An extension of the time to begin construction or suspend construction under a PSD permit; or

(c) A revision to a PSD permit, except an administrative amendment to an existing permit.

(2) **Notification of the public.** Within one year of the receipt of a complete PSD application, and as expeditiously as possible after receipt of a request for extension of the construction time limit under WAC 173-400-730(6) or for a nonadministrative revision to a PSD permit under WAC 173-400-750, ecology shall:

(a) Make available for public inspection in at least one location in the vicinity where the proposed source would be constructed, or for revisions to a PSD permit where the permittee exists, a copy of the information submitted by the applicant, and any applicable preliminary determinations, including analyses of the effects on air quality and air quality related values, considered in making the preliminary determination. Exemptions from this requirement include information protected from disclosure under any applicable law, including, but not limited to, RCW 70.94.205 and chapter 173-03 WAC.

(b) Notify the public by:

(i) Causing to be published, in a newspaper of general circulation in the area of the proposed project, the public notice prepared in accordance with WAC 173-400-730(4). The date the public notice is published in the newspaper starts the required thirty-day comment period.

(ii) If ecology grants a request to extend the public comment period, the extension notice must also be published in a newspaper as noted above and a copy of the extension notice sent to the organizations and individuals listed in (c) and (d) of this subsection. The closing date of the extended comment period shall be as defined in the public comment period extension notification.

(iii) If a hearing is held, the public comment period must extend through the hearing date.

(iv) The applicant or other initiator of the action must pay the cost of providing public notice.

(c) Send a copy of the public notice to:

(i) Any Indian governing body whose lands may be affected by emissions from the project;

(ii) The chief executive of the city where the project is located;

(iii) The chief executive of the county where the project is located;

(iv) Individuals or organizations that requested notification of the specific project proposal;

(v) Other individuals who requested notification of PSD permits;

(vi) Any state within 100 km of the proposed project.

(d) Send a copy of the public notice, PSD preliminary determination, and the technical support document to:

(i) The applicant;

(ii) The affected federal land manager;

(iii) EPA Region 10;

(iv) The permitting authority with authority over the source under chapter 173-401 WAC;

(v) Individuals or organizations who request a copy; and

(vi) The location for public inspection of material required under (a) of this subsection.

(3) **Public notice content.** The public notice shall contain at least the following information:

(a) The name and address of the applicant;

(b) The location of the proposed project;

(c) A brief description of the project proposal;

(d) The preliminary determination to approve or disapprove the application;

(e) How much increment is expected to be consumed by this project;

(f) The name, address, and telephone number of the person to contact for further information;

(g) A brief explanation of how to comment on the project;

(h) An explanation on how to request a public hearing;

(i) The location of the documents made available for public inspection;

(j) There is a thirty-day period from the date of publication of the notice for submitting written comment to ecology;

(k) A statement that a public hearing may be held if ecology determines within a thirty-day period that significant public interest exists;

(l) The length of the public comment period in the event of a public hearing;

(m) For projects subject to special protection requirements for federal Class I areas, in WAC 173-400-117, and where ecology disagrees with the analysis done by the federal land manager, ecology shall explain its decision in the public notice or state that an explanation of the decision appears in the technical support document for the proposed approval or denial.

(4) **Public hearings.**

(a) The applicant, any interested governmental entity, any group, or any person may request a public hearing within the thirty-day public comment period. A request must indicate the interest of the entity filing it and why a hearing is warranted. Whether a request for a hearing is filed or not, ecology may hold a public hearing if it determines significant public interest exists. Ecology will determine the location, date, and time of the public hearing.

(b) Notification of a public hearing will be accomplished per the requirements of WAC 173-400-740(2).

(c) The public must be notified at least thirty days prior to the date of the hearing (or first of a series of hearings).

(5) **Consideration of public comments.** Ecology shall make no final decision on any application or action of any type described in subsection (1) of this section until the public comment period has ended and any comments received during the public comment period have been considered. Ecology shall make all public comments available for public inspection at the same locations where the preconstruction information on the proposed major source or major modification was made available.

(6) **Issuance of a final determination.**

(a) The final approval or disapproval determination shall include the following:

(i) A copy of the final PSD permit or the determination to deny the permit;

(ii) A summary of the comments received;

(iii) Ecology's response to those comments;

(iv) A description of what approval conditions changed from the preliminary determination; and

(v) A cover letter that includes an explanation of how the final determination may be appealed.

(b) Ecology shall mail a copy of the cover letter that accompanies the final determination to:

(i) Individuals or organizations that requested notification of the specific project proposal;

(ii) Other individuals who requested notification of PSD permits.

(c) A copy of the final determination shall be sent to:

(i) The applicant;

(ii) U.S. Department of the Interior - National Park Service;

(iii) U.S. Department of Agriculture - Forest Service;

(iv) EPA Region 10;

(v) The permitting authority with authority over the source under chapter 173-401 WAC;

(vi) Any person who commented on the preliminary determination; and

(vii) The location for public inspection of material required under subsection (2)(a) of this section.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-740, filed 1/10/05, effective 2/10/05.]

WAC 173-400-750 Revisions to PSD permits. (1) The owner or operator may request, at any time, a change in conditions of a PSD permit and ecology may approve the request provided ecology finds that:

(a) The change in conditions will not cause the source to exceed an emissions standard established by regulation;

(b) No ambient air quality standard or PSD increment will be exceeded as a result of the change;

(c) The change will not adversely impact the ability of ecology or the authority to determine compliance with an emissions standard;

(d) The revised PSD permit will continue to require BACT, as defined at the time of the original PSD permit, for each new or modified emission unit approved by the original PSD permit; and

(e) The revised PSD permit continues to meet the requirements of WAC 173-400-112(2), and 173-400-113, as applicable.

(2) A request to revise a PSD permit must be acted upon using the timelines found in WAC 173-400-730. The fee schedule found in WAC 173-400-116 shall also apply.

(3) All revisions to PSD permits are subject to public involvement except for the following administrative revisions:

(a) Change of the owner or operator's business name and/or mailing address;

(b) Corrections to typographical errors;

(c) Revisions to compliance monitoring methods that do not reduce the permittee's or ecology's ability to determine compliance with the emission limitations; or

(d) Any other revision that does not reduce the stringency of the emission limitations in the PSD permit or the ability of ecology, the permitting authority, EPA, or the public to determine compliance with the approval conditions in the PSD permit.

[Statutory Authority: RCW 70.94.152. 05-03-033 (Order 03-07), § 173-400-750, filed 1/10/05, effective 2/10/05.]

Chapter 173-401 WAC
OPERATING PERMIT REGULATION

WAC

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PART I
OVERVIEW

WAC 173-401-100 Program overview. (1) The provisions in this chapter establish the elements of a comprehensive Washington state air operating permit program consistent with the requirements of Title V of the Federal Clean Air Act (FCAA) (42 U.S.C. 7401, et seq.).

(2) All sources subject to this regulation shall have a permit to operate that assures compliance by the source with all applicable requirements. While chapter 173-401 WAC does not impose substantive new requirements, it does require that fees be imposed on sources and that certain procedural measures be adopted especially with respect to compliance.

(3) The requirements of this chapter, including provisions regarding schedules for submission and approval or disapproval of permit applications, shall apply to the permitting of affected sources under the acid rain program, except as provided herein or modified in regulations promulgated under Title IV of the FCAA (acid rain program).

(4) Issuance of permits under this chapter may be coordinated with issuance of permits under the Resource Conservation and Recovery Act and under the Clean Water Act,

whether issued by the state, the United States Environmental Protection Agency (EPA), or the United States Army Corps of Engineers.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-100, filed 10/4/93, effective 11/4/93.]

PART II
DEFINITIONS

WAC 173-401-200 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated by reference, unless otherwise defined here. Unless a different meaning is clearly required by context, the following words and phrases, as used in this chapter, shall have the following meanings:

(1) "Affected source" means a source that includes one or more affected units.

(2) "Affected states" are the states or federally-recognized Tribal Nations:

(a) Whose air quality may be affected when a chapter 401 permit, permit modification, or permit renewal is being proposed; or

(b) That are within fifty miles of the permitted source.

(3) "Affected unit" means a fossil-fuel fired combustion device or a source that opts-in under 40 CFR part 74, that is subject to any emission reduction requirement or limitation under the Acid Rain Program.

(4) "Applicable requirement" means all of the following as they apply to emissions units in a chapter 401 source (including requirements that have been promulgated or approved by EPA, ecology or a local authority through rule making at the time of permit issuance but have future-effective compliance dates):

(a) The following provisions of the Federal Clean Air Act (FCAA):

(i) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rule making under Title I of the FCAA (Air Pollution Prevention and Control) that implements the relevant requirements of the FCAA, including any revisions to that plan promulgated in 40 CFR 52;

(ii) Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rule making under Title I, including parts C (Prevention of Significant Deterioration) or D (Plan Requirements for Nonattainment Areas), of the FCAA;

(iii) Any standard or other requirement under section 111 (New Source Performance Standards) of the FCAA, including section 111(d);

(iv) Any standard or other requirement under section 112 (Hazardous Air Pollutants) of the FCAA, including any requirement concerning accident prevention under section 112 (r)(7) of the FCAA;

(v) Any standard or other requirement of the acid rain program under Title IV of the FCAA (Acid Deposition Control) or the regulations promulgated thereunder;

(vi) Any requirements established pursuant to section 504(b) or section 114 (a)(3) of the FCAA;

(vii) Any standard or other requirement governing solid waste incineration, under section 129 of the FCAA;

(viii) Any standard or other requirement for consumer and commercial products, under section 183(e) of the FCAA;

(ix) Any standard or other requirement for tank vessels, under section 183(f) of the FCAA;

(x) Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the FCAA;

(xi) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator has determined that such requirements need not be contained in a Title V permit; and

(xii) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to WAC 173-401-635.

(b) Chapter 70.94 RCW and rules adopted thereunder. This includes requirements in regulatory orders issued by the permitting authority.

(c) In permits issued by local air pollution control authorities, the requirements of any order or regulation adopted by the authority.

(d) Chapter 70.98 RCW and rules adopted thereunder.

(e) Chapter 80.50 RCW and rules adopted thereunder.

(5) "Chapter 401 permit" or "permit" means any permit or group of permits covering a chapter 401 source that is issued, renewed, amended, or revised pursuant to this chapter.

(6) "Chapter 401 source" means any source subject to the permitting requirements of this chapter.

(7) "Continuous compliance" means collection of all monitoring data required by the permit under the data collection frequency required by the permit, with no deviations, and no other information that indicates deviations, except for unavoidable excess emissions or other operating conditions during which compliance is not required. Monitoring data includes information from instrumental (e.g., CEMS, COMS, or parameter monitors) and noninstrumental (e.g., visual observation, inspection, recordkeeping) forms of monitoring.

(8) "Delegated authority" means an air pollution control authority that has been delegated the permit program pursuant to RCW 70.94.161 (2)(b).

(9) "Designated representative" shall have the meaning given to it in section 402(26) of the FCAA and the regulations promulgated thereunder and in effect on April 7, 1993.

(10) "Draft permit" means the version of a permit for which the permitting authority offers public participation or affected state review.

(11) "Emissions allowable under the permit" means an enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or an enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

(12) "Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

(13) The "EPA" or the "administrator" means the administrator of the U.S. Environmental Protection Agency or her/his designee.

(14) "Federal Clean Air Act" or "FCAA" means the Federal Clean Air Act, also known as Public Law 88-206, 77 Stat. 392. December 17, 1963, 42 U.S.C. 7401 et seq., as last amended by the Clean Air Act Amendments of 1990, P.L. 101-549, November 15, 1990.

(15) "Final permit" means the version of a chapter 401 permit issued by the permitting authority that has completed all review procedures required by this chapter and 40 CFR §§ 70.7 and 70.8.

(16) "General permit" means a permit which covers multiple similar sources or emissions units in lieu of individual permits being issued to each source.

(17) "Insignificant activity" or "insignificant emissions unit" means any activity or emissions unit located at a chapter 401 source which qualifies as insignificant under the criteria listed in WAC 173-401-530. These units and activities are exempt from permit program requirements except as provided in WAC 173-401-530.

(18) "Intermittent compliance" means any form of compliance other than continuous compliance. A certification of intermittent compliance under WAC 173-401-630(5) shall be filed where the monitoring data or other information available to the permittee shows either there are periods of noncompliance, or periods of time during which the monitoring required by the permit was not performed or recorded.

(19) "Major source" means any stationary source (or any group of stationary sources) that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control) belonging to a single major industrial grouping and that are described in (a), (b), or (c) of this subsection. For the purposes of defining "major source," a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same major group (i.e., all have the same two-digit code) as described in the *Standard Industrial Classification Manual,* 1987.

(a) A major source under section 112 of the FCAA, which is defined as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, ten tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the FCAA, or twenty-five tpy or more of any combination of such hazardous air pollutants. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

(b) A major stationary source of air pollutants, as defined in section 302 of the FCAA, that directly emits or has the potential to emit, one hundred tpy or more of any air pollutant (including any major source of fugitive emissions of any such pollutant). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of this section, unless the source belongs to one of the following categories of stationary source:

(i) Coal cleaning plants (with thermal dryers);

(ii) Kraft pulp mills;

(iii) Portland cement plants;

(iv) Primary zinc smelters;

(v) Iron and steel mills;

(vi) Primary aluminum ore reduction plants;

(vii) Primary copper smelters;

(viii) Municipal incinerators capable of charging more than two hundred fifty tons of refuse per day;

(ix) Hydrofluoric, sulfuric, or nitric acid plants;

(x) Petroleum refineries;

(xi) Lime plants;

(xii) Phosphate rock processing plants;

(xiii) Coke oven batteries;

(xiv) Sulfur recovery plants;

(xv) Carbon black plants (furnace process);

(xvi) Primary lead smelters;

(xvii) Fuel conversion plants;

(xviii) Sintering plants;

(xix) Secondary metal production plants;

(xx) Chemical process plants;

(xxi) Fossil-fuel boilers (or combination thereof) totaling more than two hundred fifty million British thermal units per hour heat input;

(xxii) Petroleum storage and transfer units with a total storage capacity exceeding three hundred thousand barrels;

(xxiii) Taconite ore processing plants;

(xxiv) Glass fiber processing plants;

(xxv) Charcoal production plants;

(xxvi) Fossil-fuel-fired steam electric plants of more than two hundred fifty million British thermal units per hour heat input; or

(xxvii) All other stationary source categories, which as of August 7, 1980, were being regulated by a standard promulgated under section 111 or 112 of the FCAA;

(c) A major stationary source as defined in part D of Title I of the FCAA, including:

(i) For ozone nonattainment areas, sources with the potential to emit one hundred tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," fifty tpy or more in areas classified as "serious," twenty-five tpy or more in areas classified as "severe," and ten tpy or more in areas classified as "extreme"; except that the references in this paragraph to one hundred, fifty, twenty-five, and ten tpy of nitrogen oxides shall not apply with respect to any source for which the administrator has made a finding, under section 182 (f)(1) or (2) of the FCAA, that requirements under section 182(f) of the FCAA do not apply;

(ii) For ozone transport regions established pursuant to section 184 of the FCAA, sources with the potential to emit fifty tpy or more of volatile organic compounds;

(iii) For carbon monoxide nonattainment areas (A) that are classified as "serious," and (B) in which stationary sources contribute significantly to carbon monoxide levels, sources with the potential to emit fifty tpy or more of carbon monoxide; and

(iv) For particulate matter (PM-10) nonattainment areas classified as "serious," sources with the potential to emit seventy tpy or more of PM-10.

(20) "Permit modification" means a revision to a chapter 401 permit that meets the requirements of WAC 173-401-725.

(21) "Permit program costs" means all reasonable (direct and indirect) costs required to develop and administer a permit program (whether such costs are incurred by the permitting authority or other state or local agencies that do not issue permits directly, but that support permit issuance or administration).

(22) "Permit revision" means any permit modification or administrative permit amendment.

(23) "Permitting authority" means the department of ecology, local air authority, or other agency authorized under RCW 70.94.161 (3)(b) and approved by EPA to carry out a permit program under this chapter.

(24) "Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the administrator. This term does not alter or affect the use of this term for any other purposes under the FCAA, or the term "capacity factor" as used in Title IV of the FCAA or the regulations promulgated thereunder.

(25) "Proposed permit" means the version of a permit that the permitting authority proposes to issue and forwards to the administrator for review in compliance with 40 CFR 70.8.

(26) "Regulated air pollutant" means the following:

(a) Nitrogen oxides or any volatile organic compounds;

(b) Any pollutant for which a national ambient air quality standard has been promulgated;

(c) Any pollutant that is subject to any standard promulgated under section 111 of the FCAA;

(d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or

(e) Any pollutant subject to a standard promulgated under section 112 or other requirements established under section 112 of the FCAA, including sections 112 (g), (j), and (r), including the following:

(i) Any pollutant subject to requirements under section 112(j) of the FCAA. If the administrator fails to promulgate a standard by the date established pursuant to section 112(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date eighteen months after the applicable date established pursuant to section 112(e) of the FCAA; and

(ii) Any pollutant for which the requirements of section 112 (g)(2) of the FCAA have been met, but only with respect to the individual source subject to section 112 (g)(2) requirement; and

(f) Any air pollutant for which numerical emission standards, operational requirements, work practices, or monitoring requirements applicable to the source have been adopted under RCW 70.94.331, 70.94.380, and 70.94.395.

(27) "Regulated pollutant (for fee calculation)," which is used only for purposes of WAC 173-401-900, means any "regulated air pollutant" except the following:

(a) Carbon monoxide;

(b) Any pollutant that is a regulated air pollutant solely because it is a Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or

(c) Any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under section 112(r) of the FCAA.

(d) Any regulated air pollutant emitted from an insignificant activity or emissions unit as determined under WAC 173-401-530.

(28) "Renewal" means the process by which a permit is reissued at the end of its term.

(29) "Responsible official" means one of the following:

(a) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than two hundred fifty persons or have gross annual sales or expenditures exceeding forty-three million in 1992 dollars; or

(ii) The delegation of authority to such representative is approved in advance by the permitting authority;

(b) For a partnership or sole proprietorship: A general partner or the proprietor, respectively;

(c) For a municipality, state, federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of EPA); or

(d) For affected sources:

(i) The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder and in effect on April 7, 1993 are concerned; and

(ii) The designated representative for any other purposes under 40 CFR part 70.

(30) "Section 502 (b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

(31) "Small business stationary source" means a stationary source that:

(a) Is owned or operated by a person that employs one hundred or fewer individuals;

(b) Is a small business concern as defined in the Federal Small Business Act;

(c) Is not a major source;

(d) Does not emit fifty tons or more per year of any regulated pollutant; and

(e) Emits less than seventy-five tons per year of all regulated pollutants.

(32) "Solid waste incineration unit" (for purposes of this chapter) means a distinct operating unit of any facility which combusts any solid waste material from commercial or industrial establishments or the general public (including single and multiple residences, hotels, and motels). Such term does not include incinerators or other units required to have a permit under section 3005 of the Solid Waste Disposal Act (42 U.S.C. 6925). The term "solid waste incineration unit" does not include:

(a) Materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals;

(b) Qualifying small power production facilities, as defined in section (3)(17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)) or qualifying cogeneration facilities as defined in section (3)(18)(B) of the Federal Power Act (16 U.S.C. 796 (18)(B)), which burn homogeneous waste (such as units which burn tires or used oil, but not including refuse-derived fuel) for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating, or cooling purposes; or

(c) Air curtain incinerators provided that such incinerators only burn wood wastes, yard wastes, and clean lumber and that such air curtain incinerators comply with opacity limitations to be established by the administrator by rule.

(33) "State" means any nonfederal permitting authority, including any local agency, interstate association, or statewide program.

(34) "Stationary source" means any building, structure, facility, or installation that emits or may emit any air contaminant. For purposes of this chapter, air contaminants include any regulated air pollutant or any pollutant listed under section 112(b) of the FCAA.

(35) "Title I modification" or "modification under any provision of Title I of the FCAA" means any modification under Sections 111 (Standards of Performance for New Stationary Sources) or 112 (Hazardous Air Pollutants) of the FCAA and any physical change or change in the method of operations that is subject to the preconstruction review regulations promulgated under Parts C (Prevention of Significant Deterioration) and D (Plan Requirements for Nonattainment Areas) of Title I of the FCAA.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-200, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-200, filed 5/17/94, effective 6/17/94; 93-20-075 (Order 91-68), § 173-401-200, filed 10/4/93, effective 11/4/93.]

PART III
APPLICABILITY

WAC 173-401-300 Applicability. (1) Chapter 401 sources. The provisions of this chapter apply in all areas of the state of Washington to the following sources:

(a) Any source required by the FCAA to have an operating permit. These include the following sources:

(i) Any major source as defined in WAC 173-401-200.

(ii) Any source, including an area source, subject to a standard, limitation, or other requirement under section 111 (Standards of Performance for New Stationary Sources) of the FCAA. A small municipal waste combustion unit constructed on or before August 30, 1999, and regulated under WAC 173-400-050(5) becomes subject to this chapter on July 1, 2002.

(iii) Any source, including an area source, subject to a standard or other requirement under section 112 of the FCAA, except that a source is not required to obtain a permit solely because it is subject to regulations or requirements under section 112(r) (Prevention of Accidental Releases) of the FCAA.

(iv) Any solid waste incineration units required to obtain permits under section 129 of the FCAA.

A commercial and industrial solid waste incineration unit constructed on or before November 30, 1999, and regulated under WAC 173-400-050(4) becomes subject to this chapter on July 1, 2002.

(v) Any "affected source" regulated under Title IV (Acid Deposition Control) of the FCAA.

(vi) Any source in a source category designated by the EPA pursuant to 40 CFR Part 70, as amended through April 7, 1993.

(b) Any source that the permitting authority determines may cause or contribute to air pollution in such quantity as to create a threat to the public health or welfare under RCW 70.94.161(4) using the procedures in subsection (5) of this section.

(c) Any other source which chooses to apply for a permit.

(d) Deferral. A source subject to the secondary aluminum production requirements in 40 CFR Part 63, Subpart RRR (in effect on July 1, 2000) that is not a major source and is not located at a major source as defined under 40 CFR 63.2 and is not otherwise required to obtain a chapter 401 permit is deferred from chapter 173-401 WAC until December 4, 2004. This category includes sweat furnaces, aluminum scrap shredders, thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, group 2 furnaces (processing clean charge only and no reactive fluxing), dross-only furnaces, and rotary dross coolers.

(e) A municipal solid waste landfill constructed, reconstructed or modified before May 30, 1991, and regulated under WAC 173-400-070(9) becomes subject to this chapter on September 20, 2001.

Note: Under 40 CFR 62.14352(e) (in effect on July 1, 2000), an affected landfill must have submitted its chapter 401 application so that by April 6, 2001, the permitting agency was able to determine that it was timely and complete. Under 40 CFR 70.7(b), an affected source may not operate if it has not submitted a timely and complete application.

(2) Source category exemptions.

(a) All sources listed in subsection (1)(a) of this section that are not major sources, affected sources, or solid waste incineration units required to obtain a permit pursuant to section 129(e) of the FCAA, are exempted from the obligation to obtain a chapter 401 permit until such time that:

(i) Ecology completes a rulemaking to determine whether nonmajor sources should be required to obtain permits. During this rulemaking, ecology will consider the com-

pliance information contained in individual permit applications when evaluating the regulatory effectiveness and administrative feasibility of issuing operating permits to nonmajor sources relative to other regulatory options. This rulemaking must be completed no later than three years after the effective date of the permit program; or

(ii) The administrator completes a rulemaking to determine how the program should be structured for nonmajor sources and determines that such sources must obtain operating permits and ecology completes a rule making to adopt EPA's revised applicability criteria.

(b) Subsection (2)(a) of this section shall not apply to nonmajor sources subject to a standard or other requirement established under either section 111 or section 112 of the FCAA after July 21, 1992, if, during those rulemakings, the administrator determines that such sources must obtain a permit at an earlier date and, subsequently, ecology completes a rule making to adopt EPS's applicability criteria.

(c) Any source listed in (a) of this subsection exempt from the requirement to obtain a permit under this section may opt to apply for a permit under this chapter.

(d) The following source categories are exempt from the obligation to obtain permit:

(i) All sources and source categories that would be required to obtain a permit solely because they are subject to 40 CFR part 60, Subpart AAA - Standards of Performance for New Residential Wood Heaters; and

(ii) All sources and source categories that would be required to obtain a permit solely because they are subject to part 61, Subpart M - National Emission Standard for Hazardous Air Pollutants for Asbestos, section 6l.145, Standard for Demolition and Renovation.

(3) Emissions units and chapter 401 sources.

The permitting authority shall include in the permit all applicable requirements for all relevant emissions units in the source.

(4) Fugitive emissions. Fugitive emissions from a chapter 401 source shall be included in the permit application and the permit in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source.

(5) Process for determining threat to public health or welfare. The following criteria shall be used to identify sources that are covered pursuant to subsection (1)(b) of this section:

(a) The source may cause or to contribute air pollution in such quantity as to create a violation of any ambient air quality standard as demonstrated by a dispersion modeling analysis performed in accordance with EPA's dispersion modeling guidelines, monitoring, or other appropriate methods; or

(b) The source may cause or contribute to air pollution in such quantity as to create a significant ambient level of any class A or class B toxic air pollutant contained in chapter 173-460 WAC as demonstrated by a dispersion modeling analysis done in accordance with EPA's dispersion modeling guidelines, monitoring, or other appropriate methods.

(c) Small business stationary sources otherwise covered under (a) and (b) of this subsection are exempt except when all of the following requirements are satisfied:

(i) The source is in an area that currently exceeds or has been projected by ecology to exceed within five years any federal or state air quality standard. Prior to determining that any area threatens to exceed a standard, ecology shall hold a public hearing or hearings within the threatened area.

(ii) Ecology provides justification that requiring a source to have a permit is necessary to meet or to prevent exceeding a federal or state air quality standard.

(6) Permitting authorities shall develop and maintain a list of names of chapter 401 sources within their jurisdictions. This list shall be made available to the public. A chapter 401 source inadvertently omitted from this list is not exempted from the requirement to obtain a permit under this chapter.

(7) Federally enforceable limits. Any source which is defined as a chapter 401 source solely because its potential to emit exceeds the annual tonnage thresholds defined in WAC 173-401-200 shall be exempt from the requirement to obtain an operating permit when federally enforceable conditions which limit that source's potential to emit to levels below the relevant tonnage thresholds have been established for that source.

(a) In applying for an exemption under this subsection, the owner or operator of the source shall demonstrate to the permitting authority that the source's potential to emit, taking into account any federally enforceable restrictions assumed by the source, does not exceed the tonnage thresholds defined in WAC 173-401-200. Such demonstrations shall be in accordance with WAC 173-401-520 and shall contain emissions measurement and monitoring data, location of monitoring records, and other information necessary to support the source's emission calculations.

(b) Permitting authorities may use the following approaches to establish federally enforceable limitations:

(i) Regulatory orders. The permitting authority may establish source-specific conditions in a regulatory order issued pursuant to WAC 173-400-090.

(ii) Notice of construction approvals. The permitting authority may establish source-specific conditions in a notice of construction approval issued pursuant to state or local regulations contained in an EPA-approved state implementation plan; or

(iii) General permits. The permitting authority may establish source-category requirements which limit a source's potential to emit through a general permit issued pursuant to RCW 70.94.161(11). Following EPA approval of the general permit, limitations on potential to emit become federally enforceable against a particular source after that source applies for, and receives coverage under the general permit.

(c) A source receiving a federally enforceable limit on its potential to emit shall annually certify that its potential to emit is less than that which would require the source to obtain an operating permit. Such certifications shall contain the information specified in (a) of this subsection.

(d) Notice of issuance of any order or permit which limits a source's potential to emit shall be published in the permit register pursuant to WAC 173-401-805 (2)(e).

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-300, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-401-300, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-300, filed 10/4/93, effective 11/4/93.]

PART IV
PROGRAM DELEGATION

WAC 173-401-400 Program delegation. (1) General. Ecology is authorized to submit the state operating permit program for approval under section 502 of the Federal Clean Air Act. Subject to federal approval, ecology may, in turn, delegate the federally approved state permit program to the local authority with jurisdiction in a given area. This section describes the procedures for delegating the federally approved state operating permit program to a local authority.

(2) Application. The board of any local air pollution control authority may apply to ecology for a delegation order authorizing that authority to administer the operating permit program for sources under that authority's jurisdiction pursuant to RCW 70.94.161 (2)(b).

(3) Delegation orders. Ecology will, by order, approve such delegation if ecology finds that the authority has the technical and financial resources needed to discharge the responsibilities of a permitting authority under the FCAA. Each delegation order shall specify the terms and conditions for program delegation and define the responsibilities of the permitting authority and ecology in implementing the statewide program. All delegation orders and supporting program documentation shall be submitted to EPA for review and approval.

(4) Required information. A delegation request from the authority shall include the information specified in 40 CFR 70.4 (b)(3), (b)(7), (b)(8), and (b)(11). In addition, the request shall include a description of how the authority will meet the requirement that every proposed permit be reviewed and signed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority and, with respect to the latter, signed, dated, and stamped by the supervising professional engineer.

(5) Effective date. Any delegation order issued under this section shall take effect ninety days after the EPA authorizes the local authority to issue operating permits under the FCAA.

(6) Public notice. Ecology shall publish in the *State Register* notice of proposed decisions on program delegation and substantial program revision. The notice shall summarize the proposal and provide at least a thirty-day public comment period. EPA review of these requests may occur concurrently with the state process. Notice of approval of program delegation and substantial program revision requests shall be published in the *State Register*. Notice of approval of minor program revisions may be given by a letter from ecology to the authority.

(7) Performance review. Reviews of the implementation of the operating permit program by ecology and delegated local authorities shall be conducted as provided in WAC 173-401-920.

(8) Program revisions. Revisions to the state program, EPA approval of those revisions, and delegation to local authorities shall be implemented using the procedures in subsections (1) through (6) of this section.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-400, filed 10/4/93, effective 11/4/93.]

PART V
PERMIT APPLICATIONS

WAC 173-401-500 Permit applications. (1) Source identification. Within ninety days after the date that a permitting authority submits for EPA approval a permit program or partial permit program, the permitting authority shall notify each potential chapter 401 source within its jurisdiction that the source may be required to obtain a permit. Failure of the permitting authority to notify a source shall not relieve that source from the obligation to file a timely and complete application.

(2) Application distribution. No later than thirty days after EPA grants final or interim, full or partial, approval to the state program, the responsible permitting authority shall send an application to each potential chapter 401 source within its jurisdiction, and a notice stating a deadline by which an application must be filed. Failure of the permitting authority to distribute permit or renewal applications to an individual source shall not relieve that source from the obligation to file a timely and complete application. Renewal applications shall be sent to the source as specified in WAC 173-401-710.

(3) Duty to apply. For each chapter 401 source, the owner or operator shall submit a timely and complete permit application in accordance with this section. Whenever practicable, the applicant shall utilize methods provided by the permitting authority for electronic transmission of the completed application.

(a) Existing chapter 401 sources. Chapter 401 sources in existence on the date of EPA approval of the state permit program shall submit permit applications no later than one hundred eighty days after EPA approval of the state permitting program.

(b) Existing sources becoming chapter 401 sources due to future regulations. An existing source may become subject to the operating permit program as a result of regulations promulgated after EPA approval of the state permit program. For those sources, a complete application must be submitted within twelve months from the time that the source becomes subject to the permit program.

(c) New or modified sources. New or modified chapter 401 sources which commence operation after EPA approval of the state operating program shall file a complete application to obtain the chapter 401 permit or permit revision within twelve months after commencing operation. Where an existing chapter 401 permit would prohibit such construction or change in operation, the source must obtain a permit revision before commencing operation. The applicant may elect to integrate procedures for new source review and operating permit issuance as described in subsection (10) of this section.

(d) Permit renewal. For purposes of permit renewal, a timely application is one that is submitted at the time specified in WAC 173-401-710.

(e) Applications for initial phase II acid rain permits shall be submitted to the permitting authority by January 1, 1996, for sulfur dioxide, and by January 1, 1998, for nitrogen oxides.

(4) Complete application. To be deemed complete, an application must provide all information required pursuant to

WAC 173-401-510, except that applications for permit revision need supply such information only if it is related to the proposed change. Information submitted under WAC 173-401-510 must be sufficient to evaluate the subject source and its application and to determine all applicable requirements. A responsible official shall certify the submitted information consistent with WAC 173-401-520. Unless the permitting authority determines in writing that an application is not complete within sixty days of receipt of the application, such application shall be deemed to be complete, except as otherwise provided in WAC 173-401-700(6). Any notification of incompleteness shall specify the information needed to make the application complete and prescribe a reasonable time frame for response from the applicant. Unless the permitting authority requests additional information or otherwise notifies the applicant of incompleteness within sixty days of receipt of the supplemental information, the application shall be deemed complete. If, while processing an application that has been determined or deemed to be complete, the permitting authority determines that additional information is necessary to evaluate or take final action on that application, it may request such information in writing and set a reasonable deadline for a response. The source's ability to operate without a permit, as set forth in WAC 173-401-705(2), shall be in effect from the date the application is determined or deemed to be complete until the final permit is issued, provided that the applicant submits any requested additional information by the deadline specified by the permitting authority.

(5) Confidential information. In the case where a source has submitted information to the permitting authority under a claim of confidentiality, the permitting authority may also require the source to submit a copy of such information directly to the administrator.

(6) Duty to supplement or correct application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

(7) Completeness criteria. An application is complete when it contains the following information:

(a) All of the data described in WAC 173-401-510(2), including the required information for each emission unit (other than insignificant emission units) at the facility, along with any necessary supporting data and calculations. The use of a standard application is not required if all of the data elements required in WAC 173-401-510(2) are provided;

(b) A compliance plan that meets the criteria of WAC 173-401-630; and

(c) Certification by a responsible official of the chapter 401 source of the truth, accuracy, and completeness of the application, as provided in WAC 173-401-520.

(8) EPA notification. The permitting authority shall provide EPA with a copy of all complete permit applications and compliance plans for chapter 401 sources unless EPA waives or modifies this requirement.

(9) Public notice. Ecology shall publish a notice of all applications received under this section in the permit register as required under WAC 173-401-805.

(10) Operating permits for new sources. At the time of filing a notice of construction application under RCW 70.94.152 for the construction of a new source or modification of an existing source, the owner or operator may elect in writing to integrate new source review and operating permit issuance. Procedures for integration of these two processes are as follows:

(a) Modification of existing source. The owner or operator of an existing permitted source applying to modify the source within the meaning of RCW 70.94.030(14) may select integrated review by so indicating on its notice of construction application. The permitting authority shall process the notice of construction application in accordance with the procedures set forth in WAC 173-401-700. The permitting authority shall process the two applications in parallel, and consolidate all required public hearings, comment periods and EPA review periods. A proposed order of approval for the modification shall be provided to EPA for review as provided in WAC 173-401-810, along with a proposed administrative permit amendment to the source's operating permit. The administrative permit amendment shall incorporate into the operating permit the requirements contained in the order of approval. The order of approval shall include compliance requirements for the new or modified emissions units that meet the requirements of WAC 173-401-600 through 173-401-650. The permitting authority shall issue the final permit amendment and order of approval promptly upon conclusion of the EPA review period, unless EPA files a timely objection as provided in 40 CFR 70.8.

(b) Construction of new source. Any person who proposes to construct a new source, within the meaning of RCW 70.94.030(16), may select integrated review by concurrently filing with the permitting authority a notice of construction application and an operating permit application. The permitting authority shall process both applications in accordance with the procedures set forth in WAC 173-401-700. The permitting authority shall process the two applications in parallel, and consolidate all required public hearings, comment periods, and EPA review periods. A proposed order of approval for the new source shall be provided to EPA for review as provided in WAC 173-401-810, along with the proposed operating permit. The permitting authority shall issue the final operating permit and order of approval promptly upon conclusion of the EPA review period, unless EPA files a timely objection as provided in 40 CFR 70.8.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-500, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-500, filed 10/4/93, effective 11/4/93.]

WAC 173-401-510 Permit application form. (1) Standard application form and required information. Ecology shall develop a standard application form or forms to be used by each permitting authority. Information as described below for each emissions unit at a chapter 401 source other than insignificant emissions units shall be included in the application. However, an application may not omit information needed to determine the applicability of, or to impose, any

applicable requirement, or to evaluate the fee amount required under the permitting authority's fee schedule.

(2) Required data elements for individual permit applications. The application forms developed under subsection (1) of this section shall contain the data elements specified below:

(a) Identifying information, including company name and address (or plant name and address if different from the company name), owner's name and agent, responsible official name and address, and telephone number and names of plant site manager/contact.

(b) A description of the source's processes and products (by Standard Industrial Classification Code) including any associated with each alternative operating scenario identified by the source pursuant to WAC 173-401-650.

(c) The following emissions-related information:

(i) All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except emissions from insignificant emission units or activities as defined in WAC 173-401-530. The permitting authority shall require additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the source, and other information necessary to collect any permit fees owed under the permitting authority's fee schedule;

(ii) Identification and description of all points of emissions described in (c)(i) of this subsection in sufficient detail to establish the basis for fees and applicability of applicable requirements;

(iii) Emissions rates in tons per year (tpy) and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method;

(iv) The following information to the extent it is needed to determine or regulate emissions: Fuels, fuel use, raw materials, production rates, and operating schedules;

(v) Identification and description of all air pollution control equipment and compliance monitoring devices or activities;

(vi) Limitations on source operation affecting emissions or any work practice standards, where applicable, for all regulated pollutants at the chapter 401 source;

(vii) Other information required by any applicable requirement (including information related to stack height limitations developed pursuant to section 123 of the FCAA); and

(viii) Calculations on which the information in (c)(i) through (vii) of this subsection are based.

(d) The following air pollution control requirements:

(i) Citation and description of all applicable requirements; and

(ii) Description of or reference to any applicable test method for determining compliance with each applicable requirement.

(e) Other specific information that may be necessary to implement and enforce other applicable requirements or this chapter or to determine the applicability of such requirements.

(f) An explanation of any proposed exemptions from otherwise applicable requirements.

(g) Additional information as determined to be necessary by the permitting authority to define alternative operating scenarios identified by the source pursuant to WAC 173-401-650(1) or to define permit terms and conditions implementing WAC 173-401-650(e) and 173-401-722.

(h) A compliance plan for all chapter 401 sources that contains all the following:

(i) A description of the compliance status of the source with respect to all applicable requirements;

(ii) A description as follows:

(A) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements;

(B) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis; and

(C) For requirements for which the source is not in compliance at the time of permit issuance, a narrative description of how the source will achieve compliance with such requirements;

(iii) A compliance schedule as follows:

(A) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements;

(B) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis;

(C) A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based;

(iv) For those sources required to have a schedule of compliance to remedy a violation, a schedule for submission of certified progress reports every six months or at a more frequent period specified in an applicable requirement.

(v) The compliance plan content requirements specified in this paragraph shall apply and be included in the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under Title IV of the FCAA with regard to the schedule and method(s) the source will use to achieve compliance with the acid rain emissions limitations.

(i) Requirements for compliance certification, including the following:

(i) A certification of compliance with all applicable requirements by a responsible official consistent with WAC 173-401-520 and section 114 (a)(3) of the FCAA;

(ii) A statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods;

(iii) A schedule for submission of compliance certifications during the permit term, to be submitted annually, or

more frequently if specified by the underlying applicable requirement; and

(iv) A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements of the FCAA.

(j) The use of nationally standardized forms for acid rain portions of permit applications and compliance plans, as required by regulations promulgated under Title IV of the FCAA and in effect on April 7, 1993.

(k) Requirements which the source believes are inapplicable pursuant to WAC 173-401-640(2) and a request to extend the permit shield to those requirements.

[Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-510, filed 5/17/94, effective 6/17/94; 93-20-075 (Order 91-68), § 173-401-510, filed 10/4/93, effective 11/4/93.]

WAC 173-401-520 Certification. Any application form, report, or compliance certification submitted pursuant to this chapter shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this chapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-520, filed 10/4/93, effective 11/4/93.]

WAC 173-401-530 Insignificant emission units. (1) General. This section contains criteria for identifying insignificant emission units or activities for purposes of the operating permit program. Designation of an emission unit or activity as insignificant for purposes of this chapter does not exempt the unit or activity from any applicable requirement. An emission unit or activity is insignificant based on one or more of the following approaches:

(a) Actual emissions of all regulated air pollutants from a unit or activity are less than the emission thresholds established in subsection (4) of this section. Such emission units and activities must be listed in the permit application;

(b) The emission unit or activity is listed in WAC 173-401-532 as categorically exempt. Such emission units or activities do not have to be listed in the permit application;

(c) The emission unit or activity is listed in WAC 173-401-533 and is considered insignificant if its size or production rate based on maximum rated capacity is below the specified level. These emission units or activities must be listed in the permit application.

(d) The emission unit or activity generates only fugitive emissions (as defined in WAC 173-400-030(31)), which are subject to no applicable requirement other than generally applicable requirements of the state implementation plan as defined in subsection (2) of this section. These units or activities must be listed on the permit application.

(2) Applicable requirements.

(a) Notwithstanding any other provision of this chapter, no emissions unit or activity subject to a federally enforceable applicable requirement (other than generally applicable requirements of the state implementation plan) shall qualify as an insignificant emissions unit or activity. For purposes of this section, generally applicable requirements of the state implementation plan are those federally enforceable requirements that apply universally to all emission units or activities without reference to specific types of emission units or activities.

(b) The application shall list and the permit shall contain all generally applicable requirements that apply to insignificant emission units or activities in the source.

(c) Testing, monitoring, recordkeeping and reporting are not required for insignificant emissions units and activities unless determined by the permitting authority to be necessary to assure compliance or unless it is otherwise required by a generally applicable requirement of the state implementation plan. This section does not affect the authority of ecology and local air authorities to establish case-by-case monitoring requirements as set forth in WAC 173-400-105 or other provisions of law.

(d) Where a permit does not require testing, monitoring, recordkeeping and reporting for insignificant emissions units or activities, the permittee may certify continuous compliance if there were no observed, documented, or known instances of noncompliance during the reporting period. Where a permit requires testing, monitoring, recordkeeping and reporting for insignificant emission units or activities, the permittee may certify continuous compliance when the testing, monitoring, recordkeeping required by the permit revealed no violations during the period, and there were no observed, documented, or known instances of noncompliance during the reporting period.

(3) Permit shield. The permit shield described in WAC 173-401-640 shall not apply to any insignificant emissions unit or activity designated under this section.

(4) Insignificant emission thresholds. An emission unit or activity shall be considered insignificant if it qualifies under subsection (1)(b), (c) or (d) of this section, or if its actual emissions, based on methods approved by the permitting authority, are below the practical quantification limit (PQL), or are less than or equal to all of the following threshold levels:

(a) 5 tons per year of carbon monoxide;

(b) 2 tons per year of nitrogen oxides;

(c) 2 tons per year of sulfur oxides;

(d) 2 tons per year of volatile organic compounds (VOC);

(e) 0.75 tons per year of PM_{10} (as defined in WAC 173-400-030);

(f) 0.005 tons per year of lead;

(g) 0.15 tons per year of fluorides;

(h) 0.35 tons per year of sulfuric acid mist;

(i) 0.5 tons per year of hydrogen sulfide;

(j) 0.5 tons per year of total reduced sulfur (including hydrogen sulfide);

(k) 0.000000175 tons per year of municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans);

(m) 0.75 tons per year of municipal waste combustor metals (measured as PM);

(n) 2.0 tons per year of municipal waste combustor acid gases (measured as SO_2 and hydrogen chloride);

(o) 2.0 tons per year of ozone depleting substances in aggregate (the sum of Class I and/or Class II substances as defined in Title VI and 40 CFR Part 82);

(p) Thresholds levels for hazardous air pollutants as defined in WAC 173-401-531;

(q) 0.5 tons per year for any regulated air pollutant not listed above or in WAC 173-401-531.

(5) Documentation.

(a) Upon request from the permitting authority the applicant must provide sufficient documentation to enable the permitting authority to determine that the emission unit or activity has been appropriately listed as insignificant.

(b) Upon request from the permitting authority, at any time during the term of the permit, an applicant who lists an activity or emissions unit as insignificant under subsection (1)(a) of this section shall demonstrate to the permitting authority that the actual emissions of the unit or activity are below the emission thresholds listed in subsection (4) of this section.

(6) Permit revision.

If an emission unit or activity that qualifies as insignificant solely on the basis of subsection (1)(a) of this section exceeds one of the emissions thresholds specified in subsection (4) of this section prior to issuance of a permit, the applicant shall promptly amend its permit application to include the relevant activity or emissions unit in the permit, as provided in WAC 173-401-500(6). Once the permit is issued, an activity or emissions unit that qualifies as insignificant solely on the basis of subsection (1)(a) of this section shall not exceed the emissions thresholds specified in subsection (4) of this section, until the permit is modified pursuant to WAC 173-401-725 (Permit modifications).

(7) Local air authority discretion. Local air authorities may establish by rule other criteria for defining insignificant emissions units or activities. At a minimum, such criteria must be at least as stringent as the requirements in subsections (2) and (3) of this section. Insignificant emission units or activities defined by local air authority rule may not exceed threshold levels established under subsection (4) of this section.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-530, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-530, filed 5/17/94, effective 6/17/94.]

WAC 173-401-531 Thresholds for hazardous air pollutants. General. The following tables provide thresholds for hazardous air pollutants:

(1) Carcinogens:

CAS Number	Chemical Name	Threshold Levels (tons/year)
189-55-9	1, 2, 7, 8-dibenzopyrene	0.005
107-06-2	1, 2-dichloroethane	0.4
78-87-5	1, 2-dichloropropane	0.5
540-73-8	1, 2-dimethylhydrazine	0.004
122-66-7	1, 2-diphenylhydrazine	0.045
106-99-0	1, 3-butadiene	0.035
1120-71-4	1, 3-propane sultone	0.003
106-46-7	1, 4-dichlorobenzene (p)	0.5
123-91-1	1, 4-dioxane (1, 4-diethyleneoxide)	0.5
94-75-7	2, 4-d salts & esters	0.5
95-80-7	2, 4-toluene diamine	0.01
584-84-9	2, 4-toluene diisocyanate	0.05
53-96-3	2-acetylaminofluorene	0.0025
119-90-4	3, 3'-dimethoxybenzidine	0.5
119-93-7	3, 3-dimethyl benzidine	0.004
101-14-4	4, 4'-methylenebis (2-chloroaniline)	0.5
75-07-0	acetaldehyde	0.5
107-13-1	acrylonitrile	0.15
62-53-3	aniline	0.5
C7440-38-2	arsenic and inorganic arsenic compounds	0.002
1332-21-4	asbestos (fibers/ml)	0.00004
71-43-2	benzene	0.5
92-87-5	benzidine (and its salts)	0.00015
56-55-3	benzo(a)anthracene	0.005
50-32-8	benzo(a)pyrene	0.005
205-99-2	benzo(b)fluoranthene	0.005
7440-41-7	beryllium and compounds (except salts)	0.004
117-81-7	bis (2-ethylhexyl) phthalate	0.5
542-88-1	bis (chloromethyl) ether	0.00015
75-25-2	bromoform	0.5
7440-43-9	cadmium and compounds	0.005
56-23-5	carbon tetrachloride	0.5
57-74-9	chlordane	0.005
510-15-6	chlorobenzilate	0.2
67-66-3	chloroform	0.45
107-30-2	chloromethyl methyl ether	0.1
126-99-8	chloroprene	0.5
C7440-47-3	chromium, hexavalent metal	0.001
218-01-9	chrysene	0.005
———	coke oven emissions	0.015
3547-04-4	DDE	0.005
53-70-3	dibenz(a, h)anthracene	0.005
132-64-9	dibenzofuran	0.5
111-44-4	dichloroethyl ether	0.03
75-09-2	dichloromethane	0.5
77-78-1	dimethyl sulfate	0.1
———	dioxins & furans (tcdd equivalent)	3e-07
106-89-8	epichlorohydrin	0.5
107-06-2	ethylene dichloride	0.4
106-93-4	ethylene dibromide (dibromethane)	0.05
75-21-8	ethylene oxide	0.1
96-45-7	ethylene thiourea	0.3
76-44-8	heptachlor	0.01
118-74-1	hexachlorobenzene	0.005
58-89-9	hexachlorocyclohexane, gamma	0.005
302-01-2	hydrazine	0.002
193-39-5	indeno (1, 2, 3-cd) pyrene	0.005
———	lead & compounds (except those listed)	0.005
58-89-9	lindane	0.005
75-09-2	methylene chloride	0.5
62-75-9	n-nitrosodimethylamine	0.0005
C7440-02-0	nickel and compounds (except those listed)	0.02
13463-39-3	nickel carbonyl	0.1
95-53-4	o-toluidine	0.5
87-86-5	pentachlorophenol	0.35
127-18-4	perchloroethylene	0.5
1336-36-3	polychlorinated biphenyls	0.0045
75-56-9	propylene oxide	0.5
8001-35-2	toxaphene	0.005
79-01-6	trichloroethylene	0.5
75-01-4	vinyl chloride	0.1
79-34-5	1, 1, 2, 2-tetrachloroethane	0.15
79-00-5	1, 1, 2-trichloroethane	0.5
57-14-7	1, 1-dimethyl hydrazine	0.004
96-12-8	1, 2-dibromo-3-chloropropane	0.004
79-06-1	acrylamide	0.01
98-07-7	benzotrichloride	0.003
62-73-7	dichlorvos	0.1
79-44-7	dimethyl carbamoyl chloride	0.5
140-88-5	ethyl acrylate	0.5
51-79-6	ethyl carbamate	0.5
151-56-4	ethylene imine	0.5
87-68-3	hexachlorobutadiene	0.5
67-72-1	hexachloroethane	0.5
60-34-4	methyl hydrazine	0.03
684-93-5	n-nitroso-n-methylurea	0.5
12035-72-2	nickel refinery dust	0.08

CAS Number	Chemical Name	Threshold Levels (tons/year)
———	nickel subsulfide	0.02
82-68-8	pentachloronitrobenzene	0.15
91-22-5	quinoline	0.003
1582-09-8	trifluralin	0.5
593-60-2	vinyl bromide	0.5
75-35-4	vinylidene chloride	0.2
189559	1, 2: 7, 8-dibenzopyrene	0.005
121142	2, 4-dinitrotoluene	0.01
88062	2, 4, 6-trichlorophenol	0.5
91941	3, 3-dichlorobenzidene	0.1
57596	7, 12-dimethylbenz(a)anthracene	0.005
50000	formaldehyde	0.5

(2) Noncarcinogens:

CAS Number	Chemical Name	Threshold Levels (tons/year)
75-34-3	ethylidene dichloride (1, 1-dichloroethane)	0.5
75-55-8	1, 2 propylenimine (2-methyl aziridine)	0.003
120-82-1	1, 2, 4-trichlorobenzene	0.5
106-88-7	1, 2-epoxybutane	0.5
542-75-6	1, 3-dichloropropene (dichloropropene)	0.5
51-28-5	2, 4-dinitrophenol	0.5
111-76-2	2-butoxyethanol	0.5
110-80-5	2-ethoxyethanol	0.5
109-86-4	2-methoxyethanol	0.5
92-93-3	4-nitrobiphenol	0.5
100-02-7	4-nitrophenol	0.5
75-05-8	acetonitrile	0.5
98-86-2	acetophenone	0.5
107-02-8	acrolein	0.04
79-10-7	acrylic acid	0.5
107-05-1	allyl chloride	0.5
C7440-36-0	antimony & compounds as sb	0.5
1309-64-4	antimony trioxide, as sb	0.5
7784-42-1	arsine	0.1
100-44-7	benzyl chloride	0.1
92-52-4	biphenyl	0.5
156-62-7	calcium cyanamide	0.5
105-60-2	caprolactam, dust	0.5
105-60-2	caprolactam, vapor	0.5
133-06-2	captan	0.5
63-25-2	carbaryl	0.5
75-15-0	carbon disulfide	0.5
463-58-1	carbonyl sulfide	0.5
120-80-9	catechol	0.5
7782-50-5	chlorine	0.1
79-11-8	chloroacetic acid	0.1
532-27-4	chloroacetophenone, alpha-	0.06
108-90-7	chlorobenzene	0.5
C7440-47-3	chromium (ii) compounds, as cr	0.5
C7440-47-3	chromium (iii) compounds, cr	0.5
10210-68-1	cobalt carbonyl, as co	0.1
7440-48-4	cobalt, as co metal dust, fume	0.1
1319-77-3	cresols/cresylic acid, (isomers and mixture)	0.5
95-48-7	o-cresol	0.5
108-39-4	m-cresol	0.5
106-44-5	p-cresol	0.5
98-82-8	cumene	0.5
51-12-5	cyanides, as cn	0.5
84-74-2	dibutyl phthalate	0.5
111-42-2	diethanolamine	0.5
60-11-7	dimethyl aminoazobenzene	0.5
121-69-7	dimethylaniline	0.5
68-12-2	dimethylformamide	0.5
131-11-3	dimethylphthalate	0.5
100-41-4	ethyl benzene	0.5
75-00-3	ethyl chloride	0.5
107-21-1	ethylene glycol	0.5
111-76-2	ethylene glycol monobutyl ether	0.5
———	glycol ethers (except for listed ones)	0.5
77-47-4	hexachlorocyclopentadiene	0.1
822-06-0	hexamethylene, 1, 6-diisocyanate	0.02
110-54-3	hexane (n-hexane)	0.5
110-54-3	hexane, other isomers	0.5
7647-01-0	hydrogen chloride	0.5
7664-39-3	hydrogen fluoride, as f	0.1
123-31-9	hydroquinone	0.5
78-59-1	isophorone	0.5
108-31-6	maleic anhydride	0.5
C7439-96-5	manganese dust & compounds (except listed)	0.5
748-79-4	mercuric chloride	0.01
10045-94-0	mercuric nitrate	0.01
C7439-97-6	mercury, elemental	0.01
72-43-5	methoxychlor	0.5
67-56-1	methyl alcohol	0.5
74-83-9	methyl bromide	0.5
74-87-3	methyl chloride	0.5
71-55-6	methyl chloroform (1, 1, 1-trichloroethane)	0.5
78-93-3	methyl ethyl ketone (mek)	0.5
74-88-4	methyl iodide	0.06
108-10-1	methyl isobutyl ketone	0.5
624-83-9	methyl isocyanate	0.1
80-62-6	methyl methacrylate	0.5
1634-04-4	methyl tert-butyl ether	0.5
12108-13-3	methylcyclopentadienyl manganese tricarbonyl	0.1
101-68-8	methylene bisphenyl isocyanate	0.1
91-20-3	naphthalene	0.5
98-95-3	nitrobenzene	0.5
106-50-3	p-phenylenediamine	0.5
56-38-2	parathion	0.1
108-95-2	phenol	0.1
62-38-4	phenyl mercuric acetate	0.01
75-44-5	phosgene	0.1
7803-51-2	phosphine	0.5
7723-14-0	phosphorus	0.1
85-44-9	phthalic anhydride	0.5
57-57-8	propiolactone, beta-	0.1
123-38-6	propionaldehyde	0.5
114-26-1	propoxur	0.5
106-51-4	quinone	0.5
C7782-49-2	selenium compounds, as se	0.5
7783-79-1	selenium hexafluoride, as se	0.5
7488-56-4	selenium sulfides (mono and di)	0.5
100-42-5	styrene monomer	0.5
78-00-2	tetraethyl lead, as pb	0.01
75-74-1	tetramethyl lead, as pb	0.01
7550-45-0	titanium tetrachloride	0.1
108-88-3	toluene	0.5
121-44-8	triethylamine	0.5
108-05-4	vinyl acetate	0.5
593-60-2	vinyl bromide	0.5
1330-20-7	xylenes (m-,o-,p-isomers)	0.5
79469	2-nitropropane	0.5
540841	2, 2, 4-trimethylpentane	0.5
95954	2, 4, 5-trichlorophenol	0.5
92671	4-aminobiphenyl	0.5
101779	4, 4'-methlenedianiline	0.5
534521	4, 6-dinitro-o-cresol and salts	0.1
60355	acetamide	0.5
1345046	antimony trisulfide	0.1
7783702	antimony pentafluoride	0.1
28300745	antimony potassium tartrate	0.5
133904	chloramben	0.5
2 ———	chromium compounds, except hexavalent and trivalent	0.5
10025737	chromic chloride	0.1
334883	diazomethane	0.5
64675	diethyl sulfate	0.5
62207765	fluomine	0.1

CAS Number	Chemical Name	Threshold Levels (tons/year)
680319	hexamethylphosphoramide	0.01
12108133	methylcyclopentadienyl manganese	0.1
101688	methylene diphenyl diisocyanate	0.1
69892	N-nitrosomorpholine	0.5
90040	o-anisidine	0.5
———	polycyclic organic matter	0.01
151508	potassium cyanide	0.1
14339	sodium cyanide	0.1
10102188	sodium selenite	0.1
13410010	sodium selenate	0.1
96093	styrene oxide	0.5

[Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-531, filed 5/17/94, effective 6/17/94.]

WAC 173-401-532 Categorically exempt insignificant emission units. (1) General. This section contains lists of units and activities that are categorically exempt from this chapter. The activities listed in this section may be omitted from the permit application.

(2) Mobile transport tanks on vehicles, except for those containing asphalt.

(3) Lubricating oil storage tanks.

(4) Storage tanks, reservoirs and pumping and handling equipment of any size, limited to soaps, lubricants, hydraulic fluid, vegetable oil, grease, animal fat, aqueous salt solutions or other materials and processes using appropriate lids and covers where there is no generation of objectionable odor or airborne particulate matter.

(5) Pressurized storage of oxygen, nitrogen, carbon dioxide, air, or inert gases.

(6) Storage of solid material, dust-free handling.

(7) Vehicle exhaust from auto maintenance and repair shops.

(8) Vents from continuous emissions monitors and other analyzers.

(9) Vents from rooms, buildings and enclosures that contain permitted emissions units or activities from which local ventilation, controls and separate exhaust are provided.

(10) Internal combustion engines for propelling or powering a vehicle.

(11) Recreational fireplaces including the use of barbecues, campfires and ceremonial fires.

(12) Brazing, soldering and welding equipment and oxygen-hydrogen cutting torches for use in cutting metal where in components of the metal do not generate HAPs or HAPs precursors.

(13) Atmospheric generators used in connection with metal heat treating processes.

(14) Metal finishing or cleaning using tumblers.

(15) Metal casting molds and molten metal crucibles that do not contain potential HAPs.

(16) Die casting.

(17) Metal or glass heat-treating, in absence of molten materials, oils, or VOCs.

(18) Drop hammers or hydraulic presses for forging or metalworking.

(19) Electrolytic deposition, used to deposit brass, bronze, copper, iron, tin, zinc, precious and other metals not listed as the parents of HAPs.

(20) Metal fume vapors from electrically heated foundry/forge operations wherein the components of the metal do not generate HAPs or HAP precursors. Electric arc furnaces are excluded from consideration for listing as insignificant.

(21) Metal melting and molten metal holding equipment and operations wherein the components of the metal do not generate HAPs or HAP precursors. Electric arc furnaces are not considered for listing as insignificant.

(22) Inspection equipment for metal products.

(23) Plastic and resin curing equipment, excluding FRP.

(24) Extrusion equipment, metals, minerals, plastics, grain or wood.

(25) Presses and vacuum forming, for curing rubber and plastic products or for laminating plastics.

(26) Roller mills and calendars, rubber and plastics.

(27) Conveying and storage of plastic pellets.

(28) Plastic compression, injection, and transfer molding and extrusion, rotocasting, pultrusion, blowmolding, excluding acrylics, PVC, polystyrene and related copolymers and the use of plasticizer. Only oxygen, carbon dioxide, nitrogen, air, or inert gas allowed as blowing agents.

(29) Plastic pipe welding.

(30) Nonmetallic mineral mines and screening plants except for crushing and associated activities that are not subject to 40 CFR Part 60 Subpart 000. Quarrying of silica rock and associated activities are not considered for listing as insignificant.

(31) Wet sand and gravel screening.

(32) Wax application.

(33) Plant upkeep including routine housekeeping, preparation for and painting of structures or equipment, retarring roofs, applying insulation to buildings in accordance with applicable environmental and health and safety requirements and paving or stripping parking lots.

(34) Agricultural activities on a facility's property that are not subject to registration or new source review by the permitting authority.

(35) Cleaning and sweeping of streets and paved surfaces.

(36) Ultraviolet curing processes.

(37) Hot melt adhesive application with no VOCs in the adhesive formulation.

(38) Laundering, dryers, extractors, tumblers for fabrics, using water solutions of bleach and/or detergents.

(39) Steam cleaning operations.

(40) Steam sterilizers.

(41) Food preparing for human consumption including cafeterias, kitchen facilities and barbecues located at a source for providing food service on the premises.

(42) Portable drums and totes.

(43) Lawn and landscaping activities.

(44) Flares used to indicate danger to the public.

(45) General vehicle maintenance including vehicle exhaust from repair facilities.

(46) Comfort air conditioning or air cooling systems, not used to remove air contaminants from specific equipment.

(47) Natural draft hoods, natural draft stacks, or natural draft ventilators for sanitary and storm drains, safety valves, and storage tanks subject to size and service limitations expressed elsewhere in this section.

(48) Natural and forced air vents and stacks for bathroom/toilet facilities.

(49) Office activities.

(50) Personal care activities.

(51) Sampling connections used exclusively to withdraw materials for laboratory analyses and testing.

(52) Fire fighting and similar safety equipment and equipment used to train fire fighters excluding fire drill pits.

(53) Materials and equipment used by, and activity related to operation of infirmary; infirmary is not the source's business activity.

(54) Fuel and exhaust emissions from vehicles in parking lots.

(55) Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, sintering or polishing: Ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood provided that:

(a) Activity is performed indoors;

(b) Particulate emission control in the immediate vicinity of the activity;

(c) Exhaust from the particulate control is within the building housing the activity;

(d) No fugitive particulate emissions enter the environment.

(56) Oxygen, nitrogen, or rare gas extraction and liquefaction equipment subject to other exemption limitation, e.g., internal and external combustion equipment.

(57) Slaughterhouse equipment except rendering cookers.

(58) Ozonation equipment.

(59) Nonasbestos brake shoe bonding.

(60) Batch loading and unloading of solid phase catalysts.

(61) Demineralization and oxygen scavenging (deaeration) of water.

(62) Pulse capacitors.

(63) Laser trimmers, using dust collection to prevent fugitive emissions.

(64) Plasma etcher, using dust collection to prevent fugitive emissions and using only oxygen, nitrogen, carbon dioxide, or inert gas.

(65) Gas cabinets using only gasses that are not regulated air pollutants.

(66) CO_2 lasers, used only on metals and other materials which do not emit HAPs in the process.

(67) Structural changes not having air contaminant emissions.

(68) Confection cooking equipment.

(69) Mixing, packaging, storage and handling activities of any size, limited to soaps, lubricants, vegetable oil, grease, animal fat, aqueous salt solutions.

(70) Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy, e.g., blueprint activity, photocopiers, mimeograph, telefax, photographic developing, and microfiche.

(71) Pharmaceutical and cosmetics packaging equipment.

(72) Paper trimmers/binders.

(73) Sample gathering, preparation and management.

(74) Repair and maintenance activities, not involving installation of an emission unit and not increasing potential emissions of a regulated air pollutant.

(75) Handling equipment and associated activities for glass and aluminum which is destined for recycling, not the re-refining process itself.

(76) Hydraulic and hydrostatic testing equipment.

(77) Batteries and battery charging.

(78) Porcelain and vitreous enameling equipment.

(79) Solid waste (as defined in the Washington Administrative Code) containers.

(80) Salt baths using nonvolatile salts and not used in operations which result in air emissions.

(81) Shock chambers.

(82) Wire strippers.

(83) Humidity chambers.

(84) Solar simulators.

(85) Environmental chambers not using hazardous air pollutant (HAPs) gasses.

(86) Totally enclosed conveyors.

(87) Steam vents and safety relief valves.

(88) Air compressors, pneumatically operated equipment, systems and hand tools.

(89) Steam leaks.

(90) Recovery boiler blow-down tank.

(91) Salt cake mix tanks.

(92) Continuous digester chip feeders.

(93) Weak liquor and filter tanks.

(94) Process water and white water storage tanks.

(95) Demineralizer tanks.

(96) Clean condensate tanks.

(97) Alum tanks.

(98) Broke beaters, repulpers, pulp and repulping tanks, stock chests and pulp handling.

(99) Lime mud filtrate tank.

(100) Hydrogen peroxide tanks.

(101) Lime mud water.

(102) Lime mud filter.

(103) Liquor clarifiers and storage tanks and associated pumping, piping and handling.

(104) Lime grits washers, filters and handling.

(105) Lime silos and feed bins.

(106) Paper forming.

(107) Dryers (Yankee, after dryer, curing systems and coolings systems).

(108) Vacuum systems exhausts.

(109) Starch cooking.

(110) Stock cleaning and pressurized pulp washing.

(111) Winders.

(112) Chipping.

(113) Debarking.

(114) Sludge dewatering and handling.

(115) Screw press vents.

(116) Pond dredging.

(117) Polymer tanks and storage devices and associated pumping and handling equipment, used for solids dewatering and flocculation.

(118) NonPCB oil filled circuit breakers, oil filled transformers and other equipment that is analogous to, but not considered to be, a tank.

(119) Electric or steam-heated drying ovens and autoclaves.

(120) Sewer manholes, junction boxes, sumps and lift stations associated with wastewater treatment systems.

(121) Water cooling towers processing exclusively noncontact cooling water.

[Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-532, filed 5/17/94, effective 6/17/94.]

WAC 173-401-533 Units and activities defined as insignificant on the basis of size or production rate. (1) General. This section contains lists of units or activities that are exempt from this chapter on the basis of size or production rate. Units and activities listed in this section must be listed on the permit application.

(2) The following units and activities are determined to be insignificant based on their size or production rate:

(a) Operation, loading and unloading of storage tanks and storage vessels, with lids or other appropriate closure and less than two hundred sixty gallon capacity (35 cft), heated only to the minimum extent to avoid solidification if necessary.

(b) Operation, loading and unloading of storage tanks, not greater than one thousand one hundred gallon capacity, with lids or other appropriate closure, not for use with hazardous air pollutants (HAPs), maximum (max.) vp 550mm Hg.

(c) Operation, loading and unloading of VOC storage tanks (including gasoline storage tanks), ten thousand gallons capacity or less, with lids or other appropriate closure, vp not greater than 80mm Hg at 21°C.

(d) Operation, loading and unloading storage of butane, propane, or liquified petroleum gas (LPG), storage tanks, vessel capacity under forty thousand gallons.

(e) Combustion source less than five million Btu/hr. exclusively using natural gas, butane, propane and/or LPG.

(f) Combustion source, less than five hundred thousand Btu/hr., using any commercial fuel containing less than 0.4% by weight sulfur for coal or less than 1% by weight sulfur for other fuels.

(g) Combustion source, of less than one million Btu/hr. if using kerosene, No. 1 or No. 2 fuel oil.

(h) Combustion source, not greater than five hundred thousand Btu/hr. if burning used oil and not greater than four hundred thousand Btu/hr. if burning waste wood or waste paper.

(i) Welding using not more than one ton per day of welding rod.

(j) Foundry sand molds, unheated and using binders with less than 0.25% free phenol by sand weight.

(k) "Parylene" coaters using less than five hundred gallons of coating per year.

(l) Printing and silkscreening, using less than two gallon/day of any combination of the following: Inks, coatings, adhesives, fountain solutions, thinners, retarders, or nonaqueous cleaning solutions.

(m) Water cooling towers and ponds, not using chromium-based corrosion inhibitors, not used with barometric jets or condensers, not greater than ten thousand gpm, not in direct contact with gaseous or liquid process streams containing regulated air pollutants.

(n) Combustion turbines, of less than 500 HP.

(o) Batch solvent distillation, not greater than fifty-five gallons batch capacity.

(p) Municipal and industrial water chlorination facilities of not greater than twenty million gallons per day capacity. The exemption does not apply to waste water treatment.

(q) Surface coating, using less than two gallons per day.

(r) Space heaters and hot water heaters using natural gas, propane or kerosene and generating less than five million Btu/hr.

(s) Tanks, vessels, and pumping equipment, with lids or other appropriate closure for storage or dispensing of aqueous solutions of inorganic salts, bases and acids excluding:

(i) 99% or greater H_2SO_4 or H_3PO_4

(ii) 70% or greater HNO_3

(iii) 30% or greater HCl

(iv) More than one liquid phase where the top phase is more than one percent VOCs.

(t) Equipment used exclusively to pump, load, unload or store high boiling organic material, material with initial boiling point (IBP) not less than 150°C. or vapor pressure (vp) not more than 5mm Hg at 21°C. with lids or other appropriate closure.

(u) Smokehouses under twenty square feet.

(v) Milling and grinding activities, using paste-form compounds with less than one percent VOCs.

(w) Rolling, forging, drawing, stamping, shearing, or spinning hot or cold metals.

(x) Dip-coating operations, using materials with less than one percent VOCs.

(y) Surface coating, aqueous solution or suspension containing less than one percent VOCs.

(z) Cleaning and stripping activities and equipment, using solutions having less than one percent VOCs by weight. On metallic substrates, acid solutions are not considered for listing as insignificant.

(aa) Storage and handling of water based lubricants for metal working where the organic content of the lubricant is less than ten percent.

(bb) Municipal and industrial waste water chlorination facilities of not greater than one million gallons per day capacity.

(3) The following units or activities may be determined to be insignificant on a case-by-case basis by the permitting authority:

(a) Pilot plants.

(b) Cold feed aggregate bins for asphalt and concrete production equipment.

(c) Chemical or physical analytical laboratory operations or equipment including fume hoods and vacuum pumps.

(d) NPDES permitted ponds and lagoons utilized solely for the purpose of settling suspended solids and skimming of oil and grease.

(e) Coffee roasters, under fifteen lbs./day of coffee.

(f) Tire buffing of less than six thousand six hundred tires per year.

[Statutory Authority: Chapter 70.94 RCW. 94-11-105 (Order 93-30), § 173-401-533, filed 5/17/94, effective 6/17/94.]

PART VI
PERMIT CONTENT

WAC 173-401-600 Permit content. (1) Each permit shall contain terms and conditions that assure compliance with all applicable requirements at the time of permit issuance. Every requirement in an operating permit shall be based upon the most stringent of the following requirements:

(a) The FCAA and rules implementing that act, including provisions of the approved state implementation plan;

(b) Chapter 70.94 RCW and rules implementing that chapter. This includes requirements in regulatory orders issued by the permitting authority;

(c) In permits issued by a local air pollution control authority, the requirements of any order or regulation adopted by that authority;

(d) Chapter 70.98 RCW and rules adopted thereunder; and

(e) Chapter 80.50 RCW and rules adopted thereunder.

(2) Legal authority. The permit shall specify and reference the origin of and authority for each term or condition, and identify any difference in form as compared to the applicable requirement upon which the term or condition is based.

(3) Acid rain. Where an applicable requirement of the FCAA is more stringent than an applicable requirement of regulations promulgated under Title IV of the FCAA, both provisions shall be incorporated into the permit and shall be enforceable by the administrator.

(4) Where an applicable requirement based on the FCAA and rules implementing that act (including the approved state implementation plan) is less stringent than an applicable requirement promulgated under state or local legal authority, both provisions shall be incorporated into the permit in accordance with WAC 173-401-625.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-600, filed 10/4/93, effective 11/4/93.]

WAC 173-401-605 Emission standards and limitations. (1) General. Each permit shall contain emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance.

(2) Alternative emission limits. If the Washington state implementation plan allows a determination of an alternative emission limit at a chapter 401 source, equivalent to that contained in the plan, to be made in the permit issuance, renewal, or significant modification process, the permitting authority may elect to use such process. Any permit containing such equivalency determination shall contain provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.

(3) Reasonably available control technology (RACT). Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance or renewal shall be considered RACT for purposes of permit issuance or renewal. RACT determinations under section 8, chapter 252, Laws of 1993, shall be incorporated into an operating permit as provided in WAC 173-401-730.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-605, filed 10/4/93, effective 11/4/93.]

WAC 173-401-610 Permit duration. The permitting authority shall issue permits for a fixed term of five years.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-610, filed 10/4/93, effective 11/4/93.]

WAC 173-401-615 Monitoring and related recordkeeping and reporting requirements. (1) Monitoring. Each permit shall contain the following requirements with respect to monitoring:

(a) All emissions monitoring and analysis procedures or test methods required under the applicable requirements, including any procedures and methods promulgated pursuant to sections 504(b) or 114 (a)(3) of the FCAA;

(b) Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to subsection (3) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this paragraph; and

(c) As necessary, requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods.

(2) Recordkeeping. With respect to recordkeeping, the permit shall incorporate all applicable recordkeeping requirements and require, where applicable, the following:

(a) Records of required monitoring information that include the following:

(i) The date, place as defined in the permit, and time of sampling or measurements;

(ii) The date(s) analyses were performed;

(iii) The company or entity that performed the analyses;

(iv) The analytical techniques or methods used;

(v) The results of such analyses; and

(vi) The operating conditions existing at the time of sampling or measurement;

(b) A record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

(c) Retention of records of all required monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(3) Reporting. With respect to reporting, the permit shall incorporate all applicable reporting requirements and require the following:

(a) Submittal of reports of any required monitoring at least once every six months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with WAC 173-401-520.

(b) Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as

defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. The permitting authority shall define "prompt" in each individual permit in relation to the degree and type of deviation likely to occur and the applicable requirement. For deviations which represent a potential threat to human health or safety, "prompt" means as soon as possible, but in no case later than twelve hours after the deviation is discovered. The source shall maintain a contemporaneous record of all deviations. Other deviations shall be reported no later than thirty days after the end of the month during which the deviation is discovered.

(4) Compliance assurance monitoring. 40 CFR Part 64, in effect on July 1, 2000, is adopted by reference.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-615, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. 01-17-062 (Order 99-06), § 173-401-615, filed 8/15/01, effective 9/15/01. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-615, filed 10/4/93, effective 11/4/93.]

WAC 173-401-620 Standard terms and conditions. (1) Acid rain. Each permit for an affected source shall contain a condition prohibiting emissions exceeding any allowances that the source lawfully holds under Title IV of the FCAA or the regulations promulgated thereunder.

(a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement.

(b) No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

(c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the FCAA and in effect on April 7, 1993.

(2) Standard provisions. Each permit shall include the following standard provisions:

(a) Duty to comply. The permittee must comply with all conditions of this chapter 401 permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(b) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) Permit actions. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(d) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

(e) Duty to provide information. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205.

(f) Permit fees. The permittee shall pay fees as a condition of this permit in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW.

(g) Emissions trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(h) Severability. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

(i) Permit appeals. This permit or any conditions in it may be appealed only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA.

(j) Permit continuation. This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-620, filed 10/4/93, effective 11/4/93.]

WAC 173-401-625 Federally enforceable requirements. (1) Federal enforceability. All terms and conditions in a chapter 401 permit, including any provisions designed to limit a source's potential to emit, are enforceable by the administrator and citizens under the FCAA.

(2) Exceptions. Notwithstanding subsection (1) of this section, the permitting authority shall specifically designate as not being federally enforceable under the FCAA any terms and conditions included in the permit that are not required under the FCAA or under any of its applicable requirements. Terms and conditions so designated are not subject to the EPA and affected states review requirements of WAC 173-401-700 through 173-401-820.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-625, filed 10/4/93, effective 11/4/93.]

WAC 173-401-630 Compliance requirements. (1) General. Consistent with WAC 173-401-615, all chapter 401 permits shall contain compliance certification, testing, moni-

toring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. Any document (including reports) required by a chapter 401 permit shall contain a certification by a responsible official that meets the requirements of WAC 173-401-520.

(2) Inspection and entry. Each permit shall contain inspection and entry requirements that require, that upon presentation of credentials and other documents as may be required by law, the permittee shall allow the permitting authority or an authorized representative to perform the following:

(a) Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(d) As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(3) Schedule of compliance. Each permit shall contain a schedule of compliance consistent with WAC 173-401-510 (2)(h)(iii).

(4) Progress reports. For those sources required to have a schedule of compliance, the permit shall require progress reports consistent with an applicable schedule of compliance and WAC 173-401-510 (2)(h) to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by the permitting authority. Such progress reports shall contain the following:

(a) Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones, or compliance were achieved; and

(b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

(5) Compliance certification. Each permit shall contain requirements for compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. Permits shall include each of the following:

(a) A requirement that compliance certifications be submitted once per year. Permitting authorities may require that compliance certifications be submitted more frequently for those emission units not in compliance with permit terms and conditions or where more frequent certification is specified in the applicable requirement;

(b) In accordance with WAC 173-401-615(1), a means for monitoring the compliance of the source with its emissions limitations, standards, and work practices;

(c) A requirement that the compliance certification include the following:

(i) The identification of each term or condition of the permit that is the basis of the certification;

(ii) The compliance status;

(iii) Whether compliance was continuous or intermittent;

(iv) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615 (3)(a); and

(v) Such other facts as the authority may require to determine the compliance status of the source.

(d) A requirement that all compliance certifications be submitted to the administrator as well as to the permitting authority; and

(e) Such additional requirements as may be specified pursuant to sections 114 (a)(3) and 504(b) of the FCAA.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-630, filed 10/4/93, effective 11/4/93.]

WAC 173-401-635 Temporary sources. The permitting authority may issue a single permit authorizing emissions from similar operations by the same source owner or operator at multiple temporary locations. The operation must be temporary and involve at least one change of location during the term of the permit. No affected source shall be permitted as a temporary source. Permits for temporary sources shall include the following:

(1) Conditions that will assure compliance with all applicable requirements at all authorized locations;

(2) Requirements that the owner or operator notify the permitting authority at least ten days in advance of each change in location; and

(3) Conditions that assure compliance with all other provisions in WAC 173-401-600 through 173-401-650.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-635, filed 10/4/93, effective 11/4/93.]

WAC 173-401-640 Permit shield. (1) Shield requirement. Each chapter 401 permit shall include a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit.

(2) Inapplicable requirements. Upon request, the permitting authority shall include in the permit or in a separate written finding issued with the permit a determination identifying specific requirements that do not apply to the source. The source shall specify in its application for such a determination the requirements as to which the determination is requested. If the determination is issued in a separate finding, that finding shall be summarized in the permit. The permit shall state that the permit shield applies to any requirements so identified. A request to extend the permit shield to requirements deemed inapplicable to the source may be made either in the original permit application or in an application for a permit modification.

(3) Omissions. A chapter 401 permit that does not expressly state that a permit shield extends to specific applicable requirements shall be presumed not to provide such a shield for those requirements.

(4) Exclusions. Nothing in this section or in any chapter 401 permit shall alter or affect the following:

(a) The provisions of section 303 of the FCAA (emergency orders), including the authority of the administrator under that section;

(b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

(c) The applicable requirements of the acid rain program, consistent with section 408(a) of the FCAA;

(d) The ability of EPA to obtain information from a source pursuant to section 114 of the FCAA; or

(e) The ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in chapter 252, Laws of 1993.

(5) The agency may exclude all or a portion of a permit from the permit shield upon a finding that the shield would substantially impede implementation or enforcement of applicable requirements. Such a finding shall identify the portions of the permit excluded from the shield, the requirements that have led to the exclusion, and the reason for the exclusion.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-640, filed 10/4/93, effective 11/4/93.]

WAC 173-401-645 Emergency provision. (1) Definition. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(2) Effect of an emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of subsection (3) of this section are met.

(3) Criteria. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(a) An emergency occurred and that the permittee can identify the cause(s) of the emergency;

(b) The permitted facility was at the time being properly operated;

(c) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(d) The permittee submitted notice of the emergency to the permitting authority within two working days of the time when emission limitations were exceeded due to the emergency or shorter periods of time specified in an applicable requirement. This notice fulfills the requirement of WAC 173-401-615 (3)(b) unless the excess emissions represent a potential threat to human health or safety. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(4) Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(5) Relationship to other rules. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-645, filed 10/4/93, effective 11/4/93.]

WAC 173-401-650 Operational flexibility. (1) Reasonably anticipated operating scenarios. Each permit shall contain terms and conditions for reasonably anticipated operating scenarios identified by the source in its application as approved by the permitting authority. Such terms and conditions:

(a) Shall require the source, contemporaneously with making a change from one operating scenario to another, to record in a log at the permitted facility a record of the scenario under which it is operating;

(b) Shall extend the permit shield described in WAC 173-401-640 to all terms and conditions under each such operating scenario; and

(c) Shall ensure that the terms and conditions of each such alternative scenario meet all applicable requirements and the requirements of this chapter.

(2) Emissions trading. Each permit shall contain terms and conditions, if the permit applicant requests them, for the trading of emissions increases and decreases in the permitted facility, to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval of each emissions trade. Such terms and conditions:

(a) Shall include all terms required under WAC 173-401-600 through 173-401-630 to determine compliance;

(b) Shall extend the permit shield described in WAC 173-401-640 to all terms and conditions that allow such increases and decreases in emissions;

(c) Shall meet all applicable requirements and requirements of this chapter; and

(d) Shall require the source, contemporaneously with making a change, to record in a log at the permitted source the emission increases and decreases.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-650, filed 10/4/93, effective 11/4/93.]

PART VII
PERMIT ISSUANCE, RENEWAL, REOPENINGS, AND REVISIONS

WAC 173-401-700 Action on application. (1) A permit, permit modification, or renewal may be issued only if all of the following conditions have been met:

(a) The permitting authority has received a complete application for a permit, permit modification, or permit renewal, except that a complete application need not be received before issuance of a general permit under WAC 173-401-750;

(b) The permit has been reviewed and signed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority and, in the latter case, signed, dated, and stamped by the supervising professional engineer;

(c) The permitting authority has complied with the requirements for public participation under WAC 173-401-800;

(d) The permitting authority has complied with the requirements for notifying and responding to affected states under WAC 173-401-820;

(e) The conditions of the permit provide for compliance with all applicable requirements and the requirements of this chapter;

(f) The administrator has received a copy of the proposed permit and any notices required under WAC 173-401-810 and 173-401-820, and has not objected in writing to issuance of the permit within forty-five days of receipt of the proposed permit and all necessary supporting information; and

(g) Where EPA has objected to issuance of a permit or modification, the permittee has consented in writing to the changes required by the EPA.

(2) Deadlines. Except as provided in subsections (1)(g), (3), and (4) of this section or under regulations promulgated under Title IV or Title V of the FCAA for the permitting of affected sources under the acid rain program, the permitting authority shall take final action on each permit application (including a request for permit modification or renewal) within eighteen months of receiving a complete application.

(3) Transition plan. The permitting authority shall take final action on at least one-third of all operating permit applications received from chapter 401 sources in existence on the date on which EPA authorizes the permitting authority to issue operating permits within one year after EPA authorization. Final action shall be taken on at least one third of such applications annually over a period not to exceed three years after the effective date of EPA authorization.

(4) Early reduction submittals. The permitting authority shall take final action on a complete permit application containing an early reduction demonstration under section 112 (i)(5) of the FCAA within nine months of receiving the complete application.

(5) Notice of construction applications. Except as provided in WAC 173-401-500(10) processing of notice of construction applications received under RCW 70.94.152 shall take priority over processing of operating permit applications.

(6) Completeness. The permitting authority shall promptly provide notice to the applicant of whether the application is complete. Unless the permitting authority requests additional information or otherwise notifies the applicant of incompleteness within sixty days of receipt of an application, the application shall be deemed complete. For modifications processed through minor permit modification procedures, such as those in WAC 173-401-725 (2)(a) and (3), the permitting authority does not have to provide a completeness determination.

(7) Draft permit. Within one hundred eighty days of the date upon which an application is deemed to be complete, the permitting authority should generally issue either a draft permit or a notice of intent to deny the permit application. Notice of issuance of a draft permit shall be published and provided to affected states in accordance with the procedures in WAC 173-401-800 through 173-401-820. The deadline provided in this subsection shall not apply to the initial round of permit applications filed pursuant to subsection (3) of this section.

(8) Statement of basis. At the time the draft permit is issued, the permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions). The permitting authority shall send this statement to EPA, the applicant, and to any other person who requests it.

(9) Proposed permit. Upon completion of the public comment period provided in WAC 173-401-800, the permitting authority shall issue a proposed permit, along with a response to any comments received during the comment period. The permitting authority shall transmit the proposed permit and its response to any comments to the applicant and to EPA for review, as provided in WAC 173-401-810.

(10) Preconstruction approval. The submittal of a complete application shall not affect any requirement of a source to have a preconstruction permit under Title I of the FCAA or a notice of construction approval under RCW 70.94.152.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-700, filed 10/4/93, effective 11/4/93.]

WAC 173-401-705 Requirement for a permit. (1) Requirement for a permit. Except as provided in subsection (2) of this section, WAC 173-401-722 and 173-401-725, no chapter 401 source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under this chapter.

(2) Application shield. If a chapter 401 source submits a complete application for permit issuance (including for renewal) within twelve months of the time the source becomes subject to the permit program, operation of the source without a chapter 401 permit is not a violation of this chapter until the permitting authority takes final action on the permit application, except as noted in this section. Chapter 401 sources in existence on the date of EPA approval of the state permit program shall become subject to the program on the effective date of EPA approval. This protection shall cease to apply if, subsequent to the completeness determination made pursuant to WAC 173-401-700(6), the applicant fails to submit by the deadline specified in writing by the permitting authority any additional information identified as being needed to process the application.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-705, filed 10/4/93, effective 11/4/93.]

WAC 173-401-710 Permit renewal, revocation and expiration. (1) Renewal application. The source shall submit a complete permit renewal application to the permitting authority no later than the date established in the permit. This date shall be no less than six months prior to the expiration of the permit. The permitting authority may require that a permit renewal application must be submitted earlier. The permitting agency must mail this written notice to the source at least one year before the new application deadline to ensure that the terms of the permit will not lapse before the permit is renewed. In no event shall the application due date be earlier than eighteen months prior to the expiration of the permit. The permitting authority shall send a permit application to each source at least six months before a complete application is due.

(2) Permit issuance. Permits being renewed are subject to the same procedural requirements, including those for public participation, affected state and EPA review, that apply to initial permit issuance.

(3) Expired permits. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with subsection (1) of this section and WAC 173-401-500. All terms and conditions of the permit shall remain in effect after the permit itself expires if a timely and complete permit application has been submitted.

(4) Revocation of permits. The permitting authority may revoke a permit only upon the request of the permittee or for cause. The permitting authority shall provide at least thirty days written notice to the holder of a current operating permit prior to revocation of the permit or denial of a permit renewal application. Such notice shall include an explanation of the basis for the proposed action and afford the permittee/applicant an opportunity to meet with the permitting authority prior to the authority's final decision. A revocation issued under this section may be issued conditionally with a future effective date and may specify that the revocation will not take effect if the permittee satisfies the specified conditions before the effective date. Nothing in this subsection shall limit the permitting authority's authority to issue emergency orders.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-710, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-710, filed 10/4/93, effective 11/4/93.]

WAC 173-401-720 Administrative permit amendments. (1) Definition. An "administrative permit amendment" is a permit revision that:

(a) Corrects typographical errors;

(b) Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;

(c) Requires more frequent monitoring or reporting by the permittee;

(d) Allows for a change in ownership or operational control of a source where the permitting authority determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the permitting authority;

(e) Incorporates into the chapter 401 permit the terms, conditions, and provisions from orders approving notice of construction applications processed under an EPA-approved program, provided that such a program meets procedural requirements substantially equivalent to the requirements of WAC 173-401-700, 173-401-725, and 173-401-800 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in WAC 173-401-600 through 173-401-650.

(2) Acid rain provisions. Administrative permit amendments for purposes of the acid rain portion of the permit shall be governed by regulations promulgated under Title IV of the FCAA and in effect on April 7, 1993.

(3) Administrative permit amendment procedures. An administrative permit amendment may be made by the permitting authority consistent with the following:

(a) The permitting authority shall take no more than sixty days from receipt of a request for an administrative permit amendment to take final action on such request, and may incorporate such changes without providing notice to the public or affected states provided that it designates any such permit revisions as having been made pursuant to this paragraph.

(b) The permitting authority shall submit a copy of the revised permit to the administrator.

(c) The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

(4) Permit shield. The permitting authority shall, upon taking final action granting a request for an administrative permit amendment, allow coverage by the permit shield in WAC 173-401-640 for administrative permit amendments made pursuant to subsection (1)(e) of this section.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-720, filed 10/4/93, effective 11/4/93.]

WAC 173-401-722 Changes not requiring permit revisions. (1) General.

(a) A chapter 401 source is authorized to make the changes described in this section without a permit revision, providing the following conditions are met:

(i) The proposed changes are not Title I modifications;

(ii) The proposed changes do not result in emissions which exceed those allowable under the permit, whether expressed as a rate of emissions, or in total emissions;

(iii) The proposed changes do not alter permit terms that are necessary to enforce limitations on emissions from units covered by the permit; and

(iv) The facility provides the administrator and the permitting authority with written notification at least seven days prior to making the proposed changes except that written notification of a change made in response to an emergency shall be provided as soon as possible after the event.

(b) Permit attachments. The source and permitting authority shall attach each notice to their copy of the relevant permit.

(2) Section 502 (b)(10) changes. Pursuant to the conditions in subsection (1) of this section, a chapter 401 source is authorized to make section 502 (b)(10) changes (as defined in WAC 173-401-200) without a permit revision.

(a) For each such change, the written notification required under subsection (1)(a)(iv) of this section shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield authorized under WAC 173-401-640 shall not apply to any change made pursuant to this paragraph.

(3) SIP authorized emissions trading. Pursuant to the conditions in subsection (1) of this section, a chapter 401 source is authorized to trade increases and decreases in emissions in the permitted facility, where the Washington state implementation plan provides for such emissions trades with-

out requiring a permit revision. This provision is available in those cases where the permit does not already provide for such emissions trading.

(a) Under this subsection (3), the written notification required under subsection (1)(a)(iv) of this section shall include such information as may be required by the provision in the Washington state implementation plan authorizing the emissions trade, including at a minimum, when the proposed change will occur, a description of each such change, any change in emissions, the permit requirements with which the source will comply using the emissions trading provisions of the Washington state implementation plan, and the pollutants emitted subject to the emissions trade. The notice shall also refer to the provisions with which the source will comply in the applicable implementation plan and that provide for the emissions trade.

(b) The permit shield described in WAC 173-401-640 shall not extend to any change made under this paragraph. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the applicable implementation plan authorizing the emissions trade.

(4) Emission caps. Upon the request of the permit applicant, the permitting authority shall issue permits that contain terms and conditions, including all terms required under WAC 173-401-600 through 173-401-630 to determine compliance, allowing for the trading of emissions increases and decreases in the chapter 401 source solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The emissions trading provisions shall not be applied to any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements.

(a) Under this paragraph, the written notification required under subsection (1)(a)(iv) of this section shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.

(b) The permit shield described in WAC 173-401-640 shall extend to terms and conditions that allow such increases and decreases in emissions.

(5) A source making a change under this section shall comply with applicable preconstruction review requirements established pursuant to RCW 70.94.152.

[Statutory Authority: RCW 70.94.161(2). 02-19-078 (Order 02-02), § 173-401-722, filed 9/16/02, effective 10/17/02. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-722, filed 10/4/93, effective 11/4/93.]

WAC 173-401-724 Off-permit changes. (1) The source shall be allowed to make changes not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided that the proposed changes do not weaken the enforceability of existing permit conditions. Any change that is a Title I modification or is a change subject to the acid rain requirements under Title IV of the FCAA must be submitted as a permit revision.

(2) Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition.

(3) Sources must provide contemporaneous written notice to the permitting authority and EPA of each such change, except for changes that qualify as insignificant under Appendix A of this chapter. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

(4) The change shall not qualify for the permit shield under WAC 173-401-640.

(5) The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

(6) A source making a change under this section shall comply with applicable preconstruction review requirements established pursuant to RCW 70.94.152.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-724, filed 10/4/93, effective 11/4/93.]

WAC 173-401-725 Permit modification. (1) Definition. A permit modification is any revision to a chapter 401 permit that cannot be accomplished under provisions for administrative permit amendments under WAC 173-401-720. A permit modification for purposes of the acid rain portion of the permit shall be governed by regulations promulgated under Title IV of the FCAA and in effect on April 7, 1993.

(2) Minor permit modification procedures.

(a) Criteria.

(i) Minor permit modification procedures shall be used for those permit modifications that:

(A) Do not violate any applicable requirement;

(B) Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

(C) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

(D) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

(I) A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the FCAA; and

(II) An alternative emissions limit approved pursuant to regulations promulgated under section 112 (i)(5) of the FCAA;

(E) Are not modifications under any provision of Title I of the FCAA;

(ii) Notwithstanding (a)(i) of this subsection, and subsection (3)(a) of this section, the permitting authority may allow the use of minor permit modification procedures for permit

modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that the use of such minor permit modification procedures are explicitly provided for in the Washington state implementation plan or in applicable requirements promulgated by EPA and in effect on April 7, 1993.

(b) Application. An application requesting the use of minor permit modification procedures shall meet the requirements of WAC 173-401-510 and shall include the following:

(i) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

(ii) The source's suggested draft permit;

(iii) Certification by a responsible official, consistent with WAC 173-401-520, of the truth, accuracy, and completeness of the application and that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

(iv) Completed forms for the permitting authority to use to notify the administrator and affected states as required under WAC 173-401-810 and 173-401-820.

(c) EPA and affected state notification. Within five working days of receipt of a complete permit modification application, the permitting authority shall meet its obligation under WAC 173-401-810 and 173-401-820 to notify the administrator and affected states of the requested permit modification. The permitting authority promptly shall send any notice required under WAC 173-401-820(2) to the administrator.

(d) Notice requirements. Concurrent with the notice to the administrator and affected states, the permitting authority shall submit to the permit register notice of each proposed minor permit modification. Publication in the next available issue of the permit register will signal the beginning of a public comment period of twenty-one days. Each notice must describe the proposed revisions and specify the deadline to file comments with the permitting authority on the proposed modification.

(e) Timetable for issuance. The permitting authority may not issue a final permit modification until after the public comment period ends. The permitting authority may not issue a final permit modification until after EPA's forty-five day review period or until EPA has notified the permitting authority that EPA will not object to issuance of the permit modification, whichever is first, although the permitting authority can approve the permit modification prior to that time. Within ninety days of the permitting authority's receipt of an application under minor permit modification procedures or fifteen days after the end of the administrator's forty-five day review period under WAC 173-401-810, whichever is later, the permitting authority shall:

(i) Issue the permit modification as proposed;

(ii) Deny the permit modification application;

(iii) Determine that the requested modification does not meet the minor permit modification criteria and should be reviewed under the significant modification procedures; or

(iv) Revise the draft permit modification and transmit to the administrator the new proposed permit modification as required by WAC 173-401-810.

(f) Source's ability to make change. The source may make the change proposed in its minor permit modification application immediately after it files such application provided that those changes requiring the submissions of a notice of construction application have been reviewed and approved by the permitting authority. After the source makes the change allowed by the preceding sentence, and until the permitting authority takes any of the actions specified in (d) of this subsection, the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.

(g) Permit shield. The permit shield under WAC 173-401-640 shall not extend to minor permit modifications.

(3) Group processing of minor permit modifications. Consistent with this subsection, the permitting authority may process groups of a source's applications for certain modifications eligible for minor permit modification processing.

(a) Criteria. Group processing of modifications may be used only for those permit modifications:

(i) That meet the criteria for minor permit modification procedures under subsection (2)(a) of this section; and

(ii) That collectively are below ten percent of the emissions allowed by the permit for the emissions unit for which the change is requested, twenty percent of the applicable definition of major source in WAC 173-401-200, or five tons per year, whichever is least.

(b) Application. An application requesting the use of group processing procedures shall meet the requirements of WAC 173-401-510 and shall include the following:

(i) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

(ii) The source's suggested draft permit;

(iii) Certification by a responsible official, consistent with WAC 173-401-520, of the truth, accuracy, and completeness of the application and that the proposed modification meets the criteria for use of group processing procedures and a request that such procedures be used;

(iv) A list of the source's other pending applications awaiting group processing, and a determination of whether the requested modification, aggregated with these other applications, equals or exceeds the threshold set under (a)(ii) of this subsection;

(v) Certification, consistent with WAC 173-401-520, that the source has notified EPA of the proposed modification. Such notification need only contain a brief description of the requested modification; and

(vi) Completed forms for the permitting authority to use to notify the administrator and affected states as required under WAC 173-401-810 and 173-401-820.

(c) EPA and affected state notification. On a quarterly basis or within five business days of receipt of an application demonstrating that the aggregate of a source's pending applications equals or exceeds the threshold level set under (a)(ii) of this subsection, whichever is earlier, the permitting authority promptly shall meet its obligation under paragraphs WAC

173-401-810 and 173-401-820 to notify the administrator and affected states of the requested permit modifications. The permitting authority shall send any notice required under WAC 173-401-820(2) to the administrator.

(d) Notice of requirements. Concurrent with the notice to the administrator and affected states, the permitting authority shall submit to the permit register notice of group processing of minor permit modifications. Publication in the next available issue of the permit register will signal the beginning of a public comment period of at least twenty-one days. Each notice must describe the proposed revisions and specify the deadline to file comments with the permitting authority on the proposed modification.

(e) Timetable for issuance. The provisions of subsection (2)(e) of this section shall apply to modifications eligible for group processing, except that the permitting authority shall take one of the actions specified in subsection (2)(e) of this section within one hundred eighty days of receipt of the application or fifteen days after the end of the administrator's forty-five day review period, whichever is later.

(f) Source's ability to make change. The provisions of subsection (2)(f) of this section shall apply to modifications eligible for group processing.

(g) Permit shield. The permit shield under WAC 173-401-640 shall not extend to minor permit modifications eligible for group processing.

(4) Significant modification procedures.

(a) Criteria. Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative permit amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing herein shall be construed to preclude the permittee from making changes consistent with this chapter that would render existing permit compliance terms and conditions irrelevant.

(b) Significant permit modifications shall meet all requirements of this chapter, including those for applications, public participation, review by affected states, and review by EPA, as they apply to permit issuance and permit renewal. The permitting authority shall complete review on the majority of significant permit modifications within nine months after receipt of a complete application.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-725, filed 10/4/93, effective 11/4/93.]

WAC 173-401-730 Reopening for cause. (1) Standard provisions. Each issued permit shall include provisions stating that the permit shall be reopened and revised under any of the following circumstances:

(a) Additional applicable requirements become applicable to a major chapter 401 source with a remaining permit term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620 (2)(j);

(b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;

(c) The permitting authority or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or

(d) The administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(2) Procedures. Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(3) Notice. Reopenings under this section shall not be initiated before a notice of such intent is provided to the chapter 401 source by the permitting authority at least thirty days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-730, filed 10/4/93, effective 11/4/93.]

WAC 173-401-735 Permit appeals. (1) A decision to issue or to deny a final permit, or the terms or conditions of such a permit, may be appealed to the pollution control hearings board under chapter 43.21B RCW and RCW 70.94.161 (9). Any appealable decision or determination shall be identified as such and shall contain a conspicuous notice to the recipient that it may be appealed by filing an appeal with the pollution control hearings board and serving the appeal on the permitting authority within thirty days of receipt, pursuant to RCW 43.21B.310. The provision for appeal in this section is separate from and additional to any federal rights to petition and review under section 505(b) of the FCAA, including petitions filed pursuant to 40 CFR 70.8(c) and 70.8 (d).

(2) Appealing parties. Parties that may file the appeal referenced in subsection (1) of this section include any person who participated in the public participation process pursuant to WAC 173-401-800.

(3) As provided in RCW 34.05.570, a person may seek a writ of mandamus in the event that a permitting authority fails to take final action on an application for a permit, permit renewal, or permit revision within the deadlines specified by WAC 173-401-700 through 173-401-725.

[Statutory Authority: RCW 70.94.161 (2)(a). 97-08-084 (Order 97-01), § 173-401-735, filed 4/2/97, effective 5/3/97. Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-735, filed 10/4/93, effective 11/4/93.]

PART VIII
THE PERMIT PROCESS FOR GENERAL PERMITS

WAC 173-401-750 General permits. (1) Permit issuance. The permitting authority may, after notice and opportunity for public participation provided under WAC 173-401-800, issue a general permit covering numerous similar

sources or emissions units. Any general permit shall comply with all requirements applicable to other chapter 401 permits and shall identify criteria by which sources may qualify for the general permit. To sources that qualify, the permitting authority shall grant the conditions and terms of the general permit. Notwithstanding the shield provisions of WAC 173-401-640, the source shall be subject to enforcement action for operation without a chapter 401 permit if the source is later determined not to qualify for the conditions and terms of the general permit. General permits shall not be authorized for affected sources under the acid rain program.

(2) Applications. Chapter 401 sources that would qualify for a general permit must apply to the permitting authority for coverage under the terms of the general permit or must apply for a chapter 401 permit consistent with WAC 173-401-500. The permitting authority may, in the general permit, provide for applications which deviate from the requirements of WAC 173-401-510, provided that such applications meet the requirements of this chapter, and include all information necessary to determine qualification for, and to assure compliance with, the general permit. Without repeating the public participation procedures required under WAC 173-401-800, the permitting authority may grant a source's request for authorization to operate under a general permit, but such a grant shall not be a final permit action for purposes of judicial review.

(3) Renewal. General permits being renewed are subject to the same procedural requirements, including public participation, that apply to initial permit issuance. If the general permit is renewed without change, sources covered by the general permit do not need to submit new applications to operate under the authority of the general permit.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-750, filed 10/4/93, effective 11/4/93.]

PART IX
PUBLIC INVOLVEMENT AND PERMIT REVIEW BY EPA AND AFFECTED STATES

WAC 173-401-800 Public involvement. (1) Purpose. It is ecology's and local air authorities' goal to ensure that accurate permitting information is made available to the public in a timely manner. The permitting authority is responsible for providing notice of permitting actions that allows sufficient time for comment and for providing enough information to inform the public of the extent of the actions proposed. These public involvement regulations establish a statewide process to be followed by all permitting authorities.

(2) Public notice.

(a) The permitting authority shall provide public notice for the following actions:

(i) Issuance of a draft permit or permit renewal;

(ii) Intended denial of a permit application;

(iii) Issuance of a draft permit modification;

(iv) Issuance of a draft general permit;

(v) Scheduling of a public hearing under subsection (4) of this section; and

(vi) Any other related activities that the permitting authority considers to involve substantial public interest.

(b) Public notice shall be provided by the permitting authority in the newspaper of largest general circulation in the area of the facility applying for a permit. Publication includes paid advertisement, legal notice, or other appropriate format, as determined by the permitting authority. The permitting authority may provide additional notice to the public through other methods, such as newsletters and press releases. Notice shall also be published in the *Ecology Permit Register*. The permitting authority shall send information on any action requiring publication in the *Permit Register* to ecology within three days of the action.

(c) Notice of the activities described in (a) of this subsection shall also be provided to persons requesting to receive such notice. The permitting authority shall maintain a mailing list of persons requesting notice, and may maintain more than one list, such as lists based on geographical location. No request shall require the extension of the comment period associated with the notice. The permitting authority may from time to time inform the public of the opportunity to be on the list and may also delete from the list persons who fail to respond to an inquiry of continued interest in receiving the notices.

(d) Public notice must include:

(i) Name and address of the permitting authority;

(ii) Name and address of the permit applicant, and if different, the name and address of the facility or activity regulated by the permit, unless it is a general permit;

(iii) A brief description of the business conducted at the facility and activity involved in the permit action;

(iv) Name, address, and telephone number of a person from whom interested persons may obtain further information such as copies of the draft permit, the application, and relevant supporting materials;

(v) A brief description of the comment procedures, including the procedures to request a hearing, and the time and place of any hearings scheduled for the permit; and

(vi) A description of the emission change involved in any permit modification.

(e) The permitting authority must make available for public inspection, in at least one location near the chapter 401 source, all nonproprietary information contained in the permit application, draft permit and supporting materials. Public inspections of materials for nonstationary sources or general permits may be located at the discretion of the permitting authority.

(3) Public comment. Except as otherwise provided in WAC 173-401-725, the permitting authority shall provide a minimum of thirty days for public comment on actions described in subsection (2)(a) of this section. This comment period begins on the date of publication of notice in the *Permit Register* or publication in the newspaper of largest general circulation in the area of the facility applying for the permit, whichever is later. No proposed permit shall be issued until the public comment period has ended and the permitting authority has prepared a response to the comments received.

(4) Public hearings. The applicant, any interested governmental entity, any group or any person may request a public hearing within the comment period required under subsection (3) of this section. Any such request shall indicate the interest of the entity filing it and why a hearing is warranted. The permitting authority may, in its discretion, hold a public hearing if it determines significant public interest exists. Any such hearing shall be held at a time(s) and place(s) as the per-

mitting authority deems reasonable. The permitting authority shall provide at least thirty days prior notice of any hearing.

(5) The permitting authority shall keep a record of the commentors and issues raised during the public participation process. Such records shall be available to the public.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-800, filed 10/4/93, effective 11/4/93.]

WAC 173-401-805 Permit register. (1) Permit register. Ecology shall regularly publish and maintain a *Permit Register* that will be distributed to all interested parties that request to be on the mailing list. All permitting authorities will work to ensure the information published in the register is timely.

(2) Content. Besides the actions listed in WAC 173-401-800(2), the register will give notice of the following, as pertains to sources covered under this rule:

(a) Public meetings or hearings on a draft operating permit;

(b) Receipt of complete permit applications;

(c) Permit appeals to the pollution control hearings board;

(d) Issuance or denial of final permit, permit modifications, or renewals;

(e) Authorization for a source to operate without an operating permit by limiting its potential to emit to levels below those that would require the source to obtain an operating permit.

(f) Periodic summaries of enforcement order and changes made without revising the permit pursuant to WAC 173-401-722.

(3) Mailing list. Ecology shall periodically notify the public of the opportunity to be put on the mailing list for the permit register.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-805, filed 10/4/93, effective 11/4/93.]

WAC 173-401-810 EPA review. (1) Information transfer. The permitting authority shall provide to the administrator a copy of each permit application (including any application for permit modification), each proposed permit, and each final chapter 401 permit. The applicant may be required by the permitting authority to provide a copy of the permit application (including the compliance plan) directly to the administrator. Upon agreement with the administrator, the permitting authority may submit to the administrator a permit application summary form and any relevant portion of the permit application and compliance plan, in place of the complete permit application and compliance plan. To the extent practicable, the preceding information shall be provided in computer-readable format compatible with EPA's national data base management system.

(2) Records. Each permitting authority shall keep for five years such records and submit to the administrator such information as the administrator may reasonably require to ascertain whether the state program complies with the requirements of the FCAA or of 40 CFR part 70.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-810, filed 10/4/93, effective 11/4/93.]

WAC 173-401-820 Review by affected states. (1) Notice. The permitting authority shall give notice of each draft permit, permit revision, or permit renewal to any affected state on or before the time that the permitting authority provides this or permit revision notice to the public under WAC 173-401-800 and 173-401-805, except to the extent WAC 173-401-725 (2) or (3) requires the timing of the notice to be different.

(2) Response. The permitting authority, as part of the submittal of the proposed permit to the administrator (or as soon as possible after the submittal for minor permit modification procedures allowed under WAC 173-401-725 (2) and (3), shall notify the administrator and any affected state in writing of any refusal by the permitting authority to accept all recommendations for the proposed permit that the affected state submitted during the public or affected state review period. The notice shall include the permitting authority's reasons for not accepting any such recommendation. The permitting authority is not required to accept recommendations that are not based on applicable requirements or the requirements of this chapter.

(3) British Columbia notification. The permitting authority shall notify British Columbia of draft permits, permit revisions, or permit renewals at sources located within 100 kilometers of the Washington-British Columbia border. Such notice shall be concurrent with notification of EPA and affected states.

[Statutory Authority: Chapter 70.94 RCW. 93-20-075 (Order 91-68), § 173-401-820, filed 10/4/93, effective 11/4/93.]

PART X
FEE DETERMINATION AND CERTIFICATION

WAC 173-401-900 Fee determination—Ecology. (1) Fee determination. Ecology shall develop a fee schedule, consistent with the process outlined below, according to which it will collect fees from permit program sources under its jurisdiction. The fees shall be sufficient to cover ecology's permit administration costs and its share of ecology's development and oversight costs. The fee schedule shall also indicate the shares of ecology's development and oversight costs that are to be collected by each delegated local authority. Opportunities for public participation shall be afforded throughout the fee determination process, as provided in WAC 173-401-920(1).

(2) Fee eligible activities. The costs of the permit administration and development and oversight activities are fee eligible.

(a) Permit administration. Permit administration costs are those incurred by each permitting authority, including ecology, in administering and enforcing the operating permit program with respect to sources under its jurisdiction. Permit administration costs are those enumerated in WAC 173-401-940(1).

(b) Development and oversight. Development and oversight costs are those incurred by ecology in developing and administering the state operating permit program and in overseeing the administration of the program by the delegated local authorities. Development and oversight costs are those enumerated in WAC 173-401-940(2).

(3) Workload analysis. Ecology shall conduct a workload analysis projecting resource requirements, organized by categories of fee-eligible activities, for the purpose of preparing the budget. Ecology shall, for the two-year period corresponding to each biennium, identify the permit administration and development and oversight activities that it will perform during that biennium. The workload analysis shall include resource requirements for both the direct and indirect costs of the permit administration activities enumerated in WAC 173-401-940(1) and the development and oversight activities enumerated in WAC 173-401-940(2). Ecology shall publish a draft workload analysis together with the draft budget for the following biennium on or before February 28 of each even-numbered year and shall provide opportunity for public comment thereon in accordance with WAC 173-401-920(1). Ecology shall publish a final workload analysis together with the final budget for the following biennium on or before June 30 of each even-numbered year.

(4) Budget development. Ecology shall, for the two-year period corresponding to each biennium, prepare an operating permit program budget for that biennium. The budget shall be based on the resource requirements identified in the workload analysis for the biennium and shall take into account the projected operating permit program account balance at the start of the biennium. Ecology shall publish a draft budget for the following biennium together with the draft workload analysis on or before February 28 of each even-numbered year and shall provide opportunity for public comment thereon in accordance with WAC 173-401-920(1). The draft budget shall include data on unit costs (e.g., salary schedules and the indirect cost rate) used in preparing budget projections. Ecology shall publish a final budget together with the final workload analysis for the following biennium on or before June 30 of each even-numbered year.

(5) Allocation methodology.

(a) Development and oversight costs. Ecology shall allocate its development and oversight costs among all permitting authorities, including ecology, based upon the number of permit program sources under the jurisdiction of each permitting authority, except that extraordinary costs or other costs readily attributable to a specific permitting authority may be assessed by that authority.

(b) Permit administration costs and ecology's share of development and oversight costs. Ecology shall allocate its permit administration costs and its share of ecology's development and oversight costs among the permit program sources for whom it acts as permitting authority, according to a three-tiered structure based upon:

(i) The number of sources under its jurisdiction;

(ii) The complexity of the sources under its jurisdiction; and

(iii) The size of the sources under its jurisdiction, as measured by the quantity of each regulated pollutant (for fee calculation) emitted.

The complexity of each source shall be determined based on a ranking system under which ecology assigns to each source a complexity value of 1, 2 or 3, corresponding to ecology's assessment of the relative difficulty of issuing and maintaining an operating permit for that source. The quantity of each regulated pollutant emitted by a source shall be determined based on the annual emissions data during the most recent calendar year for which data is available. Each of the three tiers shall be equally weighted.

(c) WAC 173-401-300(7) Sources. Ecology shall allocate to permit program sources that qualify for an exemption pursuant to WAC 173-401-300(7) after the effective date of the date of the state operating permit program the portion of ecology's permit administration costs and ecology's share of its development and oversight costs that results from including such sources in the first tier of the allocation structure described in (b)(i) of this subsection. After federally enforceable limits have been established and for so long as a source continues to meet the requirements for exemption under WAC 173-401-300(7), that source shall pay registration program fees pursuant to RCW 70.94.015(2) in lieu of paying operating permit program fees.

(6) Fee schedule. Ecology shall issue annually a fee schedule reflecting the permit administration fee and the share of the development and oversight fee to be paid by each permit program source under its jurisdiction and reflecting the development and oversight assessment to be paid by each permitting authority. The fee schedule shall be based on the information contained in the final source data statements, as provided in WAC 173-401-925(3), for each year; the final source data statements shall be issued after opportunity for petition and review has been afforded in accordance with WAC 173-401-925. Ecology shall publish the fee schedule for the following year on or before October 31 of each year.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-900, filed 12/30/93, effective 1/30/94.]

WAC 173-401-905 Fee determination—Delegated local authorities. Each delegated local authority shall establish a process for developing, assessing, and collecting fees from permit program sources under its jurisdiction. The fees shall be sufficient to cover its permit administration costs and its share of ecology's development and oversight costs. The fee determination process shall provide opportunity for public participation.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-905, filed 12/30/93, effective 1/30/94.]

WAC 173-401-910 General permit fee determination. Reserved.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-910, filed 12/30/93, effective 1/30/94.]

WAC 173-401-915 Fee collection—Ecology and delegated local authorities. (1) Collection from sources. Ecology and each delegated local authority shall collect fees sufficient to cover the costs of their respective permit administration activities and their share of ecology's development and oversight activities from the permit program sources under their respective jurisdictions.

(2) Dedicated account. All receipts from fees collected by or on behalf of ecology from permit program sources pursuant to RCW 70.94.162 shall be deposited in the air operating permit account created under RCW 70.94.015. All receipts from fees collected by delegated local authorities from permit program sources pursuant to RCW 70.94.162 shall be deposited in their respective air operating permit

accounts or other accounts dedicated exclusively to support of the operating permit program.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-915, filed 12/30/93, effective 1/30/94.]

WAC 173-401-920 Accountability—Ecology and delegated local authorities. (1) Public participation during fee determination process. Ecology shall provide for public participation in the fee determination process described under WAC 173-401-900, which provision shall include but not be limited to the following:

(a) Ecology shall provide opportunity for public review of and comment on each biennial workload analysis and budget.

(b) Ecology shall publish in the *Permit Register* notice of issuance of its draft biennial workload analysis and draft biennial budget and issuance of its annual fee schedule.

(c) Ecology shall make available for public review, on or before February 28 of each even-numbered year, copies of its draft biennial workload analysis and draft biennial budget. Ecology shall make available for public review, on or before October 31 of each year, copies of its annual fee schedule. Ecology shall maintain a mailing list of persons requesting opportunity for review under this subsection or under WAC 173-401-925(1). Ecology may, from time to time, inform the public of the opportunity to be placed on the mailing list and may delete from the list persons who fail to respond to an inquiry regarding continued interest in receiving materials.

(d) Ecology shall provide at least sixty days for public comment on the draft biennial workload analysis and draft biennial budget. Such sixty-day period for comment shall run from the date ecology mails the draft workload analysis and draft budget as provided in (c) of this subsection.

(2) Tracking of revenues, time and expenditures.

(a) Revenues. Ecology shall track revenues on a source-specific basis.

(b) Time and expenditures. Ecology shall track time and expenditures on the basis of source categories and functional categories, except that, as part of a demonstration project undertaken pursuant to RCW 70.94.162, ecology will track time and expenditures on a source-specific basis for at least three but no more than five sources.

(i) Sources will be grouped into five categories, as follows:

(A) Kraft pulping mills;

(B) Sulfite pulping mills;

(C) Metal processing and related industries;

(D) Sources located on the Hanford Reservation; and

(E) Other sources, including those sources under the jurisdiction of ecology's central and eastern regional offices.

(ii) Functions will be grouped into several categories and subcategories, as follows:

(A) Program management and support;

(B) Program development;

(C) Permit processing;

(I) Application assistance and review;

(II) Preparing draft and final permits;

(D) Permit management and compliance activities;

(E) Technical assistance; and

(F) Outreach and education.

(c) Use of information obtained from tracking revenues, time and expenditures.

(i) Ecology shall use the information obtained from tracking revenues, time and expenditures to modify its workload analysis during the biennial review provided for under WAC 173-401-900.

(ii) The information obtained from tracking revenues, time and expenditures shall not provide a basis for challenge to the amount of an individual source's fee.

(3) Periodic fiscal audits, reports and performance audits. A system of regular, periodic fiscal audits, reports and performance audits shall be conducted in order to evaluate the implementation of the operating permit program by ecology and delegated local authorities. Ecology and each delegated local authority shall gather baseline data, where appropriate, to which the various evaluation criteria will be compared.

(a) Fiscal audits. Ecology and each delegated local authority shall contract with the state auditor to have the auditor perform a standard fiscal audit of ecology's and each delegated local authority's operating permit program every other year.

(b) Annual routine performance audits. Ecology and each local authority shall be subject to annual routine performance audits, except that the routine performance audit shall be incorporated into the extensive performance audit, conducted pursuant to subsection (3)(d) of this section, in each year during which an extensive performance audit is conducted. Ecology shall conduct the audits of each of the delegated local authorities. An individual from another state's environmental agency shall conduct the audit of ecology. In the event that no such individual is able to serve in this capacity, an independent contractor shall conduct the audit of ecology; the contractor is to be free of any conflicts of interest, to the extent possible, and is to be agreed upon by a committee comprised of one representative each from the environmental and regulated communities, and one representative of a delegated local authority. Any contractor applying to conduct the audit of ecology shall be required to disclose in its application any potential conflicts of interest. The annual routine performance audits shall incorporate by reference information contained in the relevant annual report and, every other year, in the relevant fiscal audit. The annual routine performance audits shall address the following questions and measures of performance:

(i) How many permits lapsed?

(A) Explanation of lapse;

(B) Comments;

(ii) What is the total number of permit applications or applications for permit modifications?

(A) Average application processing time;

(B) Number of disapproved applications and reason for disapproval;

(C) Number of permit applications regarding which permitting authority had to return to source to request additional information. Number of times permitting authority had to return to source before permit deemed complete;

(iii) To how many permits did the EPA object? To what percentage of permits did EPA object (including objection upon petition from public)?

(A) Grounds for objection;

(B) Agency response;

(I) Deficiency remedied;

(II) Timeliness (that is to say, within ninety days? Did administrator issue permit?)

(iv) How many permits were subject to legal/administrative challenge? What percentage of permits were subject to legal/administrative challenge?

(A) Challenging party;

(B) Grounds for challenge;

(I) Substantive;

(II) Procedural;

(C) Outcome of challenge/prevailing party;

(D) Agency response;

(v) How many administrative enforcement actions were taken for failure to meet permit requirements? How many notices of violation were issued?

(A) Date issued; time elapsed since violation discovered;

(B) Reason;

(C) Result (that is to say, penalties? Orders of agreement? Legal challenge?)

(D) Source returned to compliance; date; (if not, explain);

(vi) What was the frequency of inspections at each facility?

(A) Announced;

(B) Unannounced;

(C) Comparison with baseline data;

(vii) How many accidental releases, as defined in Section 112(r) of the Federal Clean Air Act, occurred?

(A) Reason identified;

(B) Agency response;

(C) Resulting changes to terms of permit, if any;

(D) Comparison with baseline data;

(viii) What was the amount of the expenditures per permit issuance?

(A) Average for program;

(B) Average for source category;

(c) Annual random individual permit review. Five percent of the permits issued by each permitting authority, or if five percent of the permits issued by a permitting authority is equal to or less than one, at least one permit issued by the permitting authority shall be subject to review each year in conjunction with the annual routine performance audit. The permit to be reviewed shall be selected at random. Ecology shall conduct the review in the case of each of the delegated local authorities. An individual from another state's environmental agency shall conduct the audit of ecology. In the event that no such individual is able to serve in this capacity, an independent contractor shall conduct the audit of ecology; the contractor is to be free of any conflicts of interest, to the extent possible and is to be agreed upon by a committee comprised of one representative each from the environmental and regulated communities, and one representative of a delegated local authority. Any contractor applying to conduct the audit of ecology shall be required to disclose in its application any potential conflicts of interest. The annual random individual permit review shall address the following questions and measures of performance:

(i) Can reviewer, from information available in permit, determine all requirements to which the source is subject?

(ii) Does permit include all applicable requirements?

(iii) Can reviewer, from information available in file, determine compliance status for each emission point? For facility?

(iv) Does the file include technical reviews, source tests, CEM performance specification tests, permit applications, record of citizen complaints, correspondence with facility and other supporting documentation?

(v) Are all major emissions points identified in permit?

(vi) Are all pieces of control equipment identified in permit?

(vii) Does the permit specify operation and maintenance requirements?

(viii) Does the permit specify all monitoring, recording, reporting and certification requirements to which source is subject?

(ix) Are alternative operating scenarios specified in permit? Are the conditions adequately specified?

(x) Is the permit expiration date noted?

(xi) Does the permit indicate which requirements are enforceable by federal/state mechanisms? Does the permit state the existence of opportunity for PCHB and other judicial review and opportunity to petition EPA?

(xii) Were all procedural requirements, including notice to public and affected states, satisfied in issuing/modifying permit?

(xiii) Did permit writer work with source to identify and consider opportunities for pollution prevention? Were any pollution prevention measures implemented?

(xiv) Evaluation of overall performance:

(A) Is permit complete and understandable? Assess completeness, clarity, etc.;

(B) Assess procedural adequacy of permit issuance process.

(d) Periodic extensive performance audits. Ecology and each local authority shall be subject to extensive performance audits every five years. In addition, ecology or a delegated local authority may be subject to an extensive performance audit more frequently under the conditions of WAC 173-401-920 (3)(e). Ecology shall conduct the audits of each of the delegated local authorities. An individual from another state's environmental agency shall conduct the audit of ecology. In the event that no such individual is able to serve in this capacity, an independent contractor shall conduct the audit of ecology; the contractor is to be free of any conflicts of interest, to the extent possible and is to be agreed upon by a committee comprised of one representative each from the environmental and regulated communities, and one representative of a delegated local authority. Any contractor applying to conduct the audit of ecology shall be required to disclose in its application any potential conflicts of interest. The extensive performance audits shall incorporate by reference the information contained in the annual reports and the routine performance audits for the relevant period and shall take the place of the routine performance audit every fifth year (that is to say, they gather the routine performance audit information in addition to the information indicated below). The extensive performance audits shall address the following questions and measures of performance:

(i) What was the number of modifications?

(A) Comparison with projection;

(B) Applicable to how many sources;

(ii) Did the permitting authority have personnel adequate to complete workload in timely fashion?

(iii) Were the total fees assessed adequate to fund program?

(A) Amount of shortfall or overcharge;

(B) Explanation;

(iv) Were the total fees collected equal to total fees assessed?

(A) Amount/percentage of shortfall;

(B) Reason for shortfall;

(v) Was there a program budget increase or decrease over period?

(A) Percentage increase or decrease;

(B) Explanation (for example, sources no longer part of operating permit program; new federal requirements implemented through permit program);

(vi) What was the number of instances of late fee payment?

(A) Agency response;

(B) Result (that is to say, was the fee paid? Penalty assessed? Time interval between payment and date fee amount due?)

(vii) How many sources were in compliance with all applicable requirements? What percentage of sources were in compliance with all applicable requirements? How do the number and percentage of sources in compliance with all applicable requirements compare with baseline compliance data?

(viii) What was the number of businesses availing themselves of services offered by state or local business assistance programs? What level of effort was required to provide assistance?

(ix) Were inspection results adequately documented?

(x) Were the methods used to ascertain compliance and the frequency of required reporting and related activities appropriate for each facility?

(A) Frequency of inspections appropriate for relevant facility;

(B) Monitoring requirements appropriate for relevant facility;

(xi) Were the operation and maintenance plans adequate?

(xii) Were public information efforts adequate?

(A) Public notice for actions relating to permitted sources meets/exceeds statutory requirements;

(B) Agency/permit writers accessible to regulated community, to environmental community, and to stakeholders and general public;

(C) Other outreach efforts;

(xiii) Evaluation of overall performance:

(A) Is permitting authority issuing quality permits?

(B) Is permitting authority issuing/renewing permits in timely fashion?

(C) Is permitting authority ensuring that sources are in compliance with terms and conditions of permit?

(D) Is permitting authority effectively using operating permit as a tool for securing environmental improvements?

(E) Is permitting authority efficiently administering program (includes, in the case of ecology, statewide program)? Indicate inefficiencies, where these exist;

(F) Evaluation of particular questions identified in annual report/routine performance audit for further examination;

(e) Finding of inadequate administration or need for further evaluation. If, in the process of conducting a fiscal audit, annual routine performance audit, or annual random individual permit review, the entity conducting the audit finds that ecology or a delegated local authority is inadequately administering the operating permit program or finds that further evaluation is immediately warranted, an extensive performance audit shall be conducted, as provided in WAC 173-401-920 (4)(d).

(f) Preaudit public meeting with auditor. Ecology and each delegated local authority shall provide the opportunity for interested individuals to provide comment to the entity conducting an annual routine performance audit, annual random permit review or extensive performance audit prior to the audit. Such opportunity shall consist of a single, informal meeting at which at least one representative from the regulated community and at least one representative of the environmental community are present. Ecology and each delegated local authority shall provide notice of the preaudit meeting in the *Permit Register*.

(g) Annual reports. Ecology and each delegated local authority shall prepare an annual report evaluating its operating permit program administration. Such report shall include any findings resulting from the relevant fiscal audits, annual routine performance audits, annual random individual permit reviews or periodic extensive performance audits. Ecology shall submit its annual report to the appropriate standing committees of the legislature. Each delegated local authority shall submit its report to its board of directors and to ecology.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-920, filed 12/30/93, effective 1/30/94.]

WAC 173-401-925 Source data statements and petition for review of statements—Ecology and delegated local authorities. (1) Preliminary source data statements. Ecology shall provide to the permit program sources under its jurisdiction and to those persons on the mailing list, maintained in accordance with WAC 173-401-920 (1)(c), or to those requesting receipt of source data statements under this subsection a preliminary statement of emissions and other data from that source upon which ecology intends to base its allocation determination under WAC 173-401-900(5) as well as a preliminary statement of emissions and other data from each of the permit program sources under ecology's jurisdiction upon which ecology intends to base its allocation determination. Such preliminary statement shall be provided to the permit program sources and to other persons on the mailing list on or before July 31 of each year. Such preliminary statement shall indicate the name, address and telephone number of the person or persons to whom the source or other individual may direct inquiries and/or petitions for review under subsection (2) of this section regarding the accuracy of the data contained therein.

(2) Petition for review of statement. A permit program source or other individual may petition ecology to review for accuracy the data contained in any preliminary source data statement provided for under subsection (1) of this section. Such petition shall be lodged on or before August 31 of each

year. Such petition shall be in writing, directed to the individual indicated on the statement of source data. Such petition shall indicate clearly the data to be reviewed, the specific action that the source or petitioning individual is requesting be taken and may, if the source or petitioning individual desires, be accompanied by written documentation supporting the request for review. Such petition shall, in addition, state the name, address and telephone number of the person or persons to whom ecology may direct inquiries regarding the request. Upon receipt of such a petition, ecology must issue its written response to the petitioner and any other affected party on or before September 30 of each year. Such response shall state the conclusions of the review and the reasons therefore, and shall contain a new preliminary source data statement, revised to reflect any changes necessitated by ecology's response.

(3) Final source data statement. Ecology shall provide to the permit program sources under its jurisdiction and to those persons on the mailing list, maintained in accordance with WAC 173-491-920 (1)(c), or to those requesting receipt of source data statements under this subsection a final statement of emissions and other data from that source upon which ecology will base its allocation determination under WAC 173-401-900 on or before October 31 of each year. In addition, the final source data statements shall include a final statement of emissions and other data upon which ecology intends to base its allocation determination from each of the permit program sources under its jurisdiction. The final source data statement will be accompanied by a fee schedule reflecting the fee to be paid by each source. Ecology may include with the fee schedule an invoice, or a notice stating that fees listed in the fee schedule must be paid by February 28th of the following year.

(4) Delegated local authorities. Delegated local authorities shall establish procedures for administrative dispute resolution for disputes pertaining to fees.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-925, filed 12/30/93, effective 1/30/94.]

WAC 173-401-930 Fee payment and penalties—Ecology. (1) Fee payment. Each permit program source under ecology's jurisdiction shall pay a fee in the amount reflected in the fee schedule or invoice issued under WAC 173-401-925(3). Such fee shall be due on or before February 28 of each year.

(2) Failure to pay fees. Ecology shall charge a penalty to a permit program source under its jurisdiction for failure to pay all or part of its operating permit fee after ninety days past the due date for fee payment. Ecology may charge such penalty in an amount up to three times the source's total original assessed fee.

(3) Other penalties. The penalties authorized in subsection (2) of this section are additional to and in no way prejudice ecology's or a local air authority's ability to exercise other civil and criminal remedies, including the authority to revoke a source's operating permit for failure to pay all or part of its operating permit fee.

(4) Facility closure. Sources that permanently cease operations will be required to pay only a pro rata portion of the annual operating permit fee for the fiscal year in which they cease operations. The portion of the fee to be paid will be calculated by dividing the number of calendar days that have passed in the relevant fiscal year at the time the source ceases operations by the total of three hundred sixty-five calendar days, and multiplying the fraction thus derived by the fee that the source would have paid for the relevant fiscal year, had it not ceased operations.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-930, filed 12/30/93, effective 1/30/94.]

WAC 173-401-935 Development and oversight remittance by local authorities—Ecology and delegated local authorities. (1) Collection. On or before October 31 of each year, ecology shall provide to each delegated local authority a statement of the share of ecology's development and oversight costs for which the authority is responsible for collecting from sources under its jurisdiction.

(2) Remittance. Each delegated local authority shall remit to ecology one-half of the share of ecology's development and oversight costs for which it is responsible for collecting from sources under its jurisdiction on or before March 31 of each year and shall remit to ecology the balance of its share of ecology's development and oversight costs on or before June 30 of each year.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-935, filed 12/30/93, effective 1/30/94.]

WAC 173-401-940 Fee eligible activities—Ecology and delegated local authorities. (1) Permit administration activities shall include:

(a) Preapplication assistance and review of an application and proposed compliance plan for a permit, permit revision, or renewal;

(b) Source inspections, testing and other data-gathering activities necessary for the development or a permit, permit revision, or renewal;

(c) Acting on an application for a permit, permit revision, or renewal, including the costs of developing an applicable requirement as part of the processing of a permit, permit revision, or renewal, preparing a draft permit and fact sheet, and preparing a final permit, but excluding the costs of developing BACT, LAER, BART, or RACT requirements for criteria and toxic air pollutants;

(d) Notifying and soliciting, reviewing and responding to comment from the public and contiguous states and tribes, conducting public hearings regarding the issuance of a draft permit and other costs of providing information to the public regarding operating permits and the permit issuance process;

(e) Modeling necessary to establish permit limits or to determine compliance with permit limits;

(f) Reviewing compliance certifications and emissions reports and conducting related compilation and reporting activities;

(g) Conducting compliance inspections, complaint investigations, and other activities necessary to ensure that a source is complying with permit conditions;

(h) Administrative enforcement activities and penalty assessment, excluding the costs of proceedings before the pollution control hearings board and all costs of judicial enforcement;

(i) The share attributable to permitted sources of the development and maintenance of emissions inventories;

(j) The share attributable to permitted sources of ambient air quality monitoring and associated recording and reporting activities;

(k) Training for permit administration and enforcement;

(l) Fee determination, assessment, and collection, including the costs of necessary administrative dispute resolution and penalty collection;

(m) Required fiscal audits, periodic performance audits, and reporting activities;

(n) Tracking of time, revenues and expenditures, and accounting activities;

(o) Administering the permit program including the costs of clerical support, supervision, and management; and

(p) Other activities required by operating permit regulations issued by the United States Environmental Protection Agency under the Federal Clean Air Act.

(2) Development and oversight activities shall include:

(a) Review and determinations necessary for delegation of authority to administer and enforce a permit program to a local air authority under RCW 70.94.161(2) and 70.94.860;

(b) Conducting fiscal audits and periodic performance audits of delegated local authorities, and other oversight functions required by the operating permit program;

(c) Administering enforcement actions taken by the department on behalf of a permitting authority, including those actions taken by the department under RCW 70.94.785, but excluding the costs of proceedings before the pollution control hearings board and all costs of judicial enforcement;

(d) Determination and assessment with respect to each permitting authority of the fees covering its share of the costs of development and oversight;

(e) Training and assistance for permit program administration and oversight, including training and assistance regarding technical, administrative, and data management issues;

(f) Development of generally applicable regulations or guidance regarding the permit program or its implementation or enforcement;

(g) State codification of federal rules or standards for inclusion in operating permits;

(h) Preparation of delegation package and other activities associated with submittal of the state permit program to the United States Environmental Protection Agency for approval, including ongoing coordination activities;

(i) General administration and coordination of the state permit program, related support activities, and other agency indirect costs, including necessary data management and quality assurance;

(j) Required fiscal audits and periodic performance audits of the department, and reporting activities;

(k) Tracking of time, revenues and expenditures, and accounting activities;

(l) Public education and outreach related to the operating permit program, including the maintenance of a permit register;

(m) The share attributable to permitted sources of compiling and maintaining emissions inventories;

(n) The share attributable to permitted sources of ambient air quality monitoring, related technical support, and associated recording activities;

(o) Provision of assistance to small business as required under Section 507 of the Federal Clean Air Act as it exists on the effective date of this act or its later enactment as adopted by reference by the director by rule;

(p) Provision of services by the department of revenue and the office of the state attorney general and other state agencies in support of permit program administration;

(q) A one-time revision to the state implementation plan to make those administrative changes necessary to ensure coordination of the state implementation plan and the operating permit program; and

(r) Other activities required by operating permit regulations issued by the United States Environmental Protection Agency under the Federal Clean Air Act.

[Statutory Authority: Chapter 70.94 RCW. 94-02-041 (Order 93-19), § 173-401-940, filed 12/30/93, effective 1/30/94.]

Chapter 173-405 WAC
KRAFT PULPING MILLS

WAC

173-405-012	Statement of purpose.
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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-405-011	Statement of policy and purpose. [Order DE 76-35, § 173-405-011, filed 12/28/76. Formerly WAC 18-36-011.] Repealed by 80-11-060 (Order DE 80-15), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-405-031	Specific emission standards. [Order DE 76-35, § 173-405-031, filed 12/28/76. Formerly WAC 18-36-031.] Repealed by 80-11-060 (Order DE 80-15), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-405-036	General emission standards and nuisance control measures. [Order DE 76-35, § 173-405-036, filed 12/28/76. Formerly WAC 18-36-036.] Repealed by 80-11-060 (Order DE 80-15), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-405-041	Emission requirements of prior jurisdictions. [Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-405-041, filed 3/6/85.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-405-071	Monitoring and reporting. [Order DE 76-35, § 173-405-071, filed 12/28/76. Formerly WAC 18-36-071.] Repealed by 80-11-060 (Order DE 80-15), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.
173-405-076	Report of startup, shutdown, breakdown or upset condition. [Order DE 76-35, § 173-405-076, filed 12/28/76. Formerly WAC 18-36-076.] Repealed by 80-04-049 (Order DE 80-7), filed 3/21/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.-331.
173-405-081	Notice of construction. [Order DE 76-35, § 173-405-081, filed 12/28/76. Formerly WAC 18-36-081.] Repealed by 80-04-049 (Order DE 80-7), filed 3/21/80.

Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331.

173-405-090 Operating permit. [Statutory Authority: RCW 70.94.-331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-090, filed 8/20/80.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-405-101 Exemption. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-101, filed 8/20/80; Order DE 76-35, § 173-405-101, filed 12/28/76. Formerly WAC 18-36-101.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

WAC 173-405-012 Statement of purpose. These rules are enacted under the provisions of the Washington Clean Air Act as amended (RCW 70.94.395) to:

(1) Assume state jurisdiction over emissions from kraft pulping mills to provide for the systematic control of air pollution in this industry and for the proper development of the state's natural resources; and

(2) Establish technically feasible and reasonably attainable standards and revise such standards as new information and better technology are developed and become available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-012, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.-331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-012, filed 8/20/80.]

WAC 173-405-021 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter shall have the following meanings:

(1) "Kraft mill" means any manufacturing facility which uses an alkaline solution containing sodium hydroxide and/or sodium sulfide, and any other chemical pulping facility, except those covered by chapter 173-410 WAC, to produce pulp and/or paper products from wood fibers. For the purposes of this regulation "kraft mill" is equivalent to "source."

(2) "Noncondensibles" means gases and vapors from the digestion and evaporation processes of a mill that are not condensed with the equipment used in those processes.

(3) "Recovery furnace stack" means the stack from which the products of combustion from the recovery furnace are emitted to the ambient air.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-021, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.-331. 85-06-048 (Order 84-50), § 173-405-021, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-021, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-021, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-021, filed 3/21/80; Order DE 76-35, § 173-405-021, filed 12/28/76. Formerly WAC 18-36-021.]

WAC 173-405-033 Standards of performance. The provisions of WAC 173-400-115 "Standards of performance for new sources" shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-033, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-033, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-033, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-033, filed 3/21/80.]

WAC 173-405-035 Emission standards for sources emitting hazardous air pollutants. The provisions of WAC 173-400-075 "Emission standards for sources emitting hazardous air pollutants" shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-035, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-18-010 (Order DE 83-22), § 173-405-035, filed 8/26/83.]

WAC 173-405-040 Emission standards. In addition to the general applicability of chapters 173-400 and 173-490 WAC to all emission sources; no kraft pulp mill shall cause or permit air contaminant emissions in excess of the limits listed below. Specific emission standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.

(1) Recovery furnaces.

(a) The particulate emissions from each recovery furnace stack shall not exceed 0.23 grams of particulate per dry cubic meter at standard conditions (0.10 grains/dscf) corrected to eight percent oxygen averaged over three one hour tests.

(b) The TRS emissions from each recovery furnace stack constructed before January 1, 1970, and for recovery furnaces that have direct contact evaporators, shall not exceed 17.5 ppm corrected to eight percent oxygen for a daily average.

(c) The TRS emissions from each recovery furnace constructed after January 1, 1970, which does not have a contact evaporator, shall not exceed 5.0 ppm corrected to eight percent oxygen for a daily average.

(2) Smelt dissolver tank vent. The particulate emissions from smelt dissolver tank vents shall not exceed 0.15 grams per kilogram (0.30 pounds per ton) of solids fired at the associated recovery furnace.

(3) Lime kilns.

(a) The particulate emission from each lime kiln stack shall not exceed 0.30 grams of particulate per dry cubic meter (0.13 grains/dscf) at standard conditions corrected to ten percent oxygen.

(b) The TRS emissions from any lime kiln stack shall not exceed eighty ppm expressed as hydrogen sulfide for more than two consecutive hours in any one day.

(c) The average daily emission of TRS from any lime kiln stack shall not exceed fifty ppm. After January 1, 1985, TRS emissions from each lime kiln stack shall not exceed twenty ppm corrected to ten percent oxygen for a daily average.

(4) Other TRS emissions units. Noncondensibles from digesters, multiple-effect evaporators and condensate stripper system shall at all times be treated to reduce the emissions of TRS equal to the reduction achieved by thermal oxidation in a lime kiln. A backup treatment system or equivalent approved by ecology must be installed to assure continual treatment.

(5) Other particulate emissions units. The emission of particulates from emissions units other than kraft recovery furnaces, lime kilns, or smelt dissolving tank vents, shall not exceed the following maximums:

(a) 0.46 grams per dry cubic meter at standard conditions (0.2 grains/dscf) corrected to seven percent oxygen, for units

which combust wood and wood residue to produce steam and which commenced construction prior to January 1, 1983.

(b) 0.12 grams per dry cubic meter at standard conditions (0.05 grains/dscf) corrected to seven percent oxygen, for units which combust fuel other than wood and wood residue to produce steam, and which commenced construction after January 1, 1983.

(c) 0.23 grams per dry cubic meter at standard conditions (0.1 grains/dscf) corrected to seven percent oxygen in the case of combustion units, for units not classified under (a) or (b) of this subsection.

(6) Opacity. No person shall cause or allow the emission of a plume from any kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than thirty-five percent for more than six consecutive minutes in any sixty minute period, except as described in WAC 173-405-040(7).

No person shall cause or allow the emission of a plume, from any emissions unit other than a kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than twenty percent for more than six consecutive minutes in any sixty minute period, except that these provisions do not apply when the emissions occur due to soot blowing/grate cleaning and the operator can demonstrate that the emissions will not exceed twenty percent opacity for more than fifteen minutes in any eight consecutive hours. The intent of this provision is to permit soot blowing and grate cleaning necessary to the operation of the boiler facility. This practice, except for testing and trouble shooting, is to be scheduled for the same approximate times each day and ecology shall be advised of the schedule.

There shall be no more than one violation notice issued in any sixty minute period.

These provisions (of WAC 173-405-040(6)) shall not apply when the presence of uncombined water is the only reason for the opacity of the plume to exceed the applicable maximum.

(7) Each mill may petition for, and ecology may establish by regulatory order, alternate opacity limits for a specific kraft recovery furnace or lime kiln, providing:

(a) The mill can demonstrate compliance; with all other applicable emission limits; and

(b) Best practicable operation and maintenance procedures, as approved by ecology, are continuously employed.

(8) Any person electing to apply for exceptions per the provisions of WAC 173-405-040(7) shall submit a program acceptable to ecology. The program shall include the following information: The amount and concentration of suspended particulate material emitted during best practicable operating procedures, opacity recorded at such emission level, the type of equipment and procedures which will be used to demonstrate compliance and the time required for installation of the equipment.

(9) The opacity provisions of this chapter shall apply until an application is received by ecology, petitioning for a revised limit as allowed by WAC 173-405-040(7). After a petition is received, enforcement of the opacity provisions will be stayed until the application is rejected or a new limit is established.

(10) Operation and maintenance. At all times, including periods of abnormal operation and upset conditions, owners and operators shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(11) SO_2.

(a) The emission of sulfur dioxide from any recovery furnace or lime kiln shall not exceed five hundred ppm for an hourly average, corrected to eight percent oxygen for a recovery furnace or to ten percent oxygen for a lime kiln.

(b) The emission of sulfur dioxide from any emissions unit other than a recovery furnace or lime kiln shall not exceed one thousand ppm for an hourly average, corrected to seven percent oxygen for combustion units.

(12) Source testing. To demonstrate compliance with this chapter, the provisions of WAC 173-400-105 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-040, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-040, filed 8/20/80.]

WAC 173-405-045 Creditable stack height and dispersion techniques. The provisions of WAC 173-400-200 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-045, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-405-045, filed 12/16/87.]

WAC 173-405-061 More restrictive emission standards. Ecology may establish more restrictive emission standards for new mills or for mills expanding existing facilities pursuant to WAC 173-400-110.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-061, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-061, filed 4/15/83; Order DE 76-35, § 173-405-061, filed 12/28/76. Formerly WAC 18-36-061.]

WAC 173-405-072 Monitoring requirements. Each mill shall conduct routine monitoring of emissions in accordance with a program that has been approved by ecology. Results of the monitoring shall be reported within fifteen days of the end of each calendar month and shall include data as follows:

(1) Particulate: The results of particulate measurements made on each source during the month.

(2) TRS:

(a) The average TRS concentration expressed in units of the standard for each recovery furnace and lime kiln stack.

(b) The date, time and concentration of TRS for each TRS emissions violation and the total numbers of hours that exceed the standard.

(3) Opacity or other continuous monitor:

(a) The date and time of opacity in excess of the standard.

(b) If equipment for continuous monitoring of opacity is not available, continuous monitoring of operating parameters may be required by a regulatory order as an alternate. If an alternate is approved, the date and time of each occurrence in excess of the regulatory order must be reported.

(4) Production: The average daily production of air-dried unbleached pulp.

(5) Other data: Each kraft mill shall furnish, upon request of ecology, such other pertinent data required to evaluate the mill's emissions or emission control program.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-072, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-072, filed 8/20/80.]

WAC 173-405-077 Report of startup, shutdown, breakdown or upset conditions. The provisions of WAC 173-400-105(5) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-077, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-077, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-077, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-077, filed 3/21/80.]

WAC 173-405-078 Emission inventory. The provisions of WAC 173-400-105(1) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-078, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 89-02-055 (Order 88-39), § 173-405-078, filed 1/3/89; 83-09-036 (Order DE 83-13), § 173-405-078, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-078, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.-011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-078, filed 3/21/80.]

WAC 173-405-086 New source review (NSR). The provisions of WAC 173-400-110 shall apply to all new sources and emissions units to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-086, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-405-086, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-060 (Order DE 80-15), § 173-405-086, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-049 (Order DE 80-7), § 173-405-086, filed 3/21/80.]

WAC 173-405-087 Prevention of significant deterioration (PSD). The provisions of WAC 173-400-141 shall apply to all new major sources and major modifications to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-087, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-405-087, filed 12/16/87.]

WAC 173-405-091 Special studies. Ecology may require such additional special studies relevant to process emissions and establish completion dates as it determines necessary.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-405-091, filed 2/19/91, effective 3/22/91; Order DE 76-35, § 173-405-091, filed 12/28/76. Formerly WAC 18-36-091.]

Chapter 173-406 WAC
ACID RAIN REGULATION

WAC

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PART I
GENERAL PROVISIONS

WAC 173-406-100 Acid rain program general provisions.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-100, filed 11/23/94, effective 12/24/94.]

WAC 173-406-101 Definitions. The terms used in this regulation shall have the meanings set forth in Title IV of the Clean Air Act, 42 U.S.C. 7401, et seq. as amended by the Clean Air Act Amendments of 1990, 42 U.S.C. 7651, et seq. (November 15, 1990,) and in this section as follows:

(1) "Acid rain compliance option" means one of the methods of compliance used by an affected unit under the acid rain program as described in a compliance plan submitted and approved in accordance with WAC 173-406-400 or regulations implementing section 407 of the act.

(2) "Acid Rain emissions limitation" means:

(a) For the purposes of sulfur dioxide emissions:

(i) The tonnage equivalent of the basic Phase II allowance allocations authorized to be allocated to an affected unit for use in a calendar year;

(ii) As adjusted:

(A) By allowances allocated by the administrator pursuant to section 403, section 405 (a)(2), (a)(3), (b)(2), (c)(4), (d)(3), and (h)(2), and section 406 of the act;

(B) By allowances allocated by the administrator pursuant to subpart D of 40 CFR part 72; and thereafter

(C) By allowance transfers to or from the compliance subaccount for that unit that were recorded or properly submitted for recordation by the allowance transfer deadline pursuant to 40 CFR 73.35, after deductions and other adjustments are made pursuant to 40 CFR 73.34(c); and

(b) For purposes of nitrogen oxides emissions, the applicable limitation established by regulations promulgated by the administrator pursuant to section 407 of the act, as modified by an acid rain permit application submitted to the permitting authority, and an acid rain permit issued by the permitting authority, in accordance with regulations implementing section 407 of the act.

(3) "Acid rain emissions reduction requirement" means a requirement under the acid rain program to reduce the emissions of sulfur dioxide or nitrogen oxides from a unit to a specified level or by a specified percentage.

(4) "Acid rain permit or permit" means the legally binding written document, or portion of such document, issued by the permitting authority (following an opportunity for appeal pursuant to 40 CFR part 78, chapter 43.21 RCW or other administrative appeals procedures established by the permitting authority), including any permit revisions, specifying the acid rain program requirements applicable to an affected source, to each affected unit at an affected source, and to the owners and operators and the designated representative of the affected source or the affected unit.

(5) "Acid rain program" means the National Sulfur Dioxide and Nitrogen Oxides Air Pollution Control and Emissions Reduction Program established in accordance with Title IV of the act, WAC 173-406-100 through 173-406-1000, 40 CFR parts 72, 73, 75, 77, and 78, and regulations implementing sections 407 and 410 of the act.

(6) "Act" means the Clean Air Act, 42 U.S.C. §7401, et seq. as amended by Public Law No. 101-549 (November 15, 1990).

(7) "Actual SO_2 emissions rate" means the annual average sulfur dioxide emissions rate for the unit (expressed in lb/mmBtu), for the specified calendar year; provided that, if the unit is listed in the National Allowance Data Base, the "1985 actual SO_2 emissions rate" for the unit shall be the rate specified by the administrator in the NADB under the data field "SO2RTE."

(8) "Administrator" means the Administrator of the United States Environmental Protection Agency or the administrator's duly authorized representative.

(9) "Affected source" means a source that includes one or more affected units.

(10) "Affected state" means a state whose boundary is within fifty statute miles of an affected source within the state of Washington.

(11) "Affected unit" means a unit that is subject to any acid rain emissions reduction requirement or acid rain emissions limitation.

(12) "Affiliate" shall have the meaning set forth in section 2 (a)(11) of the Public Utility Holding Company Act of 1935, 15 U.S.C. 79b (a)(11), as of November 15, 1990.

(13) "Allocate or allocation" means the initial crediting of an allowance by the administrator to an allowance tracking system unit account or general account.

(14) "Allowance" means an authorization by the administrator under the acid rain program to emit up to one ton of sulfur dioxide during or after a specified calendar year.

(15) "Allowance deduction, or deduct when referring to allowances," means the permanent withdrawal of allowances by the administrator from an allowance tracking system compliance subaccount to account for the number of the tons of SO_2 emissions from an affected unit for the calendar year, for tonnage emissions estimates calculated for periods of missing data pursuant to 40 CFR part 75, or for any other allowance surrender obligations of the acid rain program.

(16) "Allowances held or hold allowances" means the allowances recorded by the administrator, or submitted to the administrator for recordation in accordance with 40 CFR 73.50, in an allowance tracking system account.

(17) "Allowance tracking system or ATS" means the acid rain program system by which the administrator allocates, records, deducts, and tracks allowances.

(18) "Allowance tracking system account" means an account in the allowance tracking system established by the administrator for purposes of allocating, holding, transferring, and using allowances.

(19) "Allowance transfer deadline" means midnight of January 30th or, if January 30th is not a business day, midnight of the first business day thereafter and is the deadline by which allowances may be submitted for recordation in an affected unit's compliance subaccount for the purposes of meeting the unit's acid rain emissions limitation requirements for sulfur dioxide for the previous calendar year.

(20) "Authorized account representative" means a responsible natural person who is authorized, in accordance with 40 CFR part 73, to transfer and otherwise dispose of allowances held in an allowance tracking system general

account; or, in the case of a unit account, the designated representative of the owners and operators of the affected unit.

(21) "Auxiliary firing" means the combustion of additional fuel downstream of a gas turbine for the purpose of adding thermal energy to the exhaust gases which can be recovered in a waste heat recovery unit.

(22) "Basic Phase II allowance allocations" means:

(a) For calendar years 2000 through 2009 inclusive, allocations of allowances made by the administrator pursuant to section 403 and section 405 (b)(1), (3), and (4); (c)(1), (2), (3), and (5); (d)(1), (2), (4), and (5); (e); (f); (g)(1), (2), (3), (4), and (5); (h)(1); (i); and (j).

(b) For each calendar year beginning in 2010, allocations of allowances made by the administrator pursuant to section 403 and section 405 (b)(1), (3), and (4); (c)(1), (2), (3), and (5); (d)(1), (2), (4), and (5); (e); (f); (g)(1), (2), (3), (4), and (5); (h)(1) and (3); (i); and (j).

(23) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or any other medium.

(24) "Certificate of representation" means the completed and signed submission required by 40 CFR 72.20, for certifying the appointment of a designated representative for an affected source or a group of identified affected sources authorized to represent the owners and operators of such source(s) and of the affected units at such source(s) with regard to matters under the acid rain program.

(25) "Certifying official" means:

(a) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation;

(b) For partnership or sole proprietorship, a general partner or the proprietor, respectively; and

(c) For a local government entity or state, federal, or other public agency, either a principal executive officer or ranking elected official.

(26) "Coal" means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials Designation ASTM D388-92 "*Standard Classification of Coals by Rank.*"

(27) "Coal-derived fuel" means any fuel, whether in a solid, liquid, or gaseous state, produced by the mechanical, thermal, or chemical processing of coal (e.g., pulverized coal, coal refuse, liquefied or gasified coal, washed coal, chemically cleaned coal, coal-oil mixtures, and coke).

(28) "Coal-fired" means the combustion of fuel consisting of coal or any coal-derived fuel (except a coal-derived gaseous fuel with a sulfur content no greater than natural gas), alone or in combination with any other fuel, where a unit is "coal-fired" if it uses coal or coal-derived fuel as its primary fuel (expressed in mmBtu); provided that, if the unit is listed in the NADB, the primary fuel is the fuel listed in the NADB under the data field "PRIMEFUEL."

(29) "Cogeneration unit" means a unit that has equipment used to produce electric energy and forms of useful thermal energy (such as heat or steam) for industrial, commercial, heating or cooling purposes, through the sequential use of energy.

(30) "Commence commercial operation" means to have begun to generate electricity for sale, including the sale of test generation.

(31) "Commence construction" means that an owner or operator has either undertaken a continuous program of construction or has entered into a contractual obligation to undertake and complete, within eighteen months, a continuous program of construction. The permitting authority may, upon application by the owner or operator, extend the period for completion at its discretion.

(32) "Commence operation" means to have begun any mechanical, chemical, or electronic process, including start up of an emissions control technology or emissions monitor or of a unit's combustion chamber.

(33) "Common stack" means the exhaust of emissions from two or more units through a single flue.

(34) "Compliance certification" means a submission to the administrator or the permitting authority that is required by WAC 173-406-100 through 173-406-1000, by 40 CFR part 72, 73, 75, 77, or 78, or by regulations implementing sections 407 or 410 of the act to report an affected source's or an affected unit's compliance or noncompliance with a provision of the acid rain program and that is signed and verified by the designated representative in accordance with subpart B of 40 CFR part 72, WAC 173-406-800, and the acid rain program regulations generally.

(35) "Compliance plan, for purposes of the acid rain program," means the document submitted for an affected source in accordance with WAC 173-406-301 and 173-406-302 specifying the method(s) (including one or more acid rain compliance options under WAC 173-406-402 or regulations implementing section 407 of the act) by which each affected unit at the source will meet the applicable acid rain emissions limitation and acid rain emissions reduction requirements.

(36) "Compliance subaccount" means the subaccount in an affected unit's allowance tracking system account, established pursuant to 40 CFR 73.31 (a) or (b), in which are held, from the date that allowances for the current calendar year are recorded under 40 CFR 73.34(a) until December 31st, allowances available for use by the unit in the current calendar year and, after December 31st until the date that deductions are made under 40 CFR 73.35(b), allowances available for use by the unit in the preceding calendar year, for the purpose of meeting the unit's acid rain emissions limitation for sulfur dioxide.

(37) "Compliance use date" means the first calendar year for which an allowance may be used for purposes of meeting a unit's acid rain emissions limitation for sulfur dioxide.

(38) "Construction" means fabrication, erection, or installation of a unit or any portion of a unit.

(39) "Control officer" means the air pollution control officer of a local air pollution control authority which is constituted under chapter 70.94 RCW.

(40) "Designated representative" means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with subpart B of 40 CFR part 72, to represent and legally bind each owner and operator, as a matter of federal law, in matters pertaining to the acid rain program. Whenever the term "responsible official" is used in 40 CFR part 70 or in

any other regulations implementing Title V of the act, it shall be deemed to refer to the "designated representative" with regard to all matters under the acid rain program. An alternate designated representative is also included in this definition.

(41) "Diesel fuel" means a low sulfur fuel oil of grades 1-D or 2-D, as defined by the American Society for Testing and Materials ASTM D975-91, "*Standard Specification for Diesel Fuel Oils.*"

(42) "Direct public utility ownership" means direct ownership of equipment and facilities by one or more corporations, the principal business of which is sale of electricity to the public at retail. Percentage ownership of such equipment and facilities shall be measured on the basis of book value.

(43) "Director" means the director of the Washington department of ecology.

(44) "Draft acid rain permit or draft permit" means the version of the acid rain permit, or the acid rain portion of an operating permit, that the permitting authority offers for public comment.

(45) "Ecology" means the Washington department of ecology.

(46) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the administrator by the designated representative and as determined by the administrator, in accordance with the emissions monitoring requirements of 40 CFR part 75.

(47) "EPA" means the United States Environmental Protection Agency.

(48) "Excess emissions" means:

(a) Any tonnage of sulfur dioxide emitted by an affected unit during a calendar year that exceeds the acid rain emissions limitation for sulfur dioxide for the unit; and

(b) Any tonnage of nitrogen oxides emitted by an affected unit during a calendar year that exceeds the annual tonnage equivalent of the acid rain emissions limitation for nitrogen oxides applicable to the affected unit taking into account the unit's heat input for the year.

(49) "Executive director" means the executive director of a local air pollution control authority which is constituted under chapter 70.94 RCW.

(50) "Existing unit" means a unit (including a unit subject to section 111 of the act) that commenced commercial operation before November 15, 1990, and that on or after November 15, 1990, served a generator with a nameplate capacity of greater than twenty-five MWe. "Existing unit" does not include simple combustion turbines or any unit that on or after November 15, 1990, served only generators with a nameplate capacity of twenty-five MWe or less. Any "existing unit" that is modified, reconstructed, or repowered after November 15, 1990, shall continue to be an "existing unit."

(51) "Facility" means any institutional, commercial, or industrial structure, installation, plant, source, or building.

(52) "Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

(53) "Fossil fuel-fired" means the combustion of fossil fuel or any derivative of fossil fuel, alone or in combination with any other fuel, independent of the percentage of fossil fuel consumed in any calendar year.

(54) "Fuel oil" means any petroleum-based fuel (including diesel fuel or petroleum derivatives such as oil tar) as defined by the American Society for Testing and Materials in ASTM D396-90a, "*Standard Specification for Fuel Oils*," and any recycled or blended petroleum products or petroleum by-products used as a fuel whether in a liquid, solid or gaseous state.

(55) "Gas-fired" means the combustion of natural gas, or a coal-derived gaseous fuel with a sulfur content no greater than natural gas, for at least ninety percent of the average annual heat input during the previous three calendar years and for at least eighty-five percent of the annual heat input in each of those calendar years; and any fuel other than coal or any other coal-derived fuel for the remaining heat input, if any.

(56) "General account" means an allowance tracking system account that is not a unit account.

(57) "Generator" means a device that produces electricity and was or would have been required to be reported as a generating unit pursuant to the United States Department of Energy Form 860 (1990 edition).

(58) "Generator output capacity" means the full-load continuous rating of a generator under specific conditions as designed by the manufacturer.

(59) "Heat input" means the product (expressed in mmBtu/time) of the gross calorific value of the fuel (expressed in Btu/lb) and the fuel feed rate into the combustion device (expressed in mass of fuel/time) and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(60) "Independent power production facility (IPP)" means a source that:

(a) Is nonrecourse project financed, as defined by the Secretary of Energy at 10 CFR part 715;

(b) Is used for the generation of electricity, eighty percent or more of which is sold at wholesale; and

(c) Is a new unit required to hold allowances under Title IV of the act;

(d) Provided that direct public utility ownership of the equipment comprising the facility does not exceed fifty percent.

(61) "Life-of-the-unit, firm power contractual arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified generating unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

(a) For the life of the unit;

(b) For a cumulative term of no less than thirty years, including contracts that permit an election for early termination; or

(c) For a period equal to or greater than twenty-five years or seventy percent of the economic useful life of the unit determined as of the time the unit was built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(62) "Nameplate capacity" means the maximum electrical generating output (expressed in MWe) that a generator can sustain over a specified period of time when not restricted

by seasonal or other deratings, as listed in the NADB under the data field "NAMECAP" if the generator is listed in the NADB or as measured in accordance with the United States Department of Energy standards if the generator is not listed in the NADB.

(63) "National Allowance Data Base or NADB" means the data base established by the administrator under section 402 (4)(C) of the act.

(64) "Natural person" means an individual human being and not a firm, public or private corporation, association, partnership, political subdivision, municipality, or governmental agency corporate entity or partnership.

(65) "Natural gas" means a naturally occurring fluid mixture of hydrocarbons containing little or no sulfur (e.g., methane, ethane, or propane), produced in geological formations beneath the Earth's surface, and maintaining a gaseous state at standard atmospheric temperature and pressure conditions under ordinary conditions of sixty-eight degrees Fahrenheit and one atmosphere (seven hundred sixty millimeters of mercury).

(66) "New unit" means a unit that commences commercial operation on or after November 15, 1990, including any such unit that serves a generator with a nameplate capacity of twenty-five MWe or less or that is a simple combustion turbine.

(67) "Offset plan" means a plan pursuant to 40 CFR part 77 for offsetting excess emissions of sulfur dioxide that have occurred at an affected unit in any calendar year.

(68) "Oil-fired" means the combustion of: Fuel oil for more than ten percent of the average annual heat input during the previous three calendar years or for more than fifteen percent of the annual heat input in any one of those calendar years; and any solid, liquid, or gaseous fuel, other than coal or any other coal-derived fuel (except a coal-derived gaseous fuel with a sulfur content no greater than natural gas), for the remaining heat input, if any.

(69) "Operating permit" means a permit issued under 40 CFR part 70 and any other regulations implementing Title V of the act.

(70) "Owner" means any of the following persons:

(a) Any holder of any portion of the legal or equitable title in an affected unit;

(b) Any holder of a leasehold interest in an affected unit; or

(c) Any purchaser of power from an affected unit under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the affected unit; or

(d) With respect to any allowance tracking system general account, any person identified in the submission required by 40 CFR 73.31(c) that is subject to the binding agreement for the authorized account representative to represent that person's ownership interest with respect to allowances.

(71) "Owner or operator" means any person who is an owner or who operates, controls, or supervises an affected unit or affected source and shall include, but not be limited to, any holding company, utility system, or plant manager of an affected unit or affected source.

(72) "Permit revision" means a permit modification, fast track modification, administrative permit amendment, or automatic permit amendment, as provided in WAC 173-406-700.

(73) "Permitting authority" means the Washington department of ecology, the Washington energy facility site evaluation council, local air authority or other agency authorized under chapter 70.94 RCW and approved by EPA to carry out a permit program under this chapter.

(74) "Person" means an individual, firm, public or private corporation, association, partnership, political subdivision, municipality, or governmental agency.

(75) "Phase II" means the acid rain program period beginning January 1, 2000, and continuing into the future thereafter.

(76) "Potential electrical output capacity" means the MWe capacity rating for the units which shall be equal to thirty-three percent of the maximum design heat input capacity of the steam generating unit, as calculated according to Appendix D of 40 CFR part 72.

(77) "Power distribution system" means the portion of an electricity grid owned or operated by a utility that is dedicated to delivering electric energy to customers.

(78) "Power purchase commitment" means a commitment or obligation of a utility to purchase electric power from a facility pursuant to:

(a) A power sales agreement;

(b) A state regulatory authority order requiring a utility to:

(i) Enter into a power sales agreement with the facility;

(ii) Purchase from the facility; or

(iii) Enter into arbitration concerning the facility for the purpose of establishing terms and conditions of the utility's purchase of power;

(c) A letter of intent or similar instrument committing to purchase power (actual electrical output or generator output capacity) from the source at a previously offered or lower price and a power sales agreement applicable to the source is executed within the time frame established by the terms of the letter of intent but no later than November 15, 1992, or, where the letter of intent does not specify a time frame, a power sales agreement applicable to the source is executed on or before November 15, 1992; or

(d) A utility competitive bid solicitation that has resulted in the selection of the qualifying facility of independent power production facility as the winning bidder.

(79) "Power sales agreement" means a legally binding agreement between a qualifying facility, an independent power production facility, or firm associated with such facility and a regulated electric utility that establishes the terms and conditions for the sale of power from the facility to the utility.

(80) "Primary fuel or primary fuel supply" means the main fuel type (expressed in mmBtu) consumed by an affected unit for the applicable calendar year.

(81) "Proposed acid rain permit or proposed permit" means the version of an acid rain permit that the permitting authority submits to the administrator after the public comment period, but prior to completion of the EPA permit review period under 40 CFR 70.8(c).

(82) "Qualifying facility (QF)" means a "qualifying small power production facility" within the meaning of section 3 (17)(C) of the Federal Power Act or a "qualifying cogeneration facility" within the meaning of section 3 (18)(B) of the Federal Power Act.

(83) "Qualifying power purchase commitment" means a power purchase commitment in effect as of November 15, 1990, without regard to changes to that commitment so long as:

(a) The identity of the electric output purchaser, the identity of the steam purchaser and the location of the facility, remain unchanged as of the date the facility commences commercial operation; and

(b) The terms and conditions of the power purchase commitment are not changed in such a way as to allow the costs of compliance with the acid rain program to be shifted to the purchaser.

(84) "Qualifying repowering technology" means:

(a) Replacement of an existing coal-fired boiler with one of the following clean coal technologies: Atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990; or

(b) Any oil-fired or gas-fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(85) "Receive or receipt of" means the date the administrator or the permitting authority comes into possession of information or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the information or correspondence, by the administrator or the permitting authority in the regular course of business.

(86) "Recordation, record, or recorded" means, with regard to allowances, the transfer of allowances by the administrator from one allowance tracking system account or subaccount to another.

(87) "Schedule of compliance" means an enforceable sequence of actions, measures, or operations designed to achieve or maintain compliance, or correct noncompliance, with an applicable requirement of the acid rain program, including any applicable acid rain permit requirement.

(88) "Secretary of Energy" means the Secretary of the United States Department of Energy or the secretary's duly authorized representative.

(89) "Simple combustion turbine" means a unit that is a rotary engine driven by a gas under pressure that is created by the combustion of any fuel. This term includes combined cycle units without auxiliary firing. This term excludes combined cycle units with auxiliary firing, unless the unit did not use the auxiliary firing from 1985 through 1987 and does not use auxiliary firing at any time after November 15, 1990.

(90) "Solid waste incinerator" means a source as defined in section 129 (g)(1) of the act.

(91) "Source" means any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the act. For purposes of section 502(c) of the act, a "source," including a "source" with multiple units, shall be considered a single "facility."

(92) "Stack" means a structure that includes one or more flues and the housing for the flues.

(93) "State" means one of the forty-eight contiguous states and the District of Columbia and includes any nonfederal authorities, including local agencies, interstate associations, and statewide agencies with approved state operating permit programs. The term "state" shall have its conventional meaning where such meaning is clear from the context.

(94) "State operating permit program" means an operating permit program that the administrator has approved as meeting the requirements of Titles IV and V of the act and 40 CFR parts 70 and 72.

(95) "Submit or serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

(a) In person;

(b) By United States Postal Service certified mail with the official postmark or, if service is by the administrator or the permitting authority, by any other mail service by the United States Postal Service; or

(c) By other means with an equivalent time and date mark used in the regular course of business to indicate the date of dispatch or transmission and a record of prompt delivery. Compliance with any "submission," "service," or "mailing" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

(96) "Ton or tonnage" means any "short ton" (i.e., two thousand pounds). For the purpose of determining compliance with the acid rain emissions limitations and reduction requirements, total tons for a year shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with 40 CFR part 75, with any remaining fraction of a ton equal to or greater than one-half ton deemed to equal one ton and any fraction of a ton less than one-half ton deemed not to equal any ton.

(97) "Total planned net output capacity" means the planned generator output capacity, excluding that portion of the electrical power which is designed to be used at the power production facility, as specified under one or more qualifying power purchase commitments or contemporaneous documents as of November 15, 1990.

(98) "Total installed net output capacity" means the generator output capacity, excluding that portion of the electrical power actually used at the power production facility, as installed.

(99) "Unit" means a fossil fuel-fired combustion device.

(100) "Unit account" means an allowance tracking system account, established by the administrator for an affected unit pursuant to 40 CFR 73.31 (a) or (b).

(101) "Utility" means any person that sells electricity.

(102) "Utility competitive bid solicitation" means a public request from a regulated utility for offers to the utility for meeting future generating needs. A qualifying facility, independent power production facility may be regarded as having

been "selected" in such solicitation if the utility has named the facility as a project with which the utility intends to negotiate a power sales agreement.

(103) "Utility regulatory authority" means an authority, board, commission, or other entity (limited to the local-level, state-level, or federal-level, whenever so specified) responsible for overseeing the business operations of utilities located within its jurisdiction, including, but not limited to, utility rates and charges to customers.

(104) "Utility unit" means a unit owned or operated by a utility:

(a) That serves a generator that produces electricity for sale; or

(b) That during 1985, served a generator that produced electricity for sale.

(c) Notwithstanding (a) and (b) of this subsection, a unit that was in operation during 1985, but did not serve a generator that produced electricity for sale during 1985, and did not commence commercial operation on or after November 15, 1990, is not a utility unit for purposes of the acid rain program.

(d) Notwithstanding (a) and (b) of this subsection, a unit that cogenerates steam and electricity is not a utility unit for purposes of the acid rain program, unless the unit is constructed for the purpose of supplying, or commences construction after November 15, 1990, and supplies, more than one-third of its potential electrical output capacity and more than twenty-five MWe output to any power distribution system for sale.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-101, filed 11/23/94, effective 12/24/94.]

WAC 173-406-102 Measurements, abbreviations, and acronyms. Measurements, abbreviations, and acronyms used in this regulation are defined as follows:

ASTM - American Society for Testing and Materials.

ATS - Allowance Tracking System.

Btu - British thermal unit.

CAAA - Clean Air Act Amendments.

CFR - Code of Federal Regulations.

DOE - Department of Energy.

IPP - Independent power production facility.

mmBtu - million Btu.

MWe - megawatt electrical.

NADB - National Allowance Data Base.

QF - Qualifying facility.

RCW - Revised Code of Washington.

SO_2 - sulfur dioxide.

WAC - Washington Administrative Code.

WDOE - Washington Department of Ecology, hereinafter referred to as ecology.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-102, filed 11/23/94, effective 12/24/94.]

WAC 173-406-103 Applicability. (1) The provisions of this chapter apply in all areas of the state of Washington. An authority may enforce this chapter and may also adopt more stringent standards or requirements. These standards or requirements may not be less stringent than the current state air quality rules and may be more stringent than the current regulations. Each of the following units shall be an affected unit, and any source that includes such a unit shall be an affected source, subject to the requirements of the acid rain program:

(a) A unit listed in Table 1 of 40 CFR 73.10(a).

(b) An existing unit that is identified in Table 2 or 3 of 40 CFR 73.10 and any other existing utility unit, except a unit under subsection (2) of this section.

(c) A utility unit, except a unit under subsection (2) of this section, that:

(i) Is a new unit;

(ii) Did not serve a generator with a nameplate capacity greater than twenty-five MWe on November 15, 1990, but serves such a generator after November 15, 1990;

(iii) Was a simple combustion turbine on November 15, 1990, but adds or uses auxiliary firing after November 15, 1990;

(iv) Was an exempt cogeneration facility under subsection (2)(d) of this section but during any three calendar year period after November 15, 1990, sold, to a utility power distribution system, an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand MWe-hrs (i.e., twenty-five MWe times eight thousand seven hundred sixty hours) electric output, on a gross basis;

(v) Was an exempt qualifying facility under subsection (2)(e) of this section but, at any time after the later of November 15, 1990, or the date the facility commences commercial operation, fails to meet the definition of qualifying facility;

(vi) Was an exempt independent power production facility under subsection (2)(f) of this section but, at any time after the later of November 15, 1990, or the date the facility commences commercial operation, fails to meet the definition of independent power production facility; or

(vii) Was an exempt solid waste incinerator under subsection (2)(g) of this section but during any three calendar year period after November 15, 1990, consumes twenty percent or more (on a Btu basis) fossil fuel.

(2) The following types of units are not affected units, and are not subject to the requirements of the acid rain program:

(a) A simple combustion turbine that commenced operation before November 15, 1990.

(b) Any unit that commenced commercial operation before November 15, 1990, and that did not, as of November 15, 1990, and does not currently, serve a generator with a nameplate capacity of greater than twenty-five MWe.

(c) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale.

(d) A cogeneration facility which:

(i) For a unit that commenced construction on or prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than two hundred nineteen thousand MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). If the purpose of construction is not known, it will be presumed to be consistent with the actual operation from 1985 through 1987. However, if in any three calendar year

period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the acid rain program; or

(ii) For units that commenced construction after November 15, 1990, supplies equal to or less than one-third its potential electrical output capacity or equal to or less than two hundred nineteen thousand MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). However, if in any three calendar year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the acid rain program.

(e) A qualifying facility that:

(i) Has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least fifteen percent of its total planned net output capacity; and

(ii) Consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding one hundred thirty percent of the total planned net output capacity. If the emissions rates of the units are not the same, the administrator may exercise discretion to designate which units are exempt.

(f) An independent power production facility that:

(i) Has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least fifteen percent of its total planned net output capacity; and

(ii) Consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding one hundred thirty percent of its total planned net output capacity. If the emissions rates of the units are not the same, the administrator may exercise discretion to designate which units are exempt.

(g) A solid waste incinerator, if more than eighty percent (on a Btu basis) of the annual fuel consumed at such incinerator is other than fossil fuels. For a solid waste incinerator which began operation before January 1, 1985, the average annual fuel consumption of nonfossil fuels for calendar years 1985 through 1987 must be greater than eighty percent for such an incinerator to be exempt. For a solid waste incinerator which began operation after January 1, 1985, the average annual fuel consumption of nonfossil fuels for the first three years of operation must be greater than eighty percent for such an incinerator to be exempt. If, during any three calendar year period after November 15, 1990, such incinerator consumes twenty percent or more (on a Btu basis) fossil fuel, such incinerator will be an affected source under the acid rain program.

(h) A nonutility unit which is not a utility unit as defined at WAC 173-406-101.

(3) A certifying official of any unit may petition the administrator for a determination of applicability under 40 CFR 72.6(c). The administrator's determination of applicability shall be binding upon the permitting authority, unless the petition is found to have contained significant errors or omissions.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-103, filed 11/23/94, effective 12/24/94.]

WAC 173-406-104 New units exemption. (1) Applicability. This section applies to any new utility unit that serves one or more generators with total nameplate capacity of twenty-five MWe or less and burns only fuels with a sulfur content of five hundredths of one percent or less by weight, as determined in accordance with subsection (4)(a) of this section.

(2) Petition for written exemption. The designated representative, authorized in accordance with subpart B of 40 CFR part 72, of a source that includes a unit under subsection (1) of this section may petition the permitting authority for a written exemption, or to renew a written exemption, for the unit from certain requirements of the acid rain program. The petition shall be submitted on a form approved by the permitting authority which includes the following elements:

(a) Identification of the unit.

(b) The nameplate capacity of each generator served by the unit.

(c) A list of all fuels currently burned by the unit and their percentage sulfur content by weight, determined in accordance with subsection (1) of this section.

(d) A list of all fuels that are expected to be burned by the unit and their sulfur content by weight.

(e) The special provisions in subsection (4) of this section.

(f) The name of the designated representative, his or her signature, and the date of signature.

(3) The permitting authority's action.

(a)(i) The permitting authority will issue, for any unit meeting the requirements of subsections (1) and (2) of this section, a written exemption from the requirements of the acid rain program except for the requirements specified in this section, 40 CFR 72.2 through 72.7, and 40 CFR 72.10 through 72.13; provided that no unit shall be exempted unless the designated representative of the unit surrenders, and the administrator deducts from the unit's allowances tracking system account, allowances pursuant to 40 CFR 72.7 (c)(1)(i) and (d)(1).

(ii) The exemption shall take effect on January 1st of the year immediately following the date on which the written exemption is issued as a final agency action subject to judicial review, in accordance with subsection (3)(b) of this section; provided that the owners and operators, and, to the extent applicable, the designated representative, shall comply with the requirements of the acid rain program concerning all years for which the unit was not exempted, even if such requirements arise, or must be complied with, after the exemption takes effect. The exemption shall not be a defense against any violation of such requirements of the acid rain program whether the violation occurs before or after the exemption takes effect.

(b) The permitting authority will consider and either issue or deny a written exemption under subsection (3)(a) of this section by applying the procedures for acid rain permit issuance in WAC 173-406-600 as if the petition for written exemption were a permit application, with regard to completeness determination, draft written exemption, administrative record, statement of basis, public notice and comment

period, public hearing, proposed written exemption, written exemption issuance, exemption revision and appeal procedures as provided by WAC 173-406-600 and 173-406-700. No provision under WAC 173-406-600 concerning the content, effective date, or term of an acid rain permit shall apply to the written exemption or proposed written exemption under this section.

(c) A written exemption issued under this section shall have a term of five years from its effective date, except as provided in subsection (4)(c) of this section.

(4) Special provisions.

(a) The owners and operators of each unit exempted under this section shall determine the sulfur content by weight of its fuel as follows:

(i) For petroleum or petroleum products that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D4057-88 and ASTM D129-91, ASTM D2622-92, or ASTM D4294-90.

(ii) For natural gas that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, the sulfur content shall be documented to be five hundredths of one percent or less by weight.

(iii) For gaseous fuel (other than natural gas) that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D1072-90 and ASTM D1265-92; provided that if the gaseous fuel is delivered by pipeline to the unit, a sample of the fuel shall be tested, at least once every quarter in which the unit operates during any year for which the exemption is in effect, using ASTM method ASTM D1072-90.

(b) The owners and operators of each unit exempted under this section shall retain at the source that includes the unit, the records of the results of the tests performed under (a)(i) and (iii) of this subsection, a copy of documentation produced under (a)(ii) of this subsection, and a copy of the purchase agreements for the fuel under (a) of this subsection, stating the sulfur content of such fuel. Such records and documents shall be retained for five years from the date they are created.

(c) On the earlier of the date the written exemption expires, the date a unit exempted under this section burns any fuel with a sulfur content in excess of five hundredths of one percent by weight (as determined in accordance with (a) of this subsection), or twenty-four months prior to the date the unit first serves one or more generators with total nameplate capacity in excess of twenty-five MWe, the unit shall no longer be exempted under this section and shall be subject to all requirements of the acid rain program, except that:

(i) Notwithstanding WAC 173-406-301 (2) and (3), the designated representative of the source that includes the unit shall submit a complete acid rain permit application on the later of January 1, 1998, or the date the unit is no longer exempted under this section.

(ii) For purposes of applying monitoring requirements under 40 CFR part 75, the unit shall be treated as a new unit that commenced commercial operation on the date the unit no longer meets the requirements of subsection (1) of this section.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-104, filed 11/23/94, effective 12/24/94.]

WAC 173-406-105 Retired units exemption. (1) Applicability. This section applies to any affected unit that is retired prior to the issuance (including renewal) of an acid rain permit for the unit as a final agency action.

(2) Petition for written exemption.

(a) The designated representative, authorized in accordance with subpart B of 40 CFR part 72, of a source that includes a unit under subsection (1) of this section may petition the permitting authority for a written exemption, or to renew a written exemption, for the unit from certain requirements of the acid rain program.

(b) A petition under this section shall be submitted on or before:

(i) The deadline for submitting an acid rain permit application for Phase II; or

(ii) If the unit has a Phase II acid rain permit, the deadline for reapplying for such permit.

(c) The petition under this section shall be submitted on a form approved by the permitting authority which includes the following elements:

(i) Identification of the unit;

(ii) The applicable deadline under (b) of this subsection;

(iii) The actual or expected date of retirement of the unit;

(iv) The following statement: "I certify that this unit ('is' or 'will be', as applicable) permanently retired on the date specified in this petition and will not emit any sulfur dioxide or nitrogen oxides after such date";

(v) A description of any actions that have been or will be taken and provide the basis for the certification in (c)(iv) of this subsection; and

(vi) The special provisions in subsection (4) of this section.

(vii) The name of the designated representative, his or her signature, and the date of signature.

(3) Permitting authority's action.

(a)(i) The permitting authority will issue, for any unit meeting the requirements of subsections (1) and (2) of this section, a written exemption from the requirements of WAC 173-406-100 through 173-406-800 and 40 CFR part 72 except for the requirements specified in this section and 40 CFR 72.1 through 72.6, 40 CFR 72.8, and 40 CFR 72.10 through 72.13.

(ii) The exemption shall take effect on January 1st of the year following the date on which the written exemption is issued as a final agency action subject to judicial review, in accordance with (b) of this subsection; provided that the owners and operators, and, to the extent applicable, the designated representative, shall comply with the requirements of WAC 173-406-100 through 173-406-800 and 40 CFR part 72 concerning all years for which the unit was not exempted, even if such requirements arise or must be complied with after the exemption takes effect. The exemption shall not be a defense against any violation of such requirements of the acid rain program whether the violation occurs before or after the exemption takes effect.

(b) The permitting authority will consider and either issue or deny a written exemption under (a) of this subsection by applying the procedures for acid rain permit issuance in

WAC 173-406-600 as if the petition for written exemption were a permit application, with regard to completeness determination, draft written exemption, administrative record, statement of basis, public notice and comment period, public hearing, proposed written exemption, written exemption issuance, exemption revision and appeal procedures as provided by WAC 173-406-600 and 173-406-700. No provision under WAC 173-406-600 concerning the content, effective date, or term of an acid rain permit shall apply to the written exemption or proposed written exemption under this section.

(c) A written exemption issued under this section shall have a term of five years, except as provided in subsection (4)(c) of this section.

(4) Special provisions.

(a) A unit exempted under this section shall not emit any sulfur dioxide and nitrogen dioxide starting on the date it is exempted.

(b) The owners and operators of a unit exempted under this section shall comply with monitoring requirements in accordance with 40 CFR part 75 and will be allocated allowances in accordance with 40 CFR part 73.

(c) A unit exempted under this section shall not resume operation unless the designated representative of the source that includes the unit submits an acid rain permit application for the unit not less than twenty-four months prior to the later of January 1, 2000, or the date the unit is to resume operation. On the earlier of the date the written exemption expires or the date an acid rain permit application is submitted or is required to be submitted under this paragraph, the unit shall no longer be exempted under this section and shall be subject to all requirements of WAC 173-406-100 through 173-406-800 and 40 CFR part 72.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-105, filed 11/23/94, effective 12/24/94.]

WAC 173-406-106 Standard requirements. (1) Permit requirements.

(a) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete acid rain permit application under this part in accordance with the deadlines specified in WAC 173-406-301;

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an acid rain permit application and issue or deny an acid rain permit.

(b) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete acid rain permit application or a superseding acid rain permit issued by the permitting authority; and

(ii) Have an acid rain permit.

(2) Monitoring requirements.

(a) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements pursuant to 40 CFR part 75 and section 407 of the act and regulations implementing section 407 of the act.

(b) The emissions measurements recorded and reported in accordance with 40 CFR part 75 and section 407 of the act and regulations implementing section 407 of the act shall be used to determine compliance by the unit with the acid rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the acid rain program.

(c) The requirements of 40 CFR part 75 and regulations implementing section 407 of the act shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the act, applicable requirements of Title 173 WAC, and other provisions of the operating permit for the source.

(3) Sulfur dioxide requirements.

(a) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable acid rain emissions limitation for sulfur dioxide.

(b) Each ton of sulfur dioxide emitted in excess of the acid rain emissions limitations for sulfur dioxide shall constitute a separate violation of the act.

(c) An affected unit shall be subject to the requirements under (a) of this subsection as follows:

(i) Starting January 1, 2000, an affected unit under WAC 173-406-103 (1)(b); or

(ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR part 75, an affected unit under WAC 173-406-103 (1)(c).

(d) Allowances shall be held in, deducted from, or transferred among allowance tracking system accounts in accordance with the acid rain program.

(e) An allowance shall not be deducted, in order to comply with the requirements under (a)(i) of this subsection, prior to the calendar year for which the allowance was allocated.

(f) An allowance allocated by the administrator under the acid rain program is a limited authorization to emit sulfur dioxide in accordance with the acid rain program. No provision of the acid rain program, the acid rain permit application, the acid rain permit, or the written exemption under WAC 173-406-104 and 173-406-105 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(g) An allowance allocated by the administrator under the acid rain program does not constitute a property right.

(4) Nitrogen oxides requirements. The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitation for nitrogen oxides.

(5) Excess emissions requirements.

(a) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan to the administrator, as required under 40 CFR part 77, and submit a copy to the permitting authority.

(b) The owners and operators of an affected unit that has excess emissions in any calendar year shall:

(i) Pay to the administrator without demand the penalty required, and pay to the administrator upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

(6) Recordkeeping and reporting requirements.

(a) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created.

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the acid rain program.

(iv) Copies of all documents used to complete an acid rain permit application and any other submission under the acid rain program or to demonstrate compliance with the requirements of the acid rain program.

(b) The five-year document retention period in (a) of this subsection may be extended for cause, at any time prior to the end of five years, in writing by the administrator or the permitting authority.

(c) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the acid rain program, including those under WAC 173-406-800 and 40 CFR part 75.

(7) Liability.

(a) Any person who knowingly violates any requirement or prohibition of the acid rain program, a complete acid rain permit application, an acid rain permit, or a written exemption under WAC 173-406-104 or 173-406-105, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by the administrator pursuant to section 113(c) of the act and by the permitting authority pursuant to RCW 70.94.431 and 70.94.435.

(b) Any person who knowingly makes a false, material statement in any record, submission, or report under the acid rain program shall be subject to criminal enforcement by the administrator pursuant to section 113(c) of the act and 18 U.S.C. 1001 and by the permitting authority pursuant to RCW 70.94.430.

(c) No permit revision shall excuse any violation of the requirements of the acid rain program that occurs prior to the date that the revision takes effect.

(d) Each affected source and each affected unit shall meet the requirements of the acid rain program.

(e) Any provision of the acid rain program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(f) Any provision of the acid rain program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under WAC 173-406-402 (Phase II repowering extension plans), section 407 of the act and regulations implementing section 407 of the act, and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(g) Each violation of a provision of WAC 173-406-100 through 173-406-1000 and 40 CFR parts 72, 73, 75, 77, and 78, and regulations implementing sections 407 and 410 of the act by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the act.

(8) Effect on other authorities. No provision of the acid rain program, an acid rain permit application, an acid rain permit, or a written exemption under WAC 173-406-104 or 173-406-105 shall be construed as:

(a) Except as expressly provided in Title IV of the act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the act, including the provisions of Title I of the act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the act;

(c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;

(d) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or

(e) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-106, filed 11/23/94, effective 12/24/94.]

PART II
DESIGNATED REPRESENTATIVE

WAC 173-406-200 Designated representative.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-200, filed 11/23/94, effective 12/24/94.]

WAC 173-406-201 Submissions. (1) The designated representative shall submit a certificate of representation, and

any superseding certificate of representation, to the administrator in accordance with subpart B of 40 CFR part 72 and, concurrently, shall submit a copy to the permitting authority. Whenever the term "designated representative" is used in this regulation, the term shall be construed to include the alternate designated representative.

(2) Each submission under the acid rain program shall be submitted, signed, certified and dated by the designated representative for all sources on behalf of which the submission is made.

(3) In each submission under the acid rain program, the designated representative shall certify, by his or her signature:

(a) The following statement, which shall be included verbatim in such submission: "I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made."

(b) The following statement, which shall be included verbatim in such submission: "I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(4) The permitting authority will accept or act on a submission made on behalf of owners or operators of an affected source and an affected unit only if the submission has been made, signed, and certified in accordance with subsections (2) and (3) of this section.

(5)(a) The designated representative of a source shall serve notice on each owner and operator of the source and of an affected unit at the source:

(i) By the date of submission, of any acid rain program submissions by the designated representative;

(ii) Within ten business days of receipt of a determination, of any written determination by the administrator or the permitting authority; and

(iii) Provided that the submission or determination covers the source or the unit.

(b) The designated representative of a source shall provide each owner and operator of an affected unit at the source a copy of any submission or determination under (a) of this subsection, unless the owner or operator expressly waives the right to receive such a copy.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-201, filed 11/23/94, effective 12/24/94.]

WAC 173-406-202 Objections. (1) Except as provided in 40 CFR 72.23, no objection or other communication submitted to the administrator or the permitting authority concerning the authorization, or any submission, action or inaction, of the designated representative shall affect any submission, action, or inaction of the designated representative, or the finality of any decision by the permitting authority, under the acid rain program. In the event of such communication, the permitting authority is not required to stay any submission or the effect of any action or inaction under the acid rain program.

(2) The permitting authority will not adjudicate any private legal dispute concerning the authorization or any submission, action, or inaction of any designated representative, including private legal disputes concerning the proceeds of allowance transfers.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-202, filed 11/23/94, effective 12/24/94.]

PART III
APPLICATIONS

WAC 173-406-300 Acid rain permit applications.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-300, filed 11/23/94, effective 12/24/94.]

WAC 173-406-301 Requirement to apply. (1) Duty to apply. The designated representative of any source with an affected unit shall submit a complete acid rain permit application by the applicable deadline in subsections (2) and (3) of this section, and the owners and operators of such source and any affected unit at the source shall not operate the source or unit without a permit that states its Acid Rain Program requirements.

(2) Deadlines.

(a) For any source with an existing unit described under WAC 173-406-103 (1)(b), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority on or before January 1, 1996.

(b) For any source with a new unit described under WAC 173-406-103 (1)(c)(i), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority at least twenty-four months before the later of January 1, 2000, or the date on which the unit commences operation.

(c) For any source with a unit described under WAC 173-406-103 (1)(c)(ii), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority at least twenty-four months before the later of January 1, 2000, or the date on which the unit begins to serve a generator with a nameplate capacity greater than twenty-five MWe.

(d) For any source with a unit described under WAC 173-406-103 (1)(c)(iii), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority at least twenty-four months before the later of January 1, 2000, or the date on which the auxiliary firing commences operation.

(e) For any source with a unit described under WAC 173-406-103 (1)(c)(iv), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority before the later of January 1, 1998, or March 1st of the year following the three calendar year period in which the unit sold to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than two hundred nineteen thousand MWe-hrs actual electric output (on a gross basis).

(f) For any source with a unit described under WAC 173-406-103 (1)(c)(v), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority before the later of January 1, 1998, or March 1st of the year following the calendar year in which the facility fails to meet the definition of qualifying facility.

(g) For any source with a unit described under WAC 173-406-103 (1)(c)(vi), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority before the later of January 1, 1998, or March 1st of the year following the calendar year in which the facility fails to meet the definition of an independent power production facility.

(h) For any source with a unit described under WAC 173-406-103 (1)(c)(vii), the designated representative shall submit a complete acid rain permit application governing such unit to the permitting authority before the later of January 1, 1998, or March 1st of the year following the three calendar year period in which the incinerator consumed twenty percent or more fossil fuel (on a Btu basis).

(3) Duty to reapply. The designated representative shall submit a complete acid rain permit application for each source with an affected unit at least six months or more but not to exceed eighteen months, as may be approved by the permitting authority, prior to the expiration of an existing acid rain permit governing the unit to ensure that the existing acid rain permit does not expire prior to renewal.

(4) The original and three copies of all permit applications shall be submitted to the permitting authority.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-301, filed 11/23/94, effective 12/24/94.]

WAC 173-406-302 Information requirements for acid rain permit applications. Complete permit application. A complete acid rain permit application shall be submitted on a form approved by the permitting authority, which includes the following elements:

(1) Identification of the affected source for which the permit application is submitted;

(2) Identification of each affected unit at the source for which the permit application is submitted;

(3) A complete compliance plan for each unit, in accordance with WAC 173-406-400;

(4) The standard requirements under WAC 173-406-106;

(5) If the unit is a new unit, the date that the unit has commenced or will commence operation and the deadline for monitor certification; and

(6) The name of the designated representative, his or her signature, and the date of signature.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-302, filed 11/23/94, effective 12/24/94.]

WAC 173-406-303 Permit application shield and binding effect of permit application. Permit application shield.

(1) Once a designated representative submits a timely and complete acid rain permit application, the owners and operators of the affected source and the affected units covered by the permit application shall be deemed in compliance with the requirement to have an acid rain permit under WAC 173-406-106 (1)(b) and 173-406-301(1); provided that any delay in issuing an acid rain permit is not caused by the failure of the designated representative to submit in a complete and timely fashion supplemental information, as required by the permitting authority, necessary to issue a permit.

(2) Prior to the date on which an acid rain permit is issued as a final agency action subject to judicial review, an affected unit governed by and operated in accordance with the terms and requirements of a timely and complete acid rain permit application shall be deemed to be operating in compliance with the acid rain program.

(3) A complete acid rain permit application shall be binding on the owners and operators and the designated representative of the affected source and the affected units covered by the permit application and shall be enforceable as an acid rain permit from the date of submission of the permit application until the issuance or denial of such permit as a final agency action subject to judicial review.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-303, filed 11/23/94, effective 12/24/94.]

PART IV
COMPLIANCE PLAN

WAC 173-406-400 Acid rain compliance plan and compliance options.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-400, filed 11/23/94, effective 12/24/94.]

WAC 173-406-401 General. (1) For each affected unit included in an acid rain permit application, a complete compliance plan shall include:

(a) For sulfur dioxide emissions, a certification that, as of the allowance transfer deadline, the designated representative will hold allowances in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide from the unit. The compliance plan may also specify, in accordance with WAC 173-406-400, one or more of the acid rain compliance options.

(b) For nitrogen oxides emissions, a certification that the unit will comply with the applicable limitation established by regulations implementing section 407 of the act or shall specify one or more acid rain compliance options, in accordance with section 407 of the act and regulations implementing section 407.

(2) The compliance plan may include a multiunit compliance option under WAC 173-406-402 or section 407 of the act or regulations implementing section 407.

(a) A plan for a compliance option that includes units at more than one affected source shall be complete only if:

(i) Such plan is signed, certified and dated by the designated representative for each source with an affected unit governed by such plan; and

(ii) A complete permit application is submitted covering each unit governed by such plan.

(b) The permitting authority's approval of a plan under (a) of this subsection that includes units in more than one state shall be final only after every permitting authority with

jurisdiction over any such unit has approved the plan with the same modifications or conditions, if any.

(3) Conditional approval. In the compliance plan, the designated representative of an affected unit may propose, in accordance with WAC 173-406-400, any acid rain compliance option for conditional approval; provided that an acid rain compliance option under section 407 of the act may be conditionally proposed only to the extent provided in regulations implementing section 407 of the act.

(a) To activate a conditionally approved acid rain compliance option, the designated representative shall notify the permitting authority in writing that the conditionally approved compliance option will actually be pursued beginning January 1st of a specified year. Such notification shall be subject to the limitations on activation under WAC 173-406-402 and regulations implementing section 407 of the act. If the conditionally approved compliance option includes a plan described in subsection (2)(a) of this section, the designated representative of each source governed by the plan shall sign and certify the notification.

(b) The notification under subsection (3)(a) of this section shall specify the first calendar year and the last calendar year for which the conditionally approved acid rain compliance option is to be activated. A conditionally approved compliance option shall not be activated after the date of any enforceable milestone applicable to the compliance option. The date of activation of the compliance option shall not be a defense against failure to meet the requirements applicable to that compliance option during each calendar year for which the compliance option is activated.

(c) Upon submission of a notification meeting the requirements of (a) and (b) of this subsection, the conditionally approved acid rain compliance option becomes binding on the owners and operators and the designated representative of any unit governed by the conditionally approved compliance option.

(d) A notification meeting the requirements of (a) and (b) of this subsection will revise the unit's permit in accordance with WAC 173-406-704 (administrative permit amendment).

(4) Termination of compliance option.

(a) The designated representative for a unit may terminate an acid rain compliance option by notifying the permitting authority in writing that an approved compliance option will be terminated beginning January 1st of a specified year. Such notification shall be subject to the limitations on termination under WAC 173-406-402 and regulations implementing section 407 of the act. If the compliance option includes a plan described in subsection (2)(a) of this section, the designated representative for each source governed by the plan shall sign and certify the notification.

(b) The notification under (a) of this subsection shall specify the calendar year for which the termination will take effect.

(c) Upon submission of a notification meeting the requirements of (a) and (b) of this subsection, the termination becomes binding on the owners and operators and the designated representative of any unit governed by the acid rain compliance option to be terminated.

(d) A notification meeting the requirements of (a) and (b) of this subsection will revise the unit's permit in accordance with WAC 173-406-704 (administrative permit amendment).

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-401, filed 11/23/94, effective 12/24/94.]

WAC 173-406-402 Repowering extensions. (1) Applicability.

(a) This section shall apply to the designated representative of:

(i) Any existing affected unit that is a coal-fired unit and has a 1985 actual SO_2 emissions rate equal to or greater than one and two tenths lbs/mmBtu; or

(ii) Any new unit that will be a replacement unit, as provided in subsection (2)(b) of this section, for a unit meeting the requirements of (a)(i) of this subsection; or

(iii) Any oil and/or gas-fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Secretary of Energy.

(b) A repowering extension does not exempt the owner or operator for any unit governed by the repowering plan from the requirement to comply with such unit's acid rain emissions limitations for sulfur dioxide.

(2) The designated representative of any unit meeting the requirements of subsection (1)(a)(i) of this section may include in the unit's acid rain permit application a repowering extension plan that includes a demonstration that:

(a) The unit will be repowered with a qualifying repowering technology in order to comply with the emissions limitations for sulfur dioxide; or

(b) The unit will be replaced by a new utility unit that has the same designated representative and that is located at a different site using a qualified repowering technology and the existing unit will be permanently retired from service on or before the date on which the new utility unit commences commercial operation.

(3) In order to apply for a repowering extension, the designated representative of a unit under subsection (1) of this section shall:

(a) Submit to the permitting authority, by January 1, 1996, a complete repowering extension plan;

(b) Submit to the administrator before June 1, 1997, a complete petition for approval of repowering technology in accordance with 40 CFR 72.44(d) and submit a copy to the permitting authority; and

(c) If the repowering extension plan is submitted for conditional approval, submit to the permitting authority by December 31, 1997, a notification to activate the plan in accordance with WAC 173-406-401(3).

(4) Contents of repowering extension plan. A complete repowering extension plan shall include the following elements:

(a) Identification of the existing unit governed by the plan.

(b) The unit's federally approved state implementation plan sulfur dioxide emissions limitation.

(c) The unit's 1995 actual SO_2 emissions rate, or best estimate of the actual emissions rate; provided that the actual emissions rate is submitted to the permitting authority by January 30, 1996.

(d) A schedule for construction, installation, and commencement of operation of the repowering technology approved or submitted for approval under 40 CFR 72.44(d) with dates for the following milestones:

(i) Completion of design engineering;

(ii) For a plan under subsection (2)(a) of this section, removal of the existing unit from operation to install the qualified repowering technology;

(iii) Commencement of construction;

(iv) Completion of construction;

(v) Start up testing;

(vi) For a plan under subsection (2)(b) of this section, shutdown of the existing unit; and

(vii) Commencement of commercial operation of the repowering technology.

(e) For a plan under subsection (2)(b) of this section:

(i) Identification of the new unit. A new unit shall not be included in more than one repowering extension plan.

(ii) Certification that the new unit will replace the existing unit.

(iii) Certification that the new unit has the same designated representative as the existing unit.

(iv) Certification that the existing unit will be permanently retired from service on or before the date the new unit commences commercial operation.

(f) The special provisions of subsection (7) of this section.

(5) The permitting authority's action on repowering extension plan.

(a) The permitting authority will not approve a repowering extension plan until the administrator makes a conditional determination that the technology is a qualified repowering technology, unless the permitting authority approves such plan subject to the conditional determination of the administrator.

(b) Permit issuance.

(i) Upon a conditional determination by the administrator that the technology to be used in the repowering extension plan is a qualified repowering technology and a determination by the permitting authority that such plan meets the requirements of this section, the permitting authority will issue the acid rain portion of the operating permit including:

(A) The approved repowering extension plan; and

(B) A schedule of compliance with enforceable milestones for construction, installation, and commencement of operation of the repowering technology and other requirements necessary to ensure that emission reduction requirements under this section will be met.

(ii) Except as otherwise provided in subsection (6) of this section, the repowering extension shall be in effect starting January 1, 2000, and ending on the day before the date (specified in the acid rain permit) on which the existing unit will be removed from operation to install the qualifying repowering technology or will be permanently removed from service for replacement by a new unit with such technology; provided that the repowering extension shall end no later than December 31, 2003.

(iii) The portion of the operating permit specifying the repowering extension and other requirements under (b)(i) of this subsection shall be subject to the administrator's final determination, under 40 CFR 72.44 (d)(4), that the technology to be used in the repowering extension plan is a qualifying repowering technology.

(c) Allowance allocation. Allowances will be allocated in accordance with 40 CFR 72.44 (f)(3) and (g).

(6) Failed repowering projects.

(a)(i) If, at any time before the end of the repowering extension under subsection (5)(b)(ii) of this section, the designated representative of a unit governed by an approved repowering extension plan submits the notification under WAC 173-406-802(4) that the owners and operators have decided to terminate efforts to properly design, construct, and test the repowering technology specified in the plan before completion of construction or start up testing, the designated representative may submit to the permitting authority a proposed permit modification demonstrating that such efforts were in good faith. If such demonstration is to the satisfaction of the administrator, the unit shall not be deemed in violation of the act because of such a termination and the permitting authority will revise the operating permit in accordance with (a)(ii) of this subsection.

(ii) Regardless of whether notification under (a)(i) of this subsection is given, the repowering extension will end beginning on the earlier of the date of such notification or the date by which the designated representative was required to give such notification under WAC 173-406-802(4).

(b) The designated representative of a unit governed by an approved repowering extension plan may submit to the permitting authority a proposed permit modification demonstrating that the repowering technology specified in the plan was properly constructed and tested on such unit but was unable to achieve the emissions reduction limitations specified in the plan and that it is economically or technologically infeasible to modify the technology to achieve such limits. In order to be properly constructed and tested, the repowering technology shall be constructed at least to the extent necessary for direct testing of the multiple combustion emissions (including sulfur dioxide and nitrogen oxides) from such unit while operating the technology at nameplate capacity. If such demonstration is to the satisfaction of the administrator.

(i) The unit shall not be deemed in violation of the act because of such failure to achieve the emissions reduction limitations;

(ii) The permitting authority will revise the acid rain portion of the operating permit in accordance with the following:

(A) The existing unit may be retrofitted or repowered with another clean coal or other available control technology; and

(B) The repowering extension will continue in effect until the earlier of the date the existing unit commences commercial operation with such control technology or December 31, 2003.

(7) Special provisions.

(a) Emissions limitations.

(i) Sulfur dioxide. Allowances allocated during the repowering extension under subsections (5)(c) and (6) of this section to a unit governed by an approved repowering extension plan shall not be transferred to any allowance tracking system account other than the unit accounts of other units at the same source as that unit.

(ii) Nitrogen oxides. Any existing unit governed by an approved repowering extension plan shall be subject to the acid rain emissions limitations for nitrogen oxides in accordance with section 407 of the act and regulations implementing section 407 of the act beginning on the date that the unit

is removed from operation to install the repowering technology or is permanently removed from service.

(iii) No existing unit governed by an approved repowering extension plan shall be eligible for a waiver under section 111(j) of the act.

(iv) No new unit governed by an approved repowering extension plan shall receive an exemption from the requirements imposed under section 111 of the act.

(b) Reporting requirements. Each unit governed by an approved repowering extension plan shall comply with the special reporting requirements of WAC 173-406-802.

(c) Liability.

(i) The owners and operators of a unit governed by an approved repowering plan shall be liable for any violation of the plan or this section at that or any other unit governed by the plan.

(ii) The units governed by the plan under subsection (2)(b) of this section shall continue to have a common designated representative until the existing unit is permanently retired under the plan.

(d) Terminations. Except as provided in subsection (6) of this section, a repowering extension plan shall not be terminated after December 31, 1999.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-402, filed 11/23/94, effective 12/24/94.]

PART V
PERMIT CONTENTS

WAC 173-406-500 Acid rain permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-500, filed 11/23/94, effective 12/24/94.]

WAC 173-406-501 Contents. (1) Each acid rain permit (including any draft or proposed acid rain permit) will contain the following elements:

(a) All elements required for a complete acid rain permit application under WAC 173-406-302, as approved or adjusted by the permitting authority;

(b) The applicable acid rain emissions limitation for sulfur dioxide; and

(c) The applicable acid rain emissions limitation for nitrogen oxides.

(2) Each acid rain permit is deemed to incorporate the definitions of terms under WAC 173-406-101 unless expressly otherwise defined in the permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-501, filed 11/23/94, effective 12/24/94.]

WAC 173-406-502 Permit shield. Each affected unit operated in accordance with the acid rain permit that governs the unit and that was issued in compliance with Title IV of the act, as provided in WAC 173-406-100 through 173-406-800, 40 CFR parts 72, 73, 75, 77, and 78, and the regulations implementing section 407 of the act, shall be deemed to be operating in compliance with the Acid Rain Program, except as provided in WAC 173-406-106 (7)(f).

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-502, filed 11/23/94, effective 12/24/94.]

PART VI
PERMIT ISSUANCE

WAC 173-406-600 Acid rain permit issuance procedures.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-600, filed 11/23/94, effective 12/24/94.]

WAC 173-406-601 General. The permitting authority will issue or deny all acid rain permits in accordance with chapter 173-401 WAC, including the completeness determination, draft permit, administrative record, statement of basis, public notice and comment period, public hearing, proposed permit, permit issuance, permit revision, and appeal procedures as provided by WAC 173-406-600 and 173-406-700.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-601, filed 11/23/94, effective 12/24/94.]

WAC 173-406-602 Completeness. The permitting authority will submit a written notice of application completeness to the administrator and the designated representative within ten working days following a determination by the permitting authority that the acid rain permit application is complete.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-602, filed 11/23/94, effective 12/24/94.]

WAC 173-406-603 Statement of basis. (1) The statement of basis will briefly set forth significant factual, legal, and policy considerations on which the permitting authority relied in issuing or denying the draft permit.

(2) The statement of basis will include the reasons, and supporting authority, for approval or disapproval of any compliance options requested in the permit application, including references to applicable statutory or regulatory provisions and to the administrative record.

(3) The permitting authority will submit to the administrator a copy of the draft acid rain permit and the statement of basis and all other relevant portions of the operating permit that may affect the draft acid rain permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-603, filed 11/23/94, effective 12/24/94.]

WAC 173-406-604 Issuance of acid rain permits. (1) Proposed permit. After the close of the public comment period and within eighteen months of receipt of a complete application, the permitting authority will incorporate all necessary changes and issue or deny a proposed acid rain permit.

(2) The permitting authority will submit the proposed acid rain permit or denial of a proposed acid rain permit to the administrator in accordance with WAC 173-401-810 and 173-401-820, the provisions of which shall be treated as applying to the issuance or denial of a proposed acid rain permit.

(3)(a) Following the administrator's review of the proposed acid rain permit or denial of a proposed acid rain permit, the permitting authority will incorporate any required changes and issue, or deny the acid rain permit in accordance with WAC 173-406-500.

(b) No acid rain permit (including a draft or proposed permit) shall be issued unless the administrator has received a certificate of representation for the designated representative of the source as provided in WAC 173-406-201 in accordance with subpart B of 40 CFR part 72.

(4) Permit issuance deadline and effective date.

(a) On or before December 31, 1997, the permitting authority will issue an acid rain permit to each affected source whose designated representative submitted a timely and complete acid rain permit application by January 1, 1996, in accordance with WAC 173-406-201 and meets the requirements of WAC 173-406-600 and chapter 173-401 WAC.

(b) Nitrogen oxides. Not later than January 1, 1999, the permitting authority will reopen the acid rain permit to add the Acid Rain Program nitrogen oxides requirements; provided that the designated representative of the affected source submitted a timely and complete acid rain permit application for nitrogen oxides in accordance with WAC 173-406-201. Such reopening shall not affect the term of the acid rain portion of an operating permit.

(c) Each acid rain permit issued in accordance with (a) of this subsection shall take effect by the later of January 1, 2000, or, where the permit governs a unit under WAC 173-406-103 (1)(c), the deadline for monitor certification under 40 CFR part 75.

(d) Each acid rain permit shall have a term of five years commencing on its effective date, except to the extent provided under 40 CFR part 72 that the initial issuance may have a shorter period in order to provide coordination with chapter 173-401 WAC permit requirements.

(e) An acid rain permit shall be binding on any new owner or operator or designated representative of any source or unit governed by the permit.

(5)(a) Each acid rain permit shall contain all applicable acid rain requirements, shall be a portion of the operating permit that is complete and segregable from all other air quality requirements, and shall not incorporate information contained in any other documents, other than documents that are readily available.

(b) Invalidation of the acid rain portion of an operating permit shall not affect the continuing validity of the rest of the operating permit, nor shall invalidation of any other portion of the operating permit affect the continuing validity of the acid rain portion of the permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-604, filed 11/23/94, effective 12/24/94.]

WAC 173-406-605 Acid rain permit appeal procedures. (1) Appeals of the acid rain portion of an operating permit issued by the permitting authority that do not challenge or involve decisions or actions of the administrator under 40 CFR part 72, 73, 75, 77 and 78 and sections 407 and 410 of the act and regulations implementing sections 407 and 410 shall be conducted according to the procedures in chapter 43.21 RCW. Appeals of the acid rain portion of such a permit that challenge or involve such decisions or actions of the administrator shall follow the procedures under 40 CFR part 78 and section 307 of the act. Such decisions or actions include, but are not limited to, allowance allocations, determinations concerning alternative monitoring systems, and determinations of whether a technology is a qualifying repowering technology.

(2) No administrative appeal or judicial appeal of the acid rain portion of an operating permit shall be allowed more than thirty days following respectively issuance of the acid rain portion that is subject to administrative appeal or issuance of the final agency action subject to judicial appeal.

(3) The administrator may intervene as a matter of right in any state administrative appeal of an acid rain permit or denial of an acid rain permit.

(4) No administrative appeal concerning an acid rain requirement shall result in a stay of the following requirements:

(a) The allowance allocations for any year during which the appeal proceeding is pending or is being conducted;

(b) Any standard requirement under WAC 173-406-106;

(c) The emissions monitoring and reporting requirements applicable to the affected units at an affected source under 40 CFR part 75;

(d) Uncontested provisions of the decision on appeal; and

(e) The terms of a certificate of representation submitted by a designated representative under subpart B of 40 CFR part 72.

(5) The permitting authority will serve written notice on the administrator of any state administrative or judicial appeal concerning an acid rain provision of any operating permit or denial of an acid rain portion of any operating permit within thirty days of the filing of the appeal.

(6) The permitting authority will serve written notice on the administrator of any determination or order in a state administrative or judicial proceeding that interprets, modifies, voids, or otherwise relates to any portion of an acid rain permit. Following any such determination or order, the administrator will have an opportunity to review and veto the acid rain permit or revoke the permit for cause in accordance with WAC 173-401-810 and 173-401-820.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-605, filed 11/23/94, effective 12/24/94.]

PART VII
PERMIT REVISIONS

WAC 173-406-700 Permit revisions.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-700, filed 11/23/94, effective 12/24/94.]

WAC 173-406-701 General. (1) WAC 173-406-700 shall govern revisions to any acid rain permit issued by the permitting authority.

(2) A permit revision may be submitted for approval at any time. No permit revision shall affect the term of the acid rain permit to be revised. No permit revision shall excuse any violation of an Acid Rain Program requirement that occurred prior to the effective date of the revision.

(3) The terms of the acid rain permit shall apply while the permit revision is pending.

(4) Any determination or interpretation by state (including the permitting authority or a state court) modifying or voiding any acid rain permit provision shall be subject to review by the administrator in accordance with WAC 173-

401-810 and 173-401-820 as applied to permit modifications, unless the determination or interpretation is an administrative amendment approved in accordance with WAC 173-406-704.

(5) The standard requirements of WAC 173-406-106 shall not be modified or voided by a permit revision.

(6) Any permit revision involving incorporation of a compliance option that was not submitted for approval and comment during the permit issuance process, or involving a change in a compliance option that was previously submitted, shall meet the requirements for applying for such compliance option under WAC 173-406-402 and section 407 of the act and regulations implementing section 407 of the act.

(7) For permit revisions not described in WAC 173-406-702 and 173-406-703, the permitting authority may, in its discretion, determine which of these sections is applicable.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-701, filed 11/23/94, effective 12/24/94.]

WAC 173-406-702 Permit modifications. (1)(a) Permit modifications shall follow the permit issuance requirements of WAC 173-406-600, 173-401-810 and 173-401-820.

(b) For purposes of applying (a) of this subsection, a permit modification shall be treated as an acid rain permit application, to the extent consistent with WAC 173-406-700.

(2) The following permit revisions are permit modifications:

(a) Relaxation of an excess emission offset requirement after approval of the offset plan by the administrator;

(b) Incorporation of a final nitrogen oxides alternative emission limitation following a demonstration period;

(c) Determinations concerning failed repowering projects under WAC 173-406-402 (6)(a)(i) and (b); and

(d) At the option of the designated representative submitting the permit revision, the permit revisions listed in WAC 173-406-703(2).

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-702, filed 11/23/94, effective 12/24/94.]

WAC 173-406-703 Fast-track modifications. (1) Fast-track modifications shall follow the following procedures:

(a) The designated representative shall serve a copy of the fast-track modification on the administrator, the permitting authority, and any person entitled to a written notice under WAC 173-401-800. Within five business days of serving such copies, the designated representative shall also give public notice by publication in a newspaper of general circulation in the area where the source is located or in a state publication designed to give general public notice.

(b) The public shall have a period of thirty days, commencing on the date of publication of the notice, to comment on the fast-track modification. Comments shall be submitted in writing to the permitting authority and to the designated representative.

(c) The designated representative shall submit the fast-track modification to the permitting authority on or before commencement of the public comment period.

(d) Within thirty days of the close of the public comment period, the permitting authority will consider the fast-track modification and the comments received and approve or disapprove, in whole or in part or with changes or conditions as appropriate, or disapprove the modification. A fast-track modification shall be effective immediately upon issuance, in accordance with WAC 173-401-810 as applied to significant modifications.

(2) The following permit revisions are, at the option of the designated representative submitting the permit revision, either fast-track modifications under this section or permit modifications under WAC 173-406-702:

(a) Incorporation of a compliance option that the designated representative did not submit for approval and comment during the permit issuance process;

(b) Addition of a nitrogen oxides averaging plan to a permit; and

(c) Changes in a repowering plan, nitrogen oxides averaging plan, or nitrogen oxides compliance deadline extension.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-703, filed 11/23/94, effective 12/24/94.]

WAC 173-406-704 Administrative permit amendment. (1) Administrative amendments shall follow the procedures set forth at WAC 173-401-720. The permitting authority will submit the revised portion of the permit to the administrator within ten working days after the date of final action on the request for an administrative amendment.

(2) The following permit revisions are administrative amendments:

(a) Activation of a compliance option conditionally approved by the permitting authority; provided that all requirements for activation under WAC 173-406-401(3) and 173-406-402 are met;

(b) Changes in the designated representative or alternative designated representative; provided that a new certificate of representation is submitted to the administrator in accordance with subpart B of 40 CFR part 72;

(c) Correction of typographical errors;

(d) Changes in names, addresses, or telephone or facsimile numbers;

(e) Changes in the owners or operators; provided that a new certificate of representation is submitted within thirty days to the administrator in accordance with subpart B of 40 CFR part 72;

(f) Termination of a compliance option in the permit; provided that all requirements for termination under WAC 173-406-401(4) shall be met and this procedure shall not be used to terminate a repowering plan after December 31, 1999;

(g) Changes in the date, specified in a new unit's acid rain permit, of commencement of operation or the deadline for monitor certification, provided that they are in accordance with WAC 173-406-106;

(h) The addition of or change in a nitrogen oxides alternative emissions limitation demonstration period, provided that the requirements of regulations implementing section 407 of the act are met; and

(i) Incorporation of changes that the administrator has determined to be similar to those in (a) through (h) of this subsection.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-704, filed 11/23/94, effective 12/24/94.]

WAC 173-406-705 Automatic permit amendment. The following permit revisions shall be deemed to amend automatically, and become a part of the affected unit's acid rain permit by operation of law without any further review:

(1) Upon recordation by the administrator under 40 CFR part 73, all allowance allocations to, transfers to, and deductions from an affected unit's allowance tracking system account; and

(2) Incorporation of an offset plan that has been approved by the administrator under 40 CFR part 77.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-705, filed 11/23/94, effective 12/24/94.]

WAC 173-406-706 Permit reopenings. (1) As provided in WAC 173-401-730, the permitting authority will reopen an acid rain permit for cause, including whenever additional requirements become applicable to any affected unit governed by the permit.

(2) In reopening an acid rain permit for cause, the permitting authority will issue a draft permit changing the provisions, or adding the requirements, for which the reopening was necessary. The draft permit shall be subject to the requirements of WAC 173-406-500 and 173-406-600.

(3) Any reopening of an acid rain permit shall not affect the term of the permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-706, filed 11/23/94, effective 12/24/94.]

PART VIII
COMPLIANCE CERTIFICATION

WAC 173-406-800 Compliance certification.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-800, filed 11/23/94, effective 12/24/94.]

WAC 173-406-801 Annual compliance certification report. (1) Applicability and deadline. For each calendar year in which a unit is subject to the acid rain emissions limitations, the designated representative of the source at which the unit is located shall submit to the administrator and to the permitting authority, within sixty days after the end of the calendar year, an annual compliance certification report for the unit in compliance with 40 CFR 72.90.

(2) The submission of complete compliance certifications in accordance with subsection (1) of this section and 40 CFR part 75 shall be deemed to satisfy the requirement to submit compliance certifications under WAC 173-401-600 with regard to the acid rain portion of the source's operating permit.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-801, filed 11/23/94, effective 12/24/94.]

WAC 173-406-802 Units with repowering extension plans. (1) Design and engineering and contract requirements. No later than January 1, 2000, the designated representative of a unit governed by an approved repowering plan shall submit to the administrator and the permitting authority:

(a) Satisfactory documentation of a preliminary design and engineering effort.

(b) A binding letter agreement for the executed and binding contract (or for each in a series of executed and binding contracts) for the majority of the equipment to repower the unit using the technology conditionally approved by the administrator under 40 CFR 72.44 (d)(3).

(c) The letter agreement under (b) of this subsection shall be signed and dated by each party and specify:

(i) The parties to the contract;

(ii) The date each party executed the contract;

(iii) The unit to which the contract applies;

(iv) A brief list identifying each provision of the contract;

(v) Any dates to which the parties agree, including construction completion date;

(vi) The total dollar amount of the contract; and

(vii) A statement that a copy of the contract is on site at the source and will be submitted upon written request of the administrator or the permitting authority.

(2) Removal from operation to repower. The designated representative of a unit governed by an approved repowering plan shall notify the administrator and the permitting authority in writing at least sixty days in advance of the date on which the existing unit is to be removed from operation so that the qualified repowering technology can be installed, or is to be replaced by another unit with the qualified repowering technology, in accordance with the plan.

(3) Commencement of operation. Not later than sixty days after the units repowered under an approved repowering plan commences operation at full load, the designated representative of the unit shall submit a report to the administrator and the permitting authority, comparing the actual hourly emissions and percent removal of each pollutant controlled at the unit to the actual hourly emissions and percent removal at the existing unit under the plan prior to repowering, determined in accordance with 40 CFR part 75.

(4) Decision to terminate. If at any time before the end of the repowering extension and before completion of construction and start up testing, the owners and operators decide to terminate good faith efforts to design, construct, and test the qualified repowering technology on the unit to be repowered under an approved repowering plan, then the designated representative shall submit a notice to the administrator and the permitting authority by the earlier of the end of the repowering extension or a date within thirty days of such decision, stating the date on which the decision was made.

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-802, filed 11/23/94, effective 12/24/94.]

PART IX
NITROGEN OXIDES

WAC 173-406-900 Nitrogen oxides emission reduction program. (Reserved.)

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-900, filed 11/23/94, effective 12/24/94.]

PART X
SULFUR DIOXIDE OPT-IN

WAC 173-406-950 Sulfur dioxide opt-ins. (Reserved.)

[Statutory Authority: Chapter 70.94 RCW. 94-23-127 (Order 94-23), § 173-406-950, filed 11/23/94, effective 12/24/94.]

Chapter 173-407 WAC

CARBON DIOXIDE MITIGATION PROGRAM, GREENHOUSE GASES EMISSIONS PERFORMANCE STANDARD AND SEQUESTRATION PLANS AND PROGRAMS FOR THERMAL ELECTRIC GENERATING FACILITIES

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173-407-090 Severability. [Statutory Authority: RCW 70.94.892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-090, filed 12/22/04, effective 1/22/05.] Decodified by 08-14-011 (Order 07-11), filed 6/19/08, effective 7/20/08. Statutory Authority: Chapter 80.80 RCW. Recodified as WAC 173-407-400.

WAC 173-407-005 Work in unison. The requirements of this chapter, WAC 173-407-010 through 173-407-070, are based upon chapter 80.70 RCW and are separate and distinct from the requirements found in this chapter, WAC 173-407-100 through 173-407-320 that are based upon chapter 80.80 RCW. These two requirements are required to work in unison with each other in a serial manner. The first requirement is the emissions performance standard. Once that standard is met, the requirements of chapter 80.70 RCW (WAC 173-407-010 through 173-407-070) are applied.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-005, filed 6/19/08, effective 7/20/08.]

PART I
CARBON DIOXIDE MITIGATION FOR FOSSIL-FUELED THERMAL ELECTRIC GENERATING FACILITIES, IMPLEMENTING CHAPTER 80.70 RCW

WAC 173-407-010 Policy and purpose of Part I. (1) It is the policy of the state to require mitigation of the emissions of carbon dioxide (CO_2) from all new and certain modified fossil-fueled thermal electric generating facilities with station-generating capability of more than 25 megawatts of electricity (MWe).

(2) A fossil-fueled thermal electric generating facility is not subject to the requirements of chapter 173-401 WAC solely due to its emissions of CO_2.

(a) Emissions of other regulated air pollutants must be a large enough quantity to trigger those requirements.

(b) For fossil-fueled thermal electric generating facilities that are subject to chapter 173-401 WAC, the CO_2 mitigation requirements are an applicable requirement under that regulation.

(3) A fossil-fueled thermal electric generating facility not subject to the requirements of chapter 173-401 WAC is subject to the requirements of the registration program in chapter 173-400 WAC.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-010, filed 6/19/08, effective 7/20/08. Statutory Authority: RCW 70.94.892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-010, filed 12/22/04, effective 1/22/05.]

WAC 173-407-020 Definitions to Part I. The definitions in this section are found in RCW 80.70.010 and apply throughout this chapter unless clearly stated otherwise. The definitions are reprinted below.

"Applicant" has the meaning provided in RCW 80.50.020 and includes an applicant for a permit for a fossil-fueled thermal electric generation facility subject to RCW 70.94.152 and 80.70.020 (1)(b) or (d).

"Authority" means any air pollution control agency whose jurisdictional boundaries are coextensive with the boundaries of one or more counties.

"Carbon credit" means a verified reduction in carbon dioxide or carbon dioxide equivalents that is registered with a state, national, or international trading authority or exchange that has been recognized by the council.

"Carbon dioxide equivalents" means a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

"Cogeneration credit" means the carbon dioxide emissions that the council, department, or authority, as appropri-

ate, estimates would be produced on an annual basis by a stand-alone industrial and commercial facility equivalent in operating characteristics and output to the industrial or commercial heating or cooling process component of the cogeneration plant.

"Cogeneration plant" means a fossil-fueled thermal power plant in which the heat or steam is also used for industrial or commercial heating or cooling purposes and that meets federal energy regulatory commission standards for qualifying facilities under the Public Utility Regulatory Policies Act of 1978.

"Commercial operation" means the date that the first electricity produced by a facility is delivered for commercial sale to the power grid.

"Council" means the energy facility site evaluation council created by RCW 80.50.030.

"Department" means the department of ecology.

"Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material to produce heat for the generation of electricity.

"Independent qualified organization" is an organization identified by the energy facility site evaluation council as meeting the requirements of RCW 80.70.050.

"Mitigation plan" means a proposal that includes the process or means to achieve carbon dioxide mitigation through use of mitigation projects or carbon credits.

"Mitigation project" means one or more of the following:

(a) Projects or actions that are implemented by the certificateholder or order of approval holder, directly or through its agent, or by an independent qualified organization to mitigate the emission of carbon dioxide produced by the fossil-fueled thermal electric generation facility. This term includes, but is not limited to, the use of energy efficiency measures, clean and efficient transportation measures, qualified alternative energy resources, demand side management of electricity consumption, and carbon sequestration programs;

(b) Direct application of combined heat and power (cogeneration);

(c) Verified carbon credits traded on a recognized trading authority or exchange; or

(d) Enforceable and permanent reductions in carbon dioxide or carbon dioxide equivalents through process change, equipment shutdown, or other activities under the control of the applicant and approved as part of a carbon dioxide mitigation plan.

"Order of approval" means an order issued under RCW 70.94.152 with respect to a fossil-fueled thermal electric generation facility subject to RCW 80.70.020 (1)(b) or (d).

"Permanent" means that emission reductions used to offset emission increases are assured for the life of the corresponding increase, whether unlimited or limited in duration.

"Qualified alternative energy resource" has the same meaning as in RCW 19.29A.090.

"Station generating capability" means the maximum load a generator can sustain over a given period of time without exceeding design limits, and measured using maximum continuous electric generation capacity, less net auxiliary load, at average ambient temperature and barometric pressure.

"Total carbon dioxide emissions" means:

(a) For a fossil-fueled thermal electric generation facility described under RCW 80.70.020 (1)(a) and (b), the amount of carbon dioxide emitted over a thirty-year period based on the manufacturer's or designer's guaranteed total net station generating capability, new equipment heat rate, an assumed sixty percent capacity factor for facilities under the council's jurisdiction or sixty percent of the operational limitations on facilities subject to an order of approval, and taking into account any enforceable limitations on operational hours or fuel types and use; and

(b) For a fossil-fueled thermal electric generation facility described under RCW 80.70.020 (1)(c) and (d), the amount of carbon dioxide emitted over a thirty-year period based on the proposed increase in the amount of electrical output of the facility that exceeds the station generation capability of the facility prior to the applicant applying for certification or an order of approval pursuant to RCW 80.70.020 (1)(c) and (d), new equipment heat rate, an assumed sixty percent capacity factor for facilities under the council's jurisdiction or sixty percent of the operational limitations on facilities subject to an order of approval, and taking into account any enforceable limitations on operational hours or fuel types and use.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-020, filed 6/19/08, effective 7/20/08. Statutory Authority: RCW 70.94.892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-020, filed 12/22/04, effective 1/22/05.]

WAC 173-407-030 Carbon dioxide mitigation program applicability for Part I. (1) **Statutory authority for a carbon dioxide mitigation program.** RCW 70.94.892(1) states that "*For fossil-fueled electric generation facilities having more than twenty-five thousand kilowatts station generating capability but less than three hundred fifty thousand kilowatts station generation capability, except for fossil-fueled floating thermal electric generation facilities under the jurisdiction of the energy facility site evaluation council pursuant to RCW 80.50.010, the department or authority shall implement a carbon dioxide mitigation program consistent with the requirements of chapter 80.70 RCW.*"

(2) **Statutory carbon dioxide mitigation program applicability requirements.** RCW 80.70.020 describes the applicability requirements and is reprinted below:

(1) The provisions of this chapter apply to:

(a) New fossil-fueled thermal electric generation facilities with station-generating capability of three hundred fifty thousand kilowatts or more and fossil-fueled floating thermal electric generation facilities of one hundred thousand kilowatts or more under RCW 80.50.020 (14)(a), for which an application for site certification is made to the council after July 1, 2004;

(b) New fossil-fueled thermal electric generation facilities with station-generating capability of more than twenty-five thousand kilowatts, but less than three hundred fifty thousand kilowatts, except for fossil-fueled floating thermal electric generation facilities under the council's jurisdiction, for which an application for an order of approval has been submitted after July 1, 2004;

(c) Fossil-fueled thermal electric generation facilities with station-generating capability of three hundred fifty thousand kilowatts or more that have an existing site certification

agreement and, after July 1, 2004, apply to the council to increase the output of carbon dioxide emissions by fifteen percent or more through permanent changes in facility operations or modification or equipment; and

(d) Fossil-fueled thermal electric generation facilities with station-generating capability of more than twenty-five thousand kilowatts, but less than three hundred fifty thousand kilowatts, except for fossil-fueled floating thermal electric generation facilities under the council's jurisdiction, that have an existing order of approval and, after July 1, 2004, apply to the department or authority, as appropriate, to permanently modify the facility so as to increase its station-generating capability by at least twenty-five thousand kilowatts or to increase the output of carbon dioxide emissions by fifteen percent or more, whichever measure is greater.

(3) **New facilities.** Any fossil-fueled thermal electric generating facility is required to mitigate CO_2 emissions as described in chapter 80.70 RCW, if the facility meets the following criteria:

(a) An application was received after July 1, 2004;

(b) The station-generating capability is below 350 MWe and above 25 MWe;

(c) The facility is not a fossil-fueled floating thermal electric generation facility subject to regulation by the energy facility site evaluation council.

(4) **Modifying existing fossil-fueled thermal electric generating facilities.** A fossil-fueled thermal electric generating facility seeking to modify the facility or any electrical generating units is required to mitigate the increase of the emission of CO_2, as described in RCW 80.70.020, when the following occur:

(a) The application was received after July 1, 2004;

(b) The unmodified station generating capability is more than 25 MWe and less than 350 MWe;

(c) The increase to the facility or units is the greater of the following measures:

(i) An increase in station-generating capability of more than 25 MWe; or

(ii) An increase in CO_2 emissions output by 15% or more;

(d) The facility or the modification is not under the jurisdiction of the energy facility site evaluation council.

(5) **Examples of fossil-fueled thermal electric generation units.** The following are some examples of fossil-fueled thermal electric generating units:

(a) Coal, oil, natural gas, or coke fueled steam generating units (boilers) supplying steam to a steam turbine - electric generator;

(b) Simple cycle combustion turbine attached to an electric generator;

(c) Combined cycle combustion turbines (with and without duct burners) attached to an electric generator and supplying steam to a steam turbine - electric generator;

(d) Coal gasification units, or similar devices, where the synthesis gas produced is used to fuel a combustion turbine, boiler or similar device used to power an electric generator or provide hydrogen for use in fuel cells;

(e) Hydrocarbon reformer emissions where the hydrogen produced is used in fuel cells.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-030, filed 6/19/08, effective 7/20/08. Statutory Authority: RCW 70.94.-892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-030, filed 12/22/04, effective 1/22/05.]

WAC 173-407-040 Carbon dioxide mitigation program fees under Part I. Fees can be found in chapter 173-455 WAC.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-040, filed 6/19/08, effective 7/20/08. Statutory Authority: RCW 70.94.-181, [70.94.]152, [70.94.]331, [70.94.]650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-407-040, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 70.94.892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-040, filed 12/22/04, effective 1/22/05.]

WAC 173-407-050 Calculating total carbon dioxide emissions to be mitigated under Part I. (1) **Step 1 is to calculate the total quantity of CO_2.** The total quantity of CO_2 is referred to as the **maximum potential emissions of CO_2.** The maximum potential emissions of CO_2 is defined as the annual CO_2 emission rate. The annual CO_2 emission rate is derived by the following formula unless a differing analysis is necessary or appropriate for the electric generating process and type of equipment:

$$CO_{2\text{rate}} = \frac{F_s \times K_s}{2204.6} \times T_s + \frac{F_1 \times K_1}{2204.6} \times T_1 + \frac{F_2 \times K_2}{2204.6} \times T_2 + \frac{F_3 \times K_3}{2204.6} \times T_{3\ldots} + \frac{F_n \times K_n}{2204.6} \times T_n$$

where:

CO_{2rate} = Maximum potential emissions in metric tons per year

F_{1-n} = Maximum design fuel firing rate in MMBtu/hour calculated as manufacturer or designer's guaranteed total net station generating capability in MWe times the new equipment heat rate in Btu/MWe. Determined based on higher heating values of fuel

K_{1-n} = Conversion factor for the fuel(s) being evaluated in lb CO_2/MMBtu for fuel F_n

T_{1-n} = Hours per year fuel F_n is allowed to be used. The default is 8760 hours unless there is a limitation on hours in an order of approval

F_s = Maximum design supplemental fuel firing rate in MMBtu/hour, at higher heating value of the fuel

K_s = Conversion factor for the supplemental fuel being evaluated in lb CO_2/MMBtu for fuel F_n given fuel

T_s = Hours per year supplemental fuel F_n is allowed. The default is 8760 hours unless there is a limitation on hours in an order of approval

(a) When there are multiple new fossil-fueled electric generating units, the above calculation will be performed for each unit and the total CO_2 emissions of all units will be summed.

(b) When a unit or facility is allowed to use multiple fuels, the maximum allowed hours on the highest CO_2 producing fuels will be utilized for each fuel until the total of all hours per fuel add up to the allowable annual hours.

(c) When a new unit or facility is allowed to use multiple fuels without restriction in its approval order(s), this calcula-

tion will be performed assuming that the fuel with the highest CO_2 emission rate is used 100% of the time.

(d) When the annual operating hours are restricted for any reason, the total of all T_{1-n} hours equals the annual allowable hours of operation in the Order of Approval.

(e) Fuel to CO_2 conversion factors (derived from the EPA's AP-42, Compilation of Air Pollutant Emission Factors):

Fuel	K_n lb/MMBtu
#2 oil	158.16
#4 oil	160.96
#6 oil	166.67
Lignite	287.50
Sub-bituminous coal	267.22
Bituminous coal, low volatility	232.21
Bituminous coal, medium volatility	241.60
Bituminous coal, high volatility	262.38
Natural gas	117.6
Propane	136.61
Butane	139.38
Petroleum coke	242.91
Coal coke	243.1
Other fossil fuels	Calculate based on carbon content of the fossil fuel and application of the gross heat content (higher heating value) of the fuel
Nonfossil fuels	00.00

(2) **Step 2 - Insert the annual CO_2 rate to determine the total carbon dioxide emissions to be mitigated.** The formula below includes specifications that are part of the total carbon dioxide definition:

Total CO_2 Emissions = CO_{2rate} x 30 x 0.6

(3) **Step 3 - Determine and apply the cogeneration credit (if any).** Where the cogeneration unit or facility qualifies for cogeneration credit, the cogeneration credit is the annual CO_2 emission rate (in metric tons per year) and is calculated as shown below or similar method:

$$CO_{2credit} = \frac{H_s}{2204.6} \times (K_a) \div n$$

where:

CO_2 credit	=	The annual CO_2 credit for cogeneration in metric tons/year.
H_s	=	Annual heat energy supplied by the cogeneration plant to the "steam host" per the contract or other binding obligation/agreement between the parties in MMBtu/yr as substantiated by an engineering analysis.
K_a	=	The time weighted average CO_2 emission rate constant for the cogeneration plant in lb CO_2/MMBtu supplied. The time weighted average is calculated similarly to the above method described in subsection (1) of this section.
n	=	Efficiency of new boiler that would provide the same quantity of thermal energy. Assume n = 0.85 unless applicant provides information supporting a different value.

Calculate the metric tons of the cogeneration credit over the thirty-year period.

Cogeneration Credit = $CO_{2credit}$ x 30

(4) **Step 4 - Apply the mitigation factor.**

(a) RCW 80.70.020(4) states that "*Fossil-fueled thermal electric generation facilities that receive site certification approval or an order of approval shall provide mitigation for twenty percent of the total carbon dioxide emissions produced by the facility.*"

(b) The CO_2 emissions mitigation quantity is determined by the following formula:

Mitigation Quantity = Total CO_2 Emissions x 0.2 - Cogeneration Credit

where:

Mitigation quantity	=	The total CO_2 emissions to be mitigated in metric tons
CO_{2rate}	=	The annual maximum CO_2 emissions from the generating facility in tons/year
0.2	=	The mitigation factor in RCW 80.70.020(4)

(5) Additional restrictions for modifications to an existing facility not involving installation of new generating units. The quantity of CO_2 to be mitigated is calculated by the same methods used for the new generating units with the following restrictions:

(a) The quantity of CO_2 subject to mitigation is only that resulting from the modification and does not include the CO_2 emissions occurring prior to the modification;

(b) An increase in operating hours or other operational limitations established in an order of approval is not an exempt modification under this regulation. However, only emissions related to the increase in operating hours are subject to the CO_2 mitigation program requirements;

(c) The annual emissions (CO_{2rate}) is the difference between the premodification condition and the postmodification condition, but using the like new heat rate for the combustion equipment; and

(d) The cogeneration credit may be used, but only if it is a new cogeneration credit, not a cogeneration agreement or arrangement established prior to July 1, 2004, or used in a prior CO_2 mitigation evaluation.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-050, filed 6/19/08, effective 7/20/08. Statutory Authority: RCW 70.94.-892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-050, filed 12/22/04, effective 1/22/05.]

WAC 173-407-060 Carbon dioxide mitigation plan requirements and options under Part I. (1) **Once the total carbon dioxide emissions mitigation quantity is calculated, what is next?** The facility must mitigate that level of carbon dioxide emissions. A CO_2 mitigation plan is required and must be approved as part of the order of approval. RCW 80.70.020 (2)(b) states that "*For fossil-fueled thermal electric generation facilities not under jurisdiction of the council, the order of approval shall require an approved carbon dioxide mitigation plan.*" A mitigation plan is a proposal that includes the process or means to achieve carbon dioxide mit-

igation through use of mitigation projects or carbon credits (RCW 80.70.010).

(2) **What are the mitigation plan options?** The options are identified in RCW 80.70.020(3), which states that "*An applicant for a fossil-fueled thermal electric generation facility shall include one or a combination of the following carbon dioxide mitigation options as part of its mitigation plan:*

(a) Payment to a third party to provide mitigation;

(b) Direct purchase of permanent carbon credits; or

(c) Investment in applicant-controlled carbon dioxide mitigation projects, including combined heat and power (cogeneration)."

(3) **What are the requirements of the payment to a third party option?** The payment to a third party option requirements are found in RCW 80.70.020 (5) and (6). Subsection (5) identifies the mitigation rate for this option and describes the process for changing the mitigation rate. Subsection (6) describes the payment options.

The initial mitigation rate is **$1.60 per metric ton** of carbon dioxide to be mitigated. If there is a cogeneration plant, the monetary amount is based on the difference between twenty percent of the total carbon dioxide emissions and the cogeneration credit. This rate will change when the energy facility site evaluation council adjusts it through the process described in RCW 80.70.020 (5)(a) and (b). The total payment amount = mitigation rate x mitigation quantity.

An applicant may choose between **a lump sum payment or partial payment over a period of five years.** The **lump sum payment** is described in RCW 80.70.020 (6)(a) and (b). The payment amount is the mitigation quantity multiplied by the per ton mitigation rate. The entire payment amount is due to the independent qualified organization no later than one hundred twenty days after the start of commercial operation.

The alternative to a one-time payment is a **partial payment** described in RCW 80.70.020 (6)(c). Under this alternative, twenty percent of the total payment is due to the independent qualified organization no later than one hundred twenty days after the start of commercial operation. A payment of the same amount (or an adjusted amount if the rate is changed under RCW 80.70.020 (5)(a)) is due on the anniversary date of the initial payment for the next four consecutive years. In addition, the applicant is required to provide a letter of credit or comparable security for the remaining 80% at the time of the first payment. The letter of credit (or comparable security) must also include possible rate changes.

(4) **What are the requirements of the permanent carbon credits option?** RCW 80.70.030 identifies the criteria and specifies that these credits cannot be resold without approval from the local air authority having jurisdiction or ecology where there is no local air authority. The permanent carbon credit criteria of RCW 80.70.030(1) are as follows:

(a) Credits must derive from real, verified, permanent, and enforceable carbon dioxide or carbon dioxide equivalents emission mitigation not otherwise required by statute, regulation, or other legal requirements;

(b) The credits must be acquired after July 1, 2004; and

(c) The credits may not have been used for other carbon dioxide mitigation projects.

(5) **What are the requirements for the applicant controlled mitigation projects option?** RCW 80.70.040 identifies the requirements for applicant controlled mitigation projects. Subsections (1) through (5) specify the criteria. The direct investment cost of the applicant controlled mitigation project including funds used for selection, monitoring, and evaluation of mitigation projects cannot be required by ecology or the local authority to exceed the cost of making a lump sum payment to a third party per WAC 173-407-060(3).

The applicant controlled mitigation project must be:

(a) Implemented through mitigation projects conducted directly by, or under the control of, order of approval holder.

(b) Approved by the authority having jurisdiction or the department where there is no local air authority and incorporated as a condition of the proposed order of approval.

(c) Fully in place within a reasonable time after the start of commercial operation. Failure to implement an approved mitigation plan is subject to enforcement under chapter 70.94 RCW.

(d) The order of approval holder may not use more than twenty percent of the total funds for the selection, monitoring, and evaluation of mitigation projects, and the management and enforcement of contracts.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-060, filed 6/19/08, effective 7/20/08. Statutory Authority: RCW 70.94.-892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-060, filed 12/22/04, effective 1/22/05.]

WAC 173-407-070 Carbon dioxide mitigation option statement and mitigation plan approval under Part I. (1) Applicants must provide the department or authority with a statement selecting the mitigation option(s) at the time the application is submitted.

(2) Applicants choosing to use the payment to a third party or the permanent carbon credit option must provide the department or the authority, as appropriate, with the documentation to show how the requirements will be satisfied before an order or approval will be issued.

(3) Applicants seeking to use the applicant controlled mitigation projects option must submit the entire mitigation plan to the department or the authority. The department or authority having jurisdiction will review the plan. Under RCW 70.94.892 (2)(b), the review criteria is based on whether the mitigation plan is consistent with the requirements of chapter 80.70 RCW.

(4) Upon completing the review phase, the department or the authority having jurisdiction must approve or deny the mitigation plan.

(5) Approved mitigation plans become part of the order of approval.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-070, filed 6/19/08, effective 7/20/08. Statutory Authority: RCW 70.94.-892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-070, filed 12/22/04, effective 1/22/05.]

WAC 173-407-080 Enforcement under Part I. Applicants or facilities violating the carbon dioxide mitigation program requirements are subject to the enforcement provisions of chapter 70.94 RCW.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-080, filed 6/19/08, effective 7/20/08. Statutory Authority: RCW 70.94.-892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-080, filed 12/22/04, effective 1/22/05.]

PART II
GREENHOUSE GASES EMISSIONS PERFORMANCE STANDARD AND SEQUESTRATION PLANS AND PROGRAMS FOR BASELOAD ELECTRIC GENERATION FACILITIES IMPLEMENTING CHAPTER 80.80 RCW

WAC 173-407-100 Policy and purpose of Part II. It is the intent of the legislature, under chapter 80.80 RCW, to establish statutory goals for the statewide reduction of greenhouse gases emissions. The legislature further intends by chapter 80.80 RCW to authorize immediate actions in the electric power generation sector for the reduction of greenhouse gases emissions.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-100, filed 6/19/08, effective 7/20/08.]

WAC 173-407-110 Definitions to Part II. The following definitions apply when these terms are used in the provisions of Part II and Part III of this chapter.

"Average available greenhouse gases emissions output" means the level of greenhouse gases emissions as surveyed and determined by the energy policy division of the department of community, trade, and economic development under RCW 80.80.050.

"Baseload electric generation" means electric generation from a power plant that is designed and intended to provide electricity at an annualized plant capacity factor of at least sixty percent. For a cogeneration facility, the sixty percent annual capacity factor applies to only the electrical production intended to be supplied for sale. For purposes of this rule, designed means originally specified by the design engineers for the power plant or generating units (such as simple cycle combustion turbines) installed at a power plant; and intended means allowed for by the current permits for the power plant, recognizing the capability of the installed equipment or intent of the owner or operator of the power plant.

"Baseload electric cogeneration facility" means a cogeneration facility that provides baseload electric generation.

"Baseload electric generation facility" means a power plant that provides baseload electric generation.

"Benchmark" means a planned quantity of the greenhouse gases to be sequestered each calendar year at a sequestration facility as identified in the sequestration plan or sequestration program.

"Bottoming-cycle cogeneration facility" means a cogeneration facility in which the energy input to the system is first applied to a useful thermal energy application or process, and at least some of the reject heat emerging from the application or process is then used for electrical power production.

"Change in ownership" as related to cogeneration plants means a new ownership interest in the electric generation portion of the cogeneration facility or unit.

"Cogeneration facility" means a power plant in which the heat or steam is also used for industrial or commercial heating or cooling purposes and that meets Federal Energy Regulatory Commission standards for qualifying facilities under the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. Sec. 824a-3), as amended. In general, a cogeneration facility is comprised of equipment and processes which through the sequential use of energy are used to produce electric energy and useful thermal energy (such as heat or steam) that is used for industrial, commercial, heating, or cooling purposes.

"Combined-cycle natural gas thermal electric generation facility" means a power plant that employs a combination of one or more gas turbines and steam turbines in which electricity is produced in the steam turbine from otherwise lost waste heat exiting from one or more of the gas turbines.

"Commence commercial operation" means, in regard to a unit serving an electric generator, to have begun to produce steam or other heated medium, or a combustible gas used to generate electricity for sale or use, including test generation.

"Commission" means the Washington utilities and transportation commission.

"Consumer-owned utility" means a municipal utility formed under Title 35 RCW, a public utility district formed under Title 54 RCW, an irrigation district formed under chapter 87.03 RCW, a cooperative formed under chapter 23.86 RCW, a mutual corporation or association formed under chapter 24.06 RCW, or port district within which an industrial district has been established as authorized by Title 53 RCW, that is engaged in the business of distributing electricity to more than one retail electric customer in the state.

"Department" or "ecology" means the department of ecology.

"Electric generating unit" (EGU) is the equipment required to convert the thermal energy in a fuel into electricity. In the case of a steam electric generation unit, the EGU consists of all equipment involved in fuel delivery to the plant site, as well as individual boilers, any installed emission control equipment, and any steam turbine/generators dedicated to generating electricity. Where a steam turbine generator is supplied by two or more boiler units, all boilers contributing to that steam turbine/generator comprise a single electric generating unit. All combustion units/boilers/combined cycle turbines that produce steam for use in a single steam turbine/generator unit are part of the same electric generating unit.

Examples:

(a) For an integrated gasification combined cycle combustion turbine plant, the EGU consists of all equipment involved in fuel delivery to the unit, as well as all equipment used in the fuel conversion and combustion processes, any installed emission control equipment, and all equipment used for the generation of electricity.

(b) For a combined cycle natural gas fired combustion turbine, the EGU begins at the point where natural gas is delivered to the plant site and ends with the generation of electricity from the combustion turbine and from steam produced and used on a steam turbine.

(c) An EGU also includes fuel cells fueled by hydrogen produced:

(i) In a reformer utilizing nonrenewable fuels; or

(ii) By a gasifier producing hydrogen from nonrenewable fuels.

"Electricity from unspecified sources" means electricity that is to be delivered in Washington pursuant to a long-term financial commitment entered into by an electric utility and whose sources or origins of generation and expected average annual deliveries cannot be ascertained with reasonable certainty.

"EFSEC" means the energy facility site evaluation council.

"Electric utility" means an electrical company or a consumer-owned utility.

"Electrical company" means a company owned by investors that meets the definition of RCW 80.04.010.

"Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material to produce heat for the generation of electricity.

"Governing board" means the board of directors or legislative authority of a consumer-owned utility.

"Greenhouse gases" includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

"Long-term financial commitment" means:

(a) Either a new ownership interest in baseload electric generation or an upgrade to a baseload electric generation facility; or

(b) A new or renewed contract for baseload electric generation with a term of five or more years for the provision of retail power or wholesale power to end-use customers in this state.

"MWh" means megawatt-hour electricity.

"MWh_{eq}" means megawatt-hour equivalent electrical energy of useful thermal energy output. 1 MWh_{eq} = 3.413 million Btu of thermal energy.

"New ownership interest" means a change in the ownership structure of a baseload power plant or a cogeneration facility or the electrical generation portion of a cogeneration facility affecting at least:

(a) Five percent of the market value of the power plant or cogeneration facility; or

(b) Five percent of the electrical output of the power plant or cogeneration facility.

The above thresholds apply to each unit within a multiunit generation facility.

"Permanent sequestration" means the retention of greenhouse gases in a containment system using a method that is in accordance with standards approved by the department and that creates a high degree of confidence that substantially ninety-nine percent of the greenhouse gases will remain contained for at least one thousand years.

"Plant capacity factor" means the ratio of the electricity produced during a given time period, measured in kilowatt-hours, to the electricity the unit could have produced if it had been operated at its rated capacity during that period, expressed in kilowatt-hours.

"Power plant" means a facility for the generation of electricity that is permitted as a single plant by the energy facility site evaluation council or a local jurisdiction. A power plant may be comprised of one or more individual electrical generating units, each unit of which can be operated or owned separately from the other units.

"Regulated greenhouse gases emissions" is the mass of carbon dioxide emitted plus the mass of nitrous oxide emitted plus the mass of methane emitted. Regulated greenhouse gases emissions include carbon dioxide produced by a sulfur dioxide control system such as a wet limestone scrubber system.

"Renewable fuel" means:

(a) Landfill gas;

(b) Biomass energy utilizing animal waste, solid organic fuels from wood, forest, or field residues or dedicated energy crops that do not include wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic;

(c) By-products of pulping or wood manufacturing processes, including but not limited to bark, wood chips, sawdust, and lignin in spent pulping liquors; or

(d) Gas from sewage treatment facilities.

"Renewable resources" means electricity generation facilities fueled by renewable fuels plus electricity generation facilities fueled by:

(a) Water;

(b) Wind;

(c) Solar energy;

(d) Geothermal energy; or

(e) Ocean thermal, wave, or tidal power.

"Sequential use of energy" means:

(a) For a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard; or

(b) For a bottoming-cycle cogeneration facility, the use of reject heat from a thermal application or process, at least some of which is then used for power production.

"Sequestration plan" means a comprehensive plan describing how a plant owner or operator will comply with the emissions performance standard by means of sequestering greenhouse gases, where the sequestration will start after electricity is first produced, but within five years of the start of commercial operation.

"Sequestration program" means a comprehensive plan describing how a baseload electric generation plant's owner or operator will demonstrate compliance with the emissions performance standard at start of commercial operation and continuing unchanged into the future. The program is a description of how the facility meets the emissions performance standard based on the characteristics of the baseload electric generation facility or unit or by sequestering greenhouse gases emissions to meet the emissions performance standard with the sequestration starting on or before the start of commercial operation.

"Supplementary firing" means an energy input to:

(a) A cogeneration facility used only in the thermal process of a topping-cycle cogeneration facility;

(b) The electric generating process of a bottoming-cycle cogeneration facility; or

(c) Any baseload electric generation unit to temporarily increase the thermal energy that can be converted to electrical energy.

"Topping-cycle cogeneration facility" means a cogeneration facility in which the energy input to the facility is first used to produce useful electrical power output, and at least some of the reject heat from the power production process is then used to provide useful thermal energy.

"Total energy input" means the total energy supplied by all fuels used to produce electricity in a baseload electric generation facility or unit.

"Total energy output" of a topping cycle cogeneration facility or unit is the sum of the useful electrical power output and useful thermal energy output.

"Upgrade" means any modification made for the primary purpose of increasing the electric generation capacity of a baseload electric generation facility or unit. Upgrade does not include:

(a) Routine or necessary maintenance;

(b) Installation of emission control equipment;

(c) Installation, replacement, or modification of equipment that improves the heat rate of the facility; or

(d) Installation, replacement, or modification of equipment for the primary purpose of maintaining reliable generation output capability that does not increase the heat input or fuel usage as specified in existing generation air quality permits as of July 22, 2007, but may result in incidental increases in generation capacity.

"Useful energy output" of a cogeneration facility means the electric or mechanical energy made available for use, exclusive of any such energy used in the power production process.

"Useful thermal energy output" of a cogeneration facility means the thermal energy:

(a) That is made available to and used in an industrial or commercial process (minus any heat contained in condensate return and/or makeup water);

(b) That is used in a heating application (e.g., space heating, domestic hot water heating); or

(c) That is used in a space cooling application (i.e., thermal energy used by an absorption chiller).

"Waste gas" is refinery gas and other fossil fuel derived gases with a heat content of more than 300 Btu/standard cubic foot. Waste gas does not include gaseous renewable energy sources.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-110, filed 6/19/08, effective 7/20/08.]

WAC 173-407-120 Facilities subject to the greenhouse gases emissions performance standard for Part II. (1) This rule is applicable to all baseload electric generation facilities and units and baseload electric cogeneration facilities and units that:

(a) Are new and are permitted for construction and operation after June 30, 2008, and that utilize fossil fuel or nonrenewable fuels for all or part of their fuel requirements.

(b) Are existing and that commence operation on or before June 30, 2008, when the facility or unit's owner or operator engages in an action listed in subsection (3) or (4) of this section.

(2) This rule is not applicable to any baseload electric generation facility or unit or baseload electric cogeneration facility or unit that is designed and intended to utilize a renewable fuel to provide at least ninety percent of its total annual heat input.

(3) A baseload electric generation facility or an individual electric generating unit at a baseload electric generation facility is required to meet the emissions performance standard in effect when:

(a) The new baseload electric generation facility or new electric generating unit at an existing baseload electric generation facility is issued a notice of construction approval or a site certification agreement;

(b) The existing facility or a unit is upgraded; or

(c) The existing facility or a unit is subject to a new long-term financial commitment.

(4) A baseload electric cogeneration facility or unit is required to meet the emissions performance standard in effect when:

(a) The new baseload electric cogeneration facility or new baseload electric cogeneration unit is issued a notice of construction approval or a site certification agreement;

(b) The existing facility or unit is upgraded; or

(c) The existing facility or unit is subject to a change in ownership.

(5) A new baseload electric generation facility or unit or new baseload electric cogeneration facility or unit becomes an existing baseload electric generation facility or unit or baseload electric cogeneration facility or unit the day it commences commercial operation.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-120, filed 6/19/08, effective 7/20/08.]

WAC 173-407-130 Emissions performance standard under Part II. (1) Beginning July 1, 2008, all baseload electric generation facilities and units and baseload electric cogeneration facilities and units subject to WAC 173-407-120 are not allowed to emit to the atmosphere regulated greenhouse gases at a rate greater than one thousand one hundred pounds per megawatt-hour, annual average.

(2) All baseload electric generation facilities and units in operation on or before June 30, 2008, are deemed to be in compliance with the emissions performance standard until the facility or unit is subject to a new long-term financial commitment.

(3) All baseload electric cogeneration facilities and units in operation on or before June 30, 2008, and operating exclusively on natural gas, waste gas, a combination of natural and waste gases, or a renewable fuel, are deemed to be in compliance with the emissions performance standard until the facility or unit is subject to a new ownership interest or is upgraded. For purposes of this section, exclusive use of renewable fuel shall mean at least ninety percent of total annual heat input by a renewable fuel.

(4) Compliance with the emissions performance standard may be through:

(a) Use of fuels and power plant designs that comply with the emissions performance standard without need for greenhouse gases emission controls; or

(b) Use of greenhouse gases emission controls and greenhouse gases sequestration methods meeting the requirements of WAC 173-407-220 or 173-218-115 as appropriate.

(5) The greenhouse gases emissions performance standard in subsection (1) of this section applies to all baseload electric generation for which electric utilities enter into long-term financial commitments on or after July 1, 2008.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-130, filed 6/19/08, effective 7/20/08.]

WAC 173-407-140 Calculating greenhouse gases emissions and determining compliance for baseload electric generation facilities under Part II. (1) The owner or operator of a baseload electric generation facility or unit that must demonstrate compliance with the emissions perfor-

mance standard in WAC 173-407-130(1) shall collect the following data:

(a) Fuels and fuel feed stocks.

(i) All fuels and fuel feed stocks used to provide energy input to the baseload electric generation facility or unit.

(ii) Fuel usage and heat content, which are to be monitored, and reported as directed by WAC 173-407-230.

(b) Electrical output in MWh as measured and recorded per WAC 173-407-230.

(c) Regulated greenhouse gases emissions from the baseload electric generation facility or unit as monitored, reported and calculated in WAC 173-407-230.

(d) Adjustments for use of renewable resources. If the owner or operator of a baseload electric generation facility or unit adjusts its greenhouse gases emissions to account for the use of renewable resources, greenhouse gases emissions are reduced based on the ratio of the annual heat input from all fuels and fuel feed stocks and the annual heat input from use of nonrenewable fuels and fuel feed stocks. Such adjustment will be based on records of fuel usage and representative heat contents approved by ecology.

(2) By January 31 of each year, the owner or operator of each baseload electric generation facility or unit subject to the monitoring and compliance demonstration requirements of this rule will:

(a) Use the data collected under subsection (1) of this section to calculate the pounds of regulated greenhouse gases emissions emitted per MWh of electricity produced during the prior calendar year by dividing the regulated greenhouse gases emissions by the total MWh produced in that year; and

(b) Submit that calculation and all supporting information to ecology.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-140, filed 6/19/08, effective 7/20/08.]

WAC 173-407-150 Calculating greenhouse gases emissions and determining compliance for baseload electric cogeneration facilities under Part II. (1) To use this section for determining compliance with the greenhouse gases emissions performance standard, a facility must have certified to the Federal Energy Regulatory Commission (FERC) under the provisions of 18 CFR 292 Subpart B as a qualifying cogeneration facility.

(2) The owner or operator of a baseload electric cogeneration facility or unit that must demonstrate compliance with the emissions performance standard in WAC 173-407-130(1) shall collect the following data:

(a) Fuels and fuel feed stocks.

(i) All fuels and fuel feed stocks used to provide energy input to the baseload electric cogeneration facility or unit.

(ii) Fuel and fuel feed stocks usage and heat content, which are to be monitored, and reported as directed by WAC 173-407-230.

(b) Electrical output in MWh as measured and recorded per WAC 173-407-230.

(c) All useful thermal energy and useful energy used for nonelectrical generation uses converted to units of megawatts energy equivalent (MWeq) using the conversion factor of 3.413 million British thermal units per megawatt hour (MMBtu/MWh).

(d) Regulated greenhouse gases emissions from the baseload electric cogeneration facility or unit as monitored, reported and calculated in WAC 173-407-230.

(e) Adjustments for use of renewable resources. If the owner or operator of a baseload electric cogeneration facility or unit adjusts its greenhouse gases emissions to account for the use of renewable resources, the greenhouse gases emissions are reduced based on the ratio of the annual heat input from all fuels and fuel feed stocks and the annual heat input from use of nonrenewable fuels and fuel feed stocks. Such adjustment will be based on records of fuel usage and representative heat contents approved by ecology.

(3) Bottoming-cycle cogeneration facilities. The formula to determine compliance of a bottoming-cycle cogeneration facility or unit with the emissions performance standard will be jointly developed by ecology and the facility. To the extent possible, the facility-specific formula must be based on the one for topping-cycle facilities identifying the amount of energy converted to electricity, thermal losses, and energy from the original fuel(s) used to provide useful thermal energy in the industrial process. The formula should be specific to the installed equipment, other thermal energy uses in the facility, and specific operating conditions of the facility.

(4) Topping-cycle cogeneration facilities. To demonstrate compliance with the emissions performance standard, a topping-cycle facility or unit must:

(a) Determine annual electricity produced in MWh.

(b) Determine the annual electrical energy equivalent of the useful thermal energy output in MWh_{eq}.

(c) Determine the annual regulated greenhouse gases emissions produced in pounds.

(5) By January 31 of each year, the owner or operator of each baseload electric cogeneration facility or unit subject to the monitoring and compliance demonstration requirements of this rule will:

(a) Calculate the pounds of regulated greenhouse gases emissions emitted per MWh of electricity produced during the prior calendar year by dividing the regulated greenhouse gases emissions by the sum of the MWh and MWh_{eq} produced in that year; and

(b) Submit that calculation and all supporting information to ecology.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-150, filed 6/19/08, effective 7/20/08.]

WAC 173-407-200 Requirement for and timing of sequestration plan or sequestration program submittals under Part II. (1) A sequestration plan for a source that begins sequestration after the start of commercial operation shall be submitted when:

(a) A site certification application is submitted to EFSEC for a new baseload electric generation facility or baseload electric cogeneration facility or new unit at an existing baseload electric generation facility or baseload electric cogeneration facility;

(b) A site certification application is submitted to EFSEC for an upgrade to an existing baseload electric generation facility or unit or baseload electric cogeneration facility or unit that has a site certificate and the upgrade is not an exempt upgrade;

(c) A notice of construction application is submitted to ecology or a local authority for a new baseload electric generation facility or baseload electric cogeneration facility or unit at a baseload electric generation facility or baseload electric cogeneration facility;

(d) A notice of construction application is submitted to ecology or a local authority for an upgrade to an existing baseload electric generation facility or unit or an existing baseload electric cogeneration facility or unit and the upgrade is not an exempt upgrade;

(e) A baseload electric generation facility or unit or baseload electric cogeneration facility or unit enters a new long-term financial commitment with an electric utility to provide baseload power and the facility or unit does not comply with the emissions performance standard in effect at the time the new long-term financial commitment occurs; or

(f) A qualifying ownership interest change occurs and the facility or unit does not comply with the emissions performance standard in effect at the time the change in ownership occurs.

(2) A sequestration program for a source that begins sequestration on or before the start of commercial operation is required to be submitted when:

(a) A site certification application is submitted to EFSEC for new baseload electric generation facility or unit or baseload electric cogeneration facility or unit;

(b) A site certification application is submitted to EFSEC for an upgrade to an existing baseload electric generation facility or unit or baseload electric cogeneration facility or unit that has a site certificate and the upgrade is not an exempt upgrade;

(c) A notice of construction application is submitted to ecology or a local authority for a new baseload electric generation facility or unit or baseload electric cogeneration facility or unit;

(d) A notice of construction application is submitted to ecology or a local authority for an upgrade to an existing baseload electric generation facility or unit or baseload electric cogeneration facility or unit and the upgrade is not an exempt upgrade;

(e) A baseload electric generation facility or unit or baseload electric cogeneration facility or unit enters a new long-term financial commitment with an electric utility to provide baseload power if the facility or unit does not comply with the emissions performance standard in effect at the time the new long-term financial commitment occurs; or

(f) A qualifying ownership interest change occurs and the facility does not comply with the emissions performance standard in effect at the time the change in ownership occurs.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-200, filed 6/19/08, effective 7/20/08.]

WAC 173-407-210 Types of permanent sequestration under Part II. Specific requirements for permanent geologic sequestration of greenhouse gases can be found in WAC 173-218-115. Requirements for approval of sequestration plans or sequestration programs for other (nongeologic) types of permanent sequestration containment systems are found in WAC 173-407-220.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-210, filed 6/19/08, effective 7/20/08.]

WAC 173-407-220 Requirements for nongeologic permanent sequestration plans and sequestration programs under Part II. In order to meet the emissions performance standard, all baseload electric generation facilities or individual units that are subject to this rule, and must use nongeologic sequestration of greenhouse gases to meet the emissions performance standard, will submit sequestration plans or sequestration programs for approval to EFSEC or ecology, as appropriate.

(1) Sequestration plans and sequestration programs must include:

(a) Financial requirements. As a condition of plant operation, each owner or operator of a baseload electric generation facility or unit or baseload electric cogeneration facility or unit utilizing nongeologic sequestration as a method to comply with the emissions performance standard in WAC 173-407-130 is required to provide a letter of credit sufficient to ensure successful implementation, closure, and post-closure activities identified in the sequestration plan or sequestration program, including construction and operation of necessary equipment, and any other significant costs.

(i) The owner or operator of a proposed sequestration project shall establish a letter of credit to cover all expenses for construction and operation of necessary equipment, and any other significant costs. The cost estimate for the sequestration project shall be revised annually to include any changes in the project and to include cost changes due to inflation.

(ii) Closure and post-closure financial assurances. The owner or operator shall establish a closure and a post-closure letter of credit to cover all closure and post-closure expenses, respectively. The owner or operator must designate ecology or EFSEC, as appropriate, as the beneficiary to carry out the closure and post-closure activities. The value of the closure and post-closure accounts shall cover all costs of closure and post-closure care identified in the closure and post-closure plan. The closure and post-closure cost estimates shall be revised annually to include any changes in the sequestration project and to include cost changes due to inflation. The obligation to maintain the account for closure and post-closure care survives the termination of any permits and the cessation of injection. The requirement to maintain the closure and post-closure accounts is enforceable regardless of whether the requirement is a specific condition of the permit.

(b) The application for approval of a sequestration plan or sequestration program shall include (but is not limited to) the following:

(i) A current site map showing the boundaries of the permanent sequestration project containment system(s) and all areas where greenhouse gases will be stored.

(ii) A technical evaluation of the proposed project, including but not limited to, the following:

(A) The name of the area in which the sequestration will take place;

(B) A description of the facilities and place of greenhouse gases containment system;

(C) A complete site description of the site, including but not limited to the terrain, the geology, the climate (including rain and snowfall expected), any land use restrictions that exist at the time of the application or will be placed upon the site in the future;

(D) The proposed calculated maximum volume of greenhouse gases to be sequestered and areal extent of the location where the greenhouse gases will be stored using a method acceptable to and filed with ecology; and

(E) Evaluation of the quantity of sequestered greenhouse gases that may escape from the containment system at the proposed project.

(iii) A public safety and emergency response plan for the proposed project. The plan shall detail the safety procedures concerning the sequestration project containment system and residential, commercial, and public land use within one mile, or as necessary to identify potential impacts, of the outside boundary of the project area.

(iv) A greenhouse gases loss detection and monitoring plan for all parts of the sequestration project. The approved greenhouse gases loss detection and monitoring plan shall address identification of potential release to the atmosphere.

(v) A detailed schedule of annual benchmarks for sequestration of greenhouse gases.

(vi) Any other information that the department deems necessary to make its determination.

(vii) A closure and post-closure plan.

(c) In order to monitor the effectiveness of the implementation of the sequestration plan or sequestration program, the owner or operator shall submit a detailed monitoring plan that will ensure detection of failure of the sequestration method to place the greenhouse gases into a sequestered state. The monitoring plan will be sufficient to provide reasonable assurance that the sequestration provided by the project meets the definition of permanent sequestration. The monitoring shall continue for the longer of twenty years beyond the end of placement of the greenhouse gases into a sequestration containment system, or twenty years beyond the date upon which it is determined that all of the greenhouse gases have achieved a state at which they are now stably sequestered in that environment.

(d) If the sequestration plan or sequestration program fails to sequester greenhouse gases as provided in the plan or program, the owner or operator of the baseload electric generation facility or unit or baseload electric cogeneration facility or unit is no longer in compliance with the emissions performance standard.

(2) **Public notice and comment.** Ecology must provide public notice and a public comment period before approving or denying any sequestration plan or sequestration program.

(a) Public notice. Public notice shall be made only after all information required by the permitting authority has been submitted and after applicable preliminary determinations, if any, have been made. The applicant or other initiator of the action must pay the cost of providing public notice. Public notice shall include analyses of the effects on the local, state and global environment in the case of failure of the sequestration plan or sequestration program. The sequestration plan or sequestration program must be available for public inspection in at least one location near the proposed project.

(b) Public comment.

(i) The public comment period must be at least thirty days long or may be longer as specified in the public notice.

(ii) The public comment period must extend through the hearing date.

(iii) Ecology shall make no final decision on any sequestration plan or sequestration program until the public comment period has ended and any comments received during the public comment period have been considered.

(c) Public hearings.

(i) Ecology will hold a public hearing within the thirty-day public comment period. Ecology will determine the location, date, and time of the public hearing.

(ii) Ecology must provide at least thirty days prior notice of a hearing on a sequestration plan or sequestration program.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-220, filed 6/19/08, effective 7/20/08.]

WAC 173-407-230 Emissions and electrical production monitoring, recordkeeping and reporting requirements under Part II. (1) Monitoring and recordkeeping requirements. For all baseload electric generation facilities or units and baseload electric cogeneration facilities or units subject to WAC 173-407-120, the following parameters shall be monitored and reported as explained below:

(a) Electrical output: Electrical output as measured at the point of connection with the local electrical distribution network or transmission line, as appropriate. Measurement will be on an hourly or daily basis and recorded in a form suitable for use in calculating compliance with the greenhouse gases emissions performance standard;

(b) Useful thermal energy output: Quantity of energy supplied to nonelectrical production uses determined by monitoring both the energy supplied and the unused energy returned by the thermal energy user or uses. The required monitoring can be accomplished through:

(i) Measurement of the mass, pressure, and temperature of the supply and return streams of the steam or thermal fluid; or

(ii) Use of thermodynamic calculations as approved by ecology.

(iii) Measurements will be on an hourly or daily basis and recorded in a form suitable for use in calculating compliance with the greenhouse gases emissions performance standard.

(c) Regulated greenhouse gases emissions.

(i) The regulated greenhouse gases emissions are the emissions of regulated greenhouse gases from the main plant exhaust stack and any bypass stacks or flares. For baseload electric generation facilities or units and baseload electric cogeneration facilities or units utilizing CO_2 controls and sequestration to comply with the greenhouse gases emissions performance standard, direct and fugitive CO_2 emissions from the CO_2 separation and compression process are included.

(ii) Carbon dioxide (CO_2).

(A) For baseload electric generation facilities or units and baseload electric cogeneration facilities or units subject to WAC 173-407-120, producing 25 MW or more of electricity, CO_2 emissions will be monitored by a continuous emission monitoring system meeting the requirements of 40 CFR Sections 75.10 and 75.13 and 40 CFR Part 75 Appendix F. If allowed by the requirements of 40 CFR Part 72, a facility may estimate CO_2 emissions through fuel carbon content

monitoring and methods meeting the requirements of 40 CFR Sections 75.10 and 75.13 and 40 CFR Part 75 Appendix G.

(B) For baseload electric generation facilities or units and baseload electric cogeneration facilities or units subject to WAC 173-407-120 producing less than 25 MW of electricity, the owner or operator may either utilize a continuous emission monitoring system meeting the requirements of 40 CFR Sections 75.10 and 75.13 and 40 CFR Part 75 Appendix F, or use fuel carbon content monitoring and methods meeting the requirements of 40 CFR Sections 75.10 and 75.13 and 40 CFR Part 75 Appendix G.

(C) When the monitoring data from a continuous emission monitoring system does not meet the completeness requirements of 40 CFR Part 75, the baseload electric generation facility operator or operator will substitute data according to the process in 40 CFR Part 75.

(D) Continuous emission monitors for CO_2 will be installed at a location meeting the requirements of 40 CFR Part 75, Appendix A. The CO_2 and flow monitoring equipment must meet the quality control and quality assurance requirements of 40 CFR Part 75, Appendix B.

(iii) Nitrous oxide (N_2O).

(A) For baseload electric generation facilities or units or baseload electric cogeneration facilities or units subject to WAC 173-407-120 producing 25 MW or more of electricity, N_2O emissions shall be determined as follows:

(I) For the first year of operation, N_2O emissions are estimated by use of emission factors as published by the Environmental Protection Agency, the federal Department of Energy's Energy Information Agency, or other authoritative source as approved by ecology for use by the facility.

(II) For succeeding years, N_2O emissions will be estimated through use of generating unit specific emission factors derived through use of emissions testing using ecology or Environmental Protection Agency approved methods. The emission factor shall be derived through testing N_2O emissions from the stack at varying loads and through at least four separate test periods spaced evenly throughout the first year of commercial operation.

(B) For baseload electric generation facilities or units or baseload electric cogeneration facilities or units subject to WAC 173-407-120 producing less than 25 MW of electricity, the annual N_2O emissions will be estimated by use of emission factors as published by the Environmental Protection Agency, the federal Department of Energy's Energy Information Agency, or other authoritative source as approved by ecology for use by the facility.

(iv) Methane (CH_4).

(A) For baseload electric generation facilities or units or baseload electric cogeneration facilities or units subject to WAC 173-407-120 producing 25 MW or more of electricity, CH_4 emissions shall be determined as follows:

(I) For the first year of operation, CH_4 emissions are estimated by use of emission factors as published by the Environmental Protection Agency, the federal Department of Energy's Energy Information Agency, or other authoritative source as approved by ecology for use by the facility.

(II) For succeeding years, CH_4 emissions will be estimated through use of plant specific emission factors derived through use of emissions testing using ecology or Environmental Protection Agency approved methods. The emission factor shall be derived through testing CH_4 emissions from the stack at varying loads and through at least four separate test periods spaced evenly through the first year of commercial operation.

(B) For baseload electric generation facilities or units or baseload electric cogeneration facilities or units subject to WAC 173-407-120 producing less than 25 MW of electricity. The annual CH_4 emissions will be estimated by use of emission factors as published by the Environmental Protection Agency, the federal Department of Energy's Energy Information Agency, or other authoritative source as approved by ecology for use by the facility.

(d) Fuel usage and heat content information.

(i) Fossil fuel usage will be monitored by measuring continuous fuel volume or weight as appropriate for the fuel used. Measurement will be on an hourly or daily basis and recorded in a form suitable for use in calculating greenhouse gases emissions.

(ii) Renewable energy fuel usage will be monitored by measuring continuous fuel volume or weight as appropriate for the fuel used. Measurement will be on an hourly or daily basis and recorded in a form suitable for use in calculating greenhouse gases emissions.

(iii) Heat content of fossil fuels shall be tested at least once per calendar year. The owner or operator of the baseload electric generation facility or unit shall submit a proposed fuel content monitoring program to ecology for ecology approval. Upon request and submission of appropriate documentation of fuel heat content variability, ecology may allow a source to:

(A) Test the heat content of the fossil fuel less often than once per year; or

(B) Utilize representative heat content for the renewable energy source instead of the periodic monitoring of heat content required above.

(iv) Renewable energy fuel heat content will be tested monthly or with a different frequency approved by ecology. A different frequency will be based on the variability of the heat content of the renewable energy fuel.

(A) If the baseload electric generation facilities or units or baseload electric cogeneration facilities or units subject to WAC 173-407-120 using a mixture of renewable and fossil fuels do not adjust their greenhouse gases emissions by accounting for the heat input from renewable energy fuels, monitoring of the heat content of the renewable energy fuels is not required.

(B) Upon request and with appropriate documentation, ecology may allow a source to utilize representative heat content for the renewable energy source instead of the periodic monitoring of heat content required above.

(2) Reporting requirements. The results of the monitoring required by this section shall be reported to ecology and the permitting authority annually.

(a) Facilities or units subject to the reporting requirements of 40 CFR Part 75. Annual emissions of CO_2, N_2O and CH_4 will be reported to ecology and the air quality permitting authority with jurisdiction over the facility by January 31 of each calendar year for emissions that occurred in the previous calendar year. The report may be an Excel™ or CSV format

copy of the report submitted to EPA per 40 CFR Part 75 with the emissions for N_2O and CH_4 appended to the report.

(b) For facilities or units not subject to the reporting requirements of 40 CFR Part 75, annual emissions of CO_2, N_2O and CH_4 and supporting information will be reported to ecology and the air quality permitting authority with jurisdiction over the facility by January 31 of each calendar year for emissions that occurred in the previous calendar year.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-230, filed 6/19/08, effective 7/20/08.]

WAC 173-407-240 Enforcement of the emissions performance standard under Part II. (1) Any power plant subject to WAC 173-407-120 that does not meet the emissions performance standard on schedule shall be subject to enforcement under chapter 70.94 RCW.

Penalties can include:

(a) Financial penalties, which shall be assessed after any year of failure to meet a sequestration benchmark established in the sequestration plan or sequestration program. Each pound of greenhouse gases above the emissions performance standard will constitute a separate violation, as averaged on an annual basis;

(b) Revocation of approval to construct the source or to operate the source.

(2) If a new, modified or upgraded baseload electric generation facility or unit or baseload electric cogeneration facility or unit fails to meet a sequestration plan or sequestration program benchmark on schedule, a revised sequestration plan or sequestration program will be required to be submitted no later than one hundred fifty calendar days after the due date established under subsection (3)(c) of this section for reporting the failure. The revised sequestration plan or sequestration program is to be submitted to ecology or EFSEC, as appropriate, for approval.

(3) Provisions for unavoidable circumstances.

(a) The owner or operator of a facility operated under an approved sequestration plan or sequestration program shall have the burden of proving to ecology, EFSEC, or the decision-making authority in an enforcement action that failure to meet a sequestration benchmark was unavoidable. This demonstration shall be a condition to obtaining relief under (d), (e), and (f) of this subsection.

(b) Failure to meet a sequestration benchmark determined to be unavoidable under the procedures and criteria in this section shall be excused and not subject to financial penalty.

(c) Failure to meet a sequestration benchmark shall be reported by January 31 of the year following the year during which the event occurred or as part of the routine sequestration monitoring reports. Upon request by ecology, the owner(s) or operator(s) of the sequestration project source(s) shall submit a full written report including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

(d) Failure to meet a sequestration benchmark due to startup or shutdown conditions shall be considered unavoidable provided the source reports as required under (c) of this subsection, and adequately demonstrates that the failure to meet a sequestration benchmark could not have been prevented through careful planning and design and if a bypass of equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

(e) Maintenance. Failure to meet a sequestration benchmark due to scheduled maintenance shall be considered unavoidable if the source reports as required under (c) of this subsection, and adequately demonstrates that the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.

(f) Failure to meet a sequestration benchmark due to upsets shall be considered unavoidable provided the source reports as required under (c) of this subsection, and adequately demonstrates that:

(i) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;

(ii) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(iii) The operator took immediate and appropriate corrective action in a manner consistent with good practice for minimizing nonsequestration during the upset event.

(4) Enforcement for permit violations.

(a) Enforcement of an ecology or local air agency permitting authority notice of construction will take place under the authority of chapter 70.94 RCW. Enforcement of an ecology approved sequestration plan or sequestration program will be in accordance with this section.

(b) Enforcement of any part of an EFSEC site certification agreement will proceed in accordance with RCW 80.50.150.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-240, filed 6/19/08, effective 7/20/08.]

PART III
LONG-TERM FINANCIAL COMMITMENTS; RELATIONSHIP OF ECOLOGY AND THE WUTC; AND RELATIONSHIP OF ECOLOGY AND THE GOVERNING BOARDS OF CONSUMER-OWNED UTILITIES UNDER CHAPTER 80.80 RCW

WAC 173-407-300 Procedures for determining the emissions performance standard of a long-term financial commitment and addressing electricity from unspecified sources and specified sources under Part II. (1) The following procedures are adopted by the department to be utilized by the department under RCW 80.80.060 and to be available to and utilized by the governing boards of consumer-owned utilities pursuant to RCW 80.80.070 when evaluating a potential long-term financial commitment when the long-term financial commitment includes electricity from unspecified sources, electricity from one or more specified sources, and/or provisions to meet load growth with electricity from unspecified and/or specified sources.

(2) For each year of a long-term financial commitment for electric power, the regulated greenhouse gases emissions from specified and unspecified sources of power are not to exceed the emissions performance standard in WAC 173-407-130(1), in effect on the date the long-term contract is executed. The emissions performance standard for a long-term financial commitment for electricity that includes elec-

tricity from specified and unspecified sources is calculated using a time-weighted average of all sources of generation and emissions in the years in which they are contributing electricity and emissions in the commitment. Each source's proportional contribution to emissions per each MWh delivered under the contract is added together and summed for each year and divided by the number of years in the term of the commitment.

(3) An extension of an existing long-term financial commitment is treated as a new commitment, not an extension of an existing commitment.

(4) Annual and lifetime calculations of greenhouse gases emissions.

(a) The annual average emissions shall be calculated, for every year of the contract, using the formula in subsection (5) of this section. The calculation of the pounds of greenhouse gases per megawatt-hour is based upon the delivered electricity, including the portion from specified and unspecified sources, of the total portfolio for the year for which the calculation is being made.

(b) The average greenhouse gases emissions per MWh of the power supply portfolio over the life of the long-term financial commitment is compared to the emissions performance standard. The calculation of the pounds of greenhouse gases per MWh is based on the expected annual delivery contracted or expected to be supplied by each specified and unspecified source's portion of the total portfolio of electricity to be provided under the contract for the year for which the calculation is being made.

(c) Default values adopted in this procedure shall be used for each source unless actual emissions are known or specified by the manufacturer. A default greenhouse gases emissions value of an average pulverized coal plant per WAC 173-407-300 (5)(b) shall be used for unspecified sources in the procedure.

(5) The annual average calculation shall be performed using the regulated greenhouse gases emissions factors as follows:

(a) For a specified source, utilize the manufacturer's emissions specification or the measured emission rate for a specified generator. When there is no available information on greenhouse gases emissions from a specified source, utilize the following:

(i) Combined cycle combustion turbines that begin operation after July 1, 2008 = 1,100 lbs/MWh or as updated by rule in 2012 and every five years thereafter.

(ii) Steam turbines using pulverized coal = 2,600 lbs/MWh minus the amount of greenhouse gases permanently sequestered by the facility on an annual basis divided by the MWhs generated that year.

(iii) Integrated gasification combined cycle turbines = 1,800 lbs/MWh minus the amount of greenhouse gases permanently sequestered by the facility on an annual basis divided by the MWhs generated that year.

(iv) Simple cycle combustion turbines = 1,800 lbs/MWh minus the amount of greenhouse gases permanently sequestered by the facility on an annual basis divided by the MWhs generated that year.

(v) Combined cycle combustion turbines that begin operation before July 1, 2008 = 1,100 lbs/MWh.

(b) Electricity from unspecified sources = 2,600 lbs/MWh.

(c) Renewable resources = 0 lbs/MWh.

Example Calculation

$$AE = \frac{(F_1 \times MWh_1) + (F_2 \times MWh_2) + (F_3 MWh_3) + \ldots (F_n \times MWh_n)}{Total\ MWh}$$

where:

AE	=	Average emissions in lb/MWh
F	=	Regulated greenhouse gases emissions factor in lb/MWh
MWh	=	Total MWh purchased or generated by the utility's own generation capacity during the year
Total MWh	=	Total MWh from all source types for that year

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-300, filed 6/19/08, effective 7/20/08.]

WAC 173-407-310 Relationship of ecology and Washington utilities and transportation commission under Part II. (1) The Washington utilities and transportation commission (commission) shall consult with ecology to apply the procedures adopted by the department to verify the emissions of greenhouse gases from baseload electric generation under RCW 80.80.040. Ecology shall report to the commission whether baseload electric generation will comply with the greenhouse gases emissions performance standard for the duration of the period the baseload electric generation is supplied to the electrical company. (RCW 80.80.060(7).)

(2) Ecology's consultation with the commission:

(a) In assisting the commission to apply the emissions verification procedures adopted, ecology will compare the commission's procedures to the ecology procedures found in WAC 173-407-130, 173-407-140, and 173-407-230.

(b) In consulting with the commission to determine if a long-term financial commitment for baseload electric generation meets the greenhouse gases emissions performance standard, ecology shall consider whether the commitment meets WAC 173-407-300.

(3) When conducting the consultation and reporting processes, ecology will conclude this process of consultation and assistance within thirty days of receiving all necessary information from the commission to determine compliance.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-310, filed 6/19/08, effective 7/20/08.]

WAC 173-407-320 Relationship of ecology and the governing boards of consumer-owned utilities under Part II. (1) RCW 80.80.070(2) requires the governing boards of consumer-owned utilities to "review and make a determination on any long-term financial commitment by the utility, pursuant to this chapter and after consultation with the department, to determine whether the baseload electric generation to be supplied under that long-term financial commitment complies with the greenhouse gases emissions performance standard established under RCW 80.80.040." During

this consultation process, ecology shall assist the governing boards with the utilization of the method in WAC 173-407-300 to determine whether the long-term financial commitment for baseload electric generation meets the emissions performance standard. Ecology's assistance will be limited to that assistance necessary for the board to interpret, clarify or otherwise determine that the proposed long-term financial commitment for baseload electric generation will comply with the emissions performance standard.

(2) RCW 80.80.070(5) also requires the governing boards of consumer-owned utilities to "apply the procedures adopted by the department to verify the emissions of greenhouse gases from baseload electric generation under RCW 80.80.040," and allow them to "request assistance from the department in doing so." The procedures adopted by the department to be utilized by the governing boards are found in WAC 173-407-300. Ecology shall provide consultation or further assistance to the governing boards of a consumer-owned utility to apply such procedures if the governing board makes such a request.

(3) Ecology will conclude this process of consultation and assistance within thirty days unless the governing board requesting the assistance grants additional time.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), § 173-407-320, filed 6/19/08, effective 7/20/08.]

WAC 173-407-400 Severability. The provisions of this regulation are severable. If any provision is held invalid, the application of that provision to other circumstances and the remainder of the regulation will not be affected.

[Statutory Authority: Chapter 80.80 RCW. 08-14-011 (Order 07-11), recodified as § 173-407-400, filed 6/19/08, effective 7/20/08. Statutory Authority: RCW 70.94.892 and chapter 80.70 RCW. 05-01-237 (Order 03-09), § 173-407-090, filed 12/22/04, effective 1/22/05.]

Chapter 173-410 WAC
SULFITE PULPING MILLS

WAC

173-410-012 Statement of purpose.
173-410-021 Definitions.
173-410-035 Emission standards for sources emitting hazardous air pollutants.
173-410-040 Emission standards.
173-410-045 Creditable stack height and dispersion techniques.
173-410-062 Monitoring requirements.
173-410-067 Report of startup, shutdown, breakdown or upset conditions.
173-410-071 Emission inventory.
173-410-086 New source review (NSR).
173-410-087 Prevention of significant deterioration (PSD).
173-410-100 Special studies.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-410-011 Statement of policy and purpose. [Order DE 76-36, § 173-410-011, filed 12/28/76. Formerly WAC 18-38-011.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.

173-410-031 Specific emission standards. [Order DE 76-36, § 173-410-031, filed 12/28/76. Formerly WAC 18-38-031.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.

173-410-036 General emission standards and nuisance control measures. [Order DE 76-36, § 173-410-036, filed 12/28/76. Formerly WAC 18-38-036.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.

173-410-041 More restrictive emission standards. [Order DE 76-36, § 173-410-041, filed 12/28/76. Formerly WAC 18-38-041.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.

173-410-042 Emission requirements of prior jurisdictions. [Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-410-042, filed 3/6/85.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.

173-410-051 Compliance. [Order DE 76-36, § 173-410-051, filed 12/28/76. Formerly WAC 18-38-051.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.

173-410-061 Monitoring and reporting. [Order DE 76-36, § 173-410-061, filed 12/28/76. Formerly WAC 18-38-061.] Repealed by 80-11-061 (Order DE 80-16), filed 8/20/80. Statutory Authority: RCW 70.94.331 and 70.94.395.

173-410-066 Report of startup, shutdown, breakdown or upset condition. [Order DE 76-36, § 173-410-066, filed 12/28/76. Formerly WAC 18-38-066.] Repealed by 80-04-050 (Order DE 80-8), filed 3/21/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.-331.

173-410-081 Notice of construction. [Order DE 76-36, § 173-410-081, filed 12/28/76. Formerly WAC 18-38-091.] Repealed by 80-04-050 (Order DE 80-8), filed 3/21/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331.

173-410-090 Operating permit. [Statutory Authority: RCW 70.94.-331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-090, filed 8/20/80.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

173-410-091 Exemptions. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-091, filed 8/20/80; Order DE 76-36, § 173-410-091, filed 12/28/76. Formerly WAC 18-38-081.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

WAC 173-410-012 Statement of purpose. These rules are enacted under the provisions of the Washington Clean Air Act as amended (RCW 70.94.395) to:

(1) Assume state jurisdiction over emissions from sulfite pulping mills to provide for the systematic control of air pollution in this industry and for the proper development of the state's natural resources; and

(2) Establish technically feasible and reasonably attainable standards and revise such standards as new information and better technology are developed and become available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-012, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.-331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-012, filed 8/20/80.]

WAC 173-410-021 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter, shall have the following meanings:

(1) "Acid plant" means the facility in which the cooking liquor is either manufactured or fortified when not associated with a recovery system.

(2) "Average daily emission" means total weight of an air contaminant emitted in each month, divided by the number of days of production that month.

(3) "Average daily production" means air dried tons of unbleached pulp produced in a month, divided by the number of days of production in that month.

(4) "Blow system" includes the storage chest, tank or pit to which the digester pulp is discharged following the cook.

(5) "Recovery system" means the process by which all or part of the cooking chemicals may be recovered, and cooking liquor regenerated from spent cooking liquor, including evaporation, combustion, dissolving, fortification, storage facilities, and emission control equipment associated with the recovery cycle.

(6) "Sulfite pulping mill" means any manufacturing facility which uses a cooking liquor consisting of sulfurous acid, a sulfite or bisulfite salt alone or in any combination, with or without additional mechanical refining or delignification to produce pulp, pulp products or cellulose from wood fibers. For the purposes of this regulation "sulfite pulping mill" is equivalent to "source."

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-021, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.-331. 85-06-048 (Order 84-50), § 173-410-021, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-410-021, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-021, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-050 (Order DE 80-8), § 173-410-021, filed 3/21/80; Order DE 76-36, § 173-410-021, filed 12/28/76. Formerly WAC 18-38-021.]

WAC 173-410-035 Emission standards for sources emitting hazardous air pollutants. The provisions of WAC 173-400-075 "Emission standards for sources emitting hazardous air pollutants" shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-035, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-18-010 (Order DE 83-22), § 173-410-035, filed 8/26/83.]

WAC 173-410-040 Emission standards. In addition to the general applicability of chapters 173-400 and 173-490 WAC to all emission sources; no sulfite pulping mill shall cause or permit air contaminant emissions in excess of the limits listed below. Specific emission standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.

(1) Sulfur dioxide.

(a) The total average daily emissions from a sulfite pulping mill, or a portion of a sulfite pulping mill which practices incineration of the spent sulfite liquor, shall not exceed ten grams of sulfur dioxide per kilogram (twenty pounds per ton) of air dried, unbleached pulp produced.

(b) The total average daily emissions from a sulfite pulping mill, or a portion of a sulfite pulping mill that does not incinerate the spent sulfite liquor, shall not exceed two grams of sulfur dioxide per kilogram (four pounds per ton) of air dried, unbleached pulp produced.

(c) The blow system emissions shall not exceed 0.1 grams of sulfur dioxide per minute, on a fifteen minute average, per kilogram (0.2 pounds per ton) of air dried, unbleached pulp discharged from the digester.

(d) Emissions from the recovery system and acid plant shall not exceed 800 ppm of sulfur dioxide for any hourly average.

(e) Emissions from recovery systems constructed after January 24, 1972, shall not exceed 300 ppm of sulfur dioxide for any hourly average.

(f) Emissions from any emissions unit, other than a recovery system, a blow system or an acid plant, shall not exceed 1000 ppm of sulfur dioxide, corrected to seven percent oxygen in the case of combustion unit, for any hourly average.

(2) Particulate.

(a) Emissions of particulate from recovery systems constructed before January 24, 1972, shall not exceed 0.23 grams per dry cubic meter of exhaust at standard conditions (0.10 grains/dscf) corrected to eight percent oxygen.

(b) Emissions of particulate matter from recovery systems constructed after January 24, 1972, shall not exceed 0.14 grams per dry cubic meter of exhaust at standard conditions (0.06 grains/dscf) corrected to eight percent oxygen.

(c) The emission of particulates from emissions units other than acid plants or recovery systems shall not exceed the following maximums:

(i) 0.46 grams per dry cubic meter at standard conditions (0.2 grains/dscf) corrected to seven percent oxygen, for units which combust wood and wood residue to produce steam and which commenced construction prior to January 1, 1983.

(ii) 0.12 grams per dry cubic meter at standard conditions (0.05 grains/dscf) corrected to seven percent oxygen, for units which combust fuel other than wood and wood residue to produce steam, and which commenced construction after January 1, 1983.

(iii) 0.23 grams per dry cubic meter at standard conditions (0.1 grains/dscf) corrected to seven percent oxygen in the case of combustion units, for units not classified under (c)(i) or (ii) of this subsection.

(3) Opacity. No person shall cause or allow the emission of a plume from a recovery system or acid plant which has an average opacity greater than thirty-five percent, for more than six consecutive minutes in any sixty minute period, except as allowed per RCW 70.94.331 (2)(c).

(4) Operation and maintenance. At all times, including periods of abnormal operations and upset conditions, owners and operators shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(5) No recovery system shall emit total reduced sulfur (TRS) gases in excess of 17.5 ppm for a daily average.

(6) More restrictive limits. Ecology may set more restrictive emissions limits than the specific limits set in this chapter (after public involvement and hearing), if there is reason to believe that the emission(s) from a source is a cause of public nuisance or a cause of violation of ambient air quality standards. The source shall, within ninety days from notification of the more restrictive limits, achieve operation that will prevent further recurrence of the nuisance or violation.

(7) Source testing. To demonstrate compliance with this chapter, the provisions of WAC 173-400-105 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-410-040, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-040, filed 8/20/80.]

WAC 173-410-045 Creditable stack height and dispersion techniques. The provisions of WAC 173-400-200 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-045, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-410-045, filed 12/16/87.]

WAC 173-410-062 Monitoring requirements. Each mill shall conduct routine monitoring of emissions in accordance with a program that has been approved by ecology. Results of monitoring shall be reported within fifteen days of the end of each calendar month and shall include data as follows:

(1) For the recovery system and acid plant:

(a) The average daily emissions of sulfur dioxide expressed as grams SO_2 per kilogram of air dried, unbleached pulp produced and the kilograms of SO_2 per day.

(b) Daily average concentration of sulfur dioxide.

(c) The date, time and concentration for each sulfur dioxide emission violation and the total number of hours that exceed the standard.

(d) The results of particulate tests conducted during the month.

(2) For the blow system:

(a) The grams of sulfur dioxide per minute, on a fifteen minute average, per kilogram of air dried, unbleached pulp discharged from the digester.

(b) The average daily production of air dried, unbleached pulp.

(3) Each mill shall furnish, upon request of ecology, such other pertinent data required to evaluate the mill's emission control program.

(4) All measurements shall be made in accordance with WAC 173-400-105.

(5) Each mill shall be required to establish a program approved by ecology for continuous opacity monitoring to demonstrate compliance with WAC 173-410-040(3) and to report the results to ecology in a format and on a schedule set by regulatory order. If equipment for continuous monitoring of opacity is not available, continuous monitoring of operating parameters may be required as an alternate until continuous opacity monitoring equipment is available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-062, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-062, filed 8/20/80.]

WAC 173-410-067 Report of startup, shutdown, breakdown or upset conditions. The provisions of WAC 173-400-105(5) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-067, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-410-067, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-067, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-050 (Order DE 80-8), § 173-410-067, filed 3/21/80.]

WAC 173-410-071 Emission inventory. The provisions of WAC 173-400-105(1) shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-071, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 89-02-055 (Order 88-39), § 173-410-071, filed 1/3/89; 83-09-036 (Order DE 83-13), § 173-410-071, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-071, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.-011, 70.94.152, and 70.94.331. 80-04-050 (Order DE 80-8), § 173-410-071, filed 3/21/80.]

WAC 173-410-086 New source review (NSR). The provisions of WAC 173-400-110 shall apply to all new sources and emissions units to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-086, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-410-086, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-061 (Order DE 80-16), § 173-410-086, filed 8/20/80. Statutory Authority: RCW 43.21A.080, 70.94.011, 70.94.152, and 70.94.331. 80-04-050 (Order DE 80-8), § 173-410-086, filed 3/21/80.]

WAC 173-410-087 Prevention of significant deterioration (PSD). The provisions of WAC 173-400-141 shall apply to all new major sources and major modifications to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-087, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-410-087, filed 12/16/87.]

WAC 173-410-100 Special studies. Ecology may require such additional special studies relevant to process emissions and establish completion dates as it finds necessary.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-410-100, filed 2/19/91, effective 3/22/91.]

Chapter 173-415 WAC
PRIMARY ALUMINUM PLANTS

WAC

173-415-010	Statement of purpose.
173-415-015	Applicability.
173-415-020	Definitions.
173-415-030	Emission standards.
173-415-060	Monitoring and reporting.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-415-040 Standards of performance. [Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-020 (Order DE 82-21), § 173-415-040, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-040, filed 8/14/80.

Formerly WAC 18-52-051.] Repealed by 05-17-169 (Order 05-07), filed 8/23/05, effective 9/23/05. Statutory Authority: RCW 70.94.395 and 70.94.331.

173-415-041 Emission requirements of prior jurisdictions. [Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-415-041, filed 3/6/85.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.

173-415-045 Creditable stack height and dispersion techniques. [Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-045, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-415-045, filed 12/16/87.] Repealed by 05-17-169 (Order 05-07), filed 8/23/05, effective 9/23/05. Statutory Authority: RCW 70.94.395 and 70.94.331.

173-415-050 New source review (NSR). [Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-050, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-415-050, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-050, filed 8/14/80. Formerly WAC 18-52-056.] Repealed by 05-17-169 (Order 05-07), filed 8/23/05, effective 9/23/05. Statutory Authority: RCW 70.94.395 and 70.94.331.

173-415-051 Prevention of significant deterioration (PSD). [Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-051, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-415-051, filed 12/16/87.] Repealed by 05-17-169 (Order 05-07), filed 8/23/05, effective 9/23/05. Statutory Authority: RCW 70.94.395 and 70.94.331.

173-415-070 Report of startup, shutdown, breakdown or upset conditions. [Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-070, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-415-070, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-070, filed 8/14/80. Formerly WAC 18-52-077.] Repealed by 05-17-169 (Order 05-07), filed 8/23/05, effective 9/23/05. Statutory Authority: RCW 70.94.395 and 70.94.331.

173-415-080 Emission inventory. [Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-080, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 89-02-055 (Order 88-39), § 173-415-080, filed 1/3/89; 83-09-036 (Order DE 83-13), § 173-415-080, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-080, filed 8/14/80. Formerly WAC 18-52-086.] Repealed by 05-17-169 (Order 05-07), filed 8/23/05, effective 9/23/05. Statutory Authority: RCW 70.94.395 and 70.94.331.

173-415-090 Operating permit. [Statutory Authority: RCW 70.94.-331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-090, filed 8/14/80.] Repealed by 83-09-036 (Order DE 83-13), filed 4/15/83. Statutory Authority: Chapters 43.21A and 70.94 RCW.

WAC 173-415-010 Statement of purpose. These rules are enacted under the provisions of the Washington Clean Air Act as amended (RCW 70.94.395) to:

(1) Assume state jurisdiction over emissions from primary aluminum reduction plants to provide for the systematic control of air pollution in this industry and for the proper development of the state's natural resources; and

(2) Establish technically feasible and reasonably attainable standards and revise such standards as new information and better technology are developed and become available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-010, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.-331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-010, filed 8/14/80. Formerly WAC 18-52-010.]

WAC 173-415-015 Applicability. (1) In addition to the general applicability of chapter 173-400 WAC to all emission sources, all primary aluminum reduction plants are required to meet the emissions standards of this chapter. Specific emissions standards and requirements listed in this chapter shall supersede the general emissions standards and general requirements in chapter 173-400 WAC.

(2) All primary aluminum reduction plants are required to meet applicable National Emissions Standards for Hazardous Air Pollutants (NESHAPs). New primary aluminum reduction plants must meet federal New Source Performance Standards (NSPS).

(3) In this rule, whenever a federal regulation is cited, the most recent version that has been adopted into Washington Administrative Code is the version of the federal regulation that is referenced. These most recent adoptions by reference can be found in chapter 173-400 WAC.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 05-17-169 (Order 05-07), § 173-415-015, filed 8/23/05, effective 9/23/05.]

WAC 173-415-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter, shall have the following meanings:

(1) "Potline" means a single discreet group of electrolytic reduction cells connected in series, in which alumina is reduced to form aluminum.

(2) "Primary aluminum reduction plant" means any facility manufacturing aluminum by electrolytic reduction. For the purposes of this regulation "primary aluminum reduction plant" is equivalent to "source."

(3) "Primary emission control system" means the equipment used to capture the gases and particulate matter evacuated directly from the reduction cell and the emission control device(s) used to remove pollutants prior to discharge of the cleaned gas to the atmosphere. A roof scrubber is not part of the primary control system.

(4) "Total fluorides (TF)" means elemental fluorine and all fluoride compounds as measured by Methods 13A, 13B or 14A in 40 CFR Part 60 Appendix A or by an EPA approved alternative method.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 05-17-169 (Order 05-07), § 173-415-020, filed 8/23/05, effective 9/23/05. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-020, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331. 85-06-048 (Order 84-50), § 173-415-020, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-415-020, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-020, filed 8/14/80. Formerly WAC 18-52-021.]

WAC 173-415-030 Emission standards. (1) Fluoride. The emission of total fluorides from a primary aluminum reduction plant shall meet the MACT requirements specified in 40 CFR 63 Subpart LL. If the department has reason to believe that adverse fluoride impacts are occurring in violation of chapter 173-481 WAC, a primary aluminum reduction plant must establish, in response to a request from the department, an ambient air and/or forage monitoring program approved by the department as required by WAC 173-481-150.

(2) Particulate. The total emission of particulate matter to the atmosphere from the reduction process (potlines) shall be reduced to the lowest level consistent with reasonably available control technology (RACT) for primary aluminum reduction plants. The emission of solid particulate shall not exceed 7.5 grams per kilogram (fifteen pounds per ton) of aluminum produced on a daily basis. Aluminum produced shall be calculated by the method used to determine aluminum production rate in 40 CFR 63.847 (e)(6).

(3) Visible emissions. Visible emissions from any emissions unit in a primary aluminum reduction plant shall not exceed an average twenty percent opacity for more than six consecutive minutes in any sixty minute period. This provision shall not apply:

(a) When the presence of uncombined water is the only reason for the opacity of the plume to exceed twenty percent; or

(b) When an alternate opacity limit has been established under RCW 70.94.331 (2)(c).

(4) Fugitive emissions. Each primary aluminum reduction plant shall use RACT to prevent fugitive emissions. Fugitive dust is included in fugitive emissions.

(5) Sulfur dioxide.

(a) Total emissions of sulfur dioxide from all emissions units shall not exceed thirty grams of sulfur dioxide per kilogram of aluminum produced on a monthly average (sixty pounds per ton). Those primary aluminum plants which were in excess of the above sulfur dioxide limit on January 1, 1978, will be allowed to emit at the January 1, 1978, level of emissions provided that the owners or operators did demonstrate to ecology by July 1, 1981, by use of modeling and ambient measurements, that the emissions will not cause the ambient standard to be exceeded, and that the limits are placed in a regulatory order(s).

(b) In no case shall any plant cause or permit the emission of a gas containing sulfur dioxide in excess of one thousand parts per million corrected to dry standard conditions for an hourly average.

(6) Operation and maintenance (O&M). At all times, including periods of abnormal operation and upset conditions, owners and operators shall, to the extent practicable, maintain and operate an affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The means for demonstrating ongoing compliance with good O&M may include, but not be limited to: More frequent source testing, prescriptive procedures or inspections, control values for emissions at values less than the applicable regulatory requirements and that function as an investigative trigger rather than as a limit, collection and efficiency requirements, or the use of CEMs.

(7) Source testing. To demonstrate compliance with this chapter, the testing provisions of chapter 173-400 WAC and MACT requirements as specified in 40 CFR 63 Subpart LL shall be used as applicable.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 05-17-169 (Order 05-07), § 173-415-030, filed 8/23/05, effective 9/23/05. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-030, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. 83-09-036 (Order DE 83-13), § 173-415-030, filed 4/15/83. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-028 (Order DE 80-17), § 173-415-030, filed 8/14/80. Formerly WAC 18-52-031.]

WAC 173-415-060 Monitoring and reporting. (1) When requested by the department, each primary aluminum reduction plant shall conduct routine monitoring of emissions, ambient air, and forage in accordance with a program that has been approved by the department of ecology. Results of monitoring shall be reported within thirty days of the end of each calendar month. In addition to the information required by the Primary Aluminum MACT, 40 CFR 63 Subpart LL, the approved program shall include data as follows:

(a) Particulate emissions: Results of all emission sampling conducted during the month for particulates, shall be expressed in units used in the applicable requirements or in units specified in the monitoring plan. The method of calculating pounds per ton shall be as specified in the approved monitoring programs. For each potline, particulate data shall be reported as total particulates and percentage of fluoride ion contained therein. For other units at a primary aluminum reduction plant, particulate data shall be reported as total particulates.

Compliance with WAC 173-415-030(2) shall be determined by measurements of emissions from the potline primary control system plus measurements of emissions from the potline roof.

(b) Fluoride emissions: Results of all sampling conducted during the month for fluoride emissions shall be reported in pounds of total fluoride per ton of aluminum produced. Aluminum produced shall be calculated by the method used to determine aluminum production rate in 40 CFR 63.847 (e)(6).

(c) Other emission and ambient air data as specified in the approved monitoring program.

(2) Other data: Each primary aluminum reduction plant shall furnish other data requested by the department of ecology to evaluate a plant's emission control program.

(3) Change in raw materials or fuel: Any change or series of changes in raw material or fuel which results in a cumulative increase in emissions of sulfur dioxide of five hundred tons per year or more over that stated in the 1979 emissions inventory shall require the submittal of sufficient information to the department of ecology so that the effect upon ambient concentrations of sulfur dioxide can be determined. The department of ecology may issue regulatory orders requiring controls to reduce the effect of such increases.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 05-17-169 (Order 05-07), § 173-415-060, filed 8/23/05, effective 9/23/05. Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-415-060, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.-395. 80-11-028 (Order DE 80-17), § 173-415-060, filed 8/14/80. Formerly WAC 18-52-061 and 18-52-071.]

Chapter 173-420 WAC

CONFORMITY OF TRANSPORTATION ACTIVITIES TO AIR QUALITY IMPLEMENTATION PLANS

WAC

173-420-010	Title.
173-420-020	Purpose and intent.
173-420-030	Scope.
173-420-040	Definitions.
173-420-050	General provisions.
173-420-055	SIP impacts on conformity determinations.
173-420-060	General criteria.
173-420-065	Specific criteria.
173-420-070	Air quality analysis procedures.
173-420-080	Transportation plan conformity.
173-420-090	Transportation improvement program conformity.
173-420-100	Transportation project conformity.
173-420-110	Exempt projects.
173-420-120	Projects exempt from regional analysis.

WAC 173-420-010 Title. This chapter shall be known as the "Washington State Clean Air Conformity Act" hereinafter as "this chapter."

[Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-010, filed 1/22/93, effective 2/22/93.]

WAC 173-420-020 Purpose and intent. This chapter implements RCW 70.94.037 of the Washington Clean Air Act (chapter 70.94 RCW). The law requires the departments of ecology and transportation to develop criteria and guidance for demonstrating and assuring conformity of transportation plans, programs, and projects to the purpose of the state implementation plan for attaining and maintaining the national ambient air quality standards and meeting the requirements of the federal Clean Air Act (42 U.S.C. 7401) as amended. This chapter is jointly adopted by the departments of ecology and transportation and can be amended only by agreement between the departments. This chapter sets forth minimum requirements for evaluating transportation plans, programs, and projects for conformity with the purpose and intent of state implementation plans for air quality. This chapter clarifies state policy and procedures to achieve national ambient air quality standards, foster long-range planning for attainment and maintenance of those standards, provide at least as stringent requirements as the federal conformity regulation (40 C.F.R. Part 51 Subpart T), provide a basis for evaluating conformity determinations, and guide state, regional, and local agencies in making conformity determinations.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-020, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-020, filed 1/22/93, effective 2/22/93.]

WAC 173-420-030 Scope. (1) Conformity determinations shall be made for the adoption, acceptance, approval, funding, or support of all transportation plans, improvement programs, and projects located in or affecting nonattainment and maintenance areas for any criteria pollutants.

(2) Regional transportation plans that contain either wholly or partially a nonattainment area for any criteria pollutant shall comply with this chapter. Transportation plans that do not contain either wholly or partially a nonattainment or maintenance area are exempt from this chapter.

(3) Transportation improvement programs shall comply with this chapter. The regional transportation improvement program shall include projects on the regional transportation system; transportation control measures of local government six-year street and road programs developed pursuant to RCW 36.81.121 and 35.77.010; and transit management plans developed pursuant to RCW 35.58.2795. Transportation improvement programs for areas that do not contain either wholly or partially a nonattainment or maintenance area for any criteria pollutants are exempt from this chapter.

(4) Projects contained in the regional transportation improvement program of a metropolitan area boundary and within a county that either wholly or partially contains a nonattainment area shall comply with this chapter. Projects not on the regional transportation system shall be considered to comply with the general provisions of this chapter; however they must be evaluated by the lead agency during compliance with the requirements of the State Environmental Policy Act (SEPA), (chapter 197-11 WAC), to determine if a conformity analysis and determination based upon this chapter is warranted. Preservation or maintenance projects in WAC 173-420-110 are exempt from the conformity requirements of this chapter.

(5) Projects on the regional transportation system that are located outside a nonattainment area but affect traffic or air quality of a nonattainment area shall comply with WAC 173-420-060, 173-420-065 and 173-420-100.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-030, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-030, filed 1/22/93, effective 2/22/93.]

WAC 173-420-040 Definitions. The following definitions will apply unless a different meaning is clearly required by context:

"Criteria pollutants" means air pollutants for which a NAAQS has been promulgated under the federal Clean Air Act (40 C.F.R. 50) and their precursors and, for this chapter, applies only to those pollutants for which nonattainment or maintenance areas have been designated.

"Action scenario" means the future transportation system determined pursuant to the federal transportation conformity regulation (40 C.F.R. Part 51 Subpart T) in a year that is being analyzed for conformity that will result from the implementation of the proposed plan and/or transportation improvement program.

"Baseline scenario" means the transportation system determined pursuant to the federal transportation conformity regulation (40 C.F.R. Part 51 Subpart T) in a year that is being analyzed for conformity that would result from the plan, improvement program, and facilities, services, and activities that are in effect in the year the conformity analysis is being conducted.

"Lead agency" means the agency with primary responsibility for ensuring plan, program, or project compliance with SEPA, (chapter 197-11 WAC).

"Maintenance area" means any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainments subject to the requirement to develop a

maintenance plan under section 175A of the CAA, as amended.

"Metropolitan area boundary" (MAB) means an area determined by an agreement between the governor and the MPO as defined in 23 U.S.C. 134.

"Metropolitan planning organization" (MPO) means an organization for each urbanized area of more than fifty thousand people as defined in 23 U.S.C. 134, whose responsibilities include development of transportation plans and improvement programs for those areas.

"Motor vehicle emission budget" means that portion of the total allowable emission defined in a state implementation plan for a certain date for the purpose of meeting attainment or maintenance demonstrations for any criteria pollutant or its precursors, that is allocated by the SIP to highway and transit vehicles.

"National ambient air quality standards" (NAAQS) means air quality standards promulgated for criteria pollutants under the federal Clean Air Act (40 C.F.R. 50). The standard for carbon monoxide is thirty-five parts per million over a one-hour period or nine parts per million over an eight-hour period. The standard for ozone is 0.12 parts per million over a one-hour period. The standard for PM10 is fifty $\mu g/m^3$ annual arithmetic mean or 150 $\mu g/m^3$ maximum twenty-four hour average concentration.

"Nonattainment area" means the geographic area designated as not meeting the NAAQS for a criteria pollutant. The boundaries are proposed by the governor, approved by the federal Environmental Protection Agency (EPA), and include that area required to implement plans and programs for attainment of the NAAQS published in the federal register.

"Regional transportation system" means the transportation system identified by an MPO in development of planning requirements under the federal Intermodal Surface Transportation Efficiency Act (ISTEA) (P.L. 102-240).

"Regionally significant project" means a transportation project that is on a facility which serves regional transportation needs and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative for regional highway travel.

"State implementation plan" (SIP) means a plan as defined in section 302(q) of the CAA and which implements the relevant requirements of the CAA that is intended to eliminate or reduce the severity and number of violations of the national ambient air quality standards and expeditiously achieve those standards, and includes the revision referred to as the maintenance plan that provides for the maintenance of the NAAQS in the area concerned for at least ten years after the redesignation of a nonattaiment area to an attainment area.

"Transportation control measure" (TCM) means a transportation project, program, or action listed in the state implementation plan that will aid in elimination or reduction of the severity or number of violations of the national ambient air quality standards and help expeditiously attain and maintain those standards.

"Transportation improvement program" (TIP) means a schedule of intended transportation improvements (or continuation of current activities) as required in section 134 of Title 23 U.S.C. A TIP shall include projects within the MPO's area that are proposed for funding under Title 23 U.S.C. and the federal Transit Act, projects that are part of or consistent with the transportation plan as previously defined, and transportation control measures that are included in the state implementation plan for meeting NAAQS.

"Transportation plan" means a document that is required under the regulation implementing section 134 of Title 23 U.S.C., and section 8 of the federal Transit Act, and is intended to foster a continuing, cooperative, and comprehensive planning process.

"Transportation projects" means an action that expends funds on or approves physical and/or operational alterations to a transportation system.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-040, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-040, filed 1/22/93, effective 2/22/93.]

WAC 173-420-050 General provisions. (1) Conformity review will include transportation plans, improvement programs, and projects on the regional transportation system. The review utilizes requirements from the federal Clean Air Act, the Washington Clean Air Act (chapter 70.94 RCW), the Growth Management Act (GMA) (chapter 36.70A RCW), the State Environmental Policy Act (SEPA) (chapter 43.21C RCW), and the federal ISTEA (P.L. 102-240).

(2) Identification of transportation plans and improvement programs that affect nonattainment areas, identification of projects on the regional transportation system, and coordination and consistency among plans shall be accomplished through the planning processes required by the GMA and the ISTEA.

(3) Transportation plans and improvement programs on the regional transportation system within metropolitan area boundaries that contain nonattainment areas shall be coordinated through the MPO using the regional planning process required by ISTEA (P.L. 102-240).

(4) Transportation control measures shall be identified and incorporated into plans and programs through the SIP process required by the federal Clean Air Act.

(5) Early and continuous public participation shall be a component of the conformity process pursuant to requirements of the GMA (chapter 36.70A RCW) and ISTEA (P.L. 102-240). At least one public hearing shall be held on transportation plan and improvement program conformity determinations. Such hearings may be combined with general hearings required for the transportation plans or improvement programs. Public comment on project conformity shall be completed as part of the SEPA process (chapter 197-11 WAC).

(6) Disagreement over a conformity determination for a plan or program shall be presented in writing to the MPO and shall identify the changes considered necessary to achieve conformity. The MPO shall convene a meeting or meetings with the contesting party, parties of record, consulted agencies, and the state departments of ecology and transportation within fifteen working days of receipt of the written document contesting the determination. The meeting shall be to review the written reasons for contesting the determination.

A written decision stating the changes, if any, in the conformity determination on the plan or program shall be provided to each of the meeting participants. The department of ecology or air pollution control authority may appeal the written decision, provided a written appeal to the governor is filed within fourteen calendar days of the written decision.

(7) Disagreements on project conformity findings shall be addressed through the SEPA process (chapter 197-11 WAC).

(8) If the classification or designation of a nonattainment or maintenance area changes, the next consultation meeting required under WAC 173-420-070 shall incorporate the criteria in the federal transportation conformity regulation (40 C.F.R. Part 93 Subpart A and 40 C.F.R. Part 51 Subpart T) that apply to the new classification or designation for use in all subsequent conformity determinations.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-050, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-050, filed 1/22/93, effective 2/22/93.]

WAC 173-420-055 SIP impacts on conformity determinations. (1) Until EPA redesignates a nonattainment area to an attainment area the status of the applicable SIP shall have the following impact on the conformity of plans, TIPs and projects:

(2) If the applicable SIP is not submitted by the deadline for submittal:

(a) Four months after the applicable deadline no new plan or TIP shall be found to conform; and

(b) Twelve months after the applicable deadline the conformity status of the existing plan and TIP shall lapse and no new project-level conformity determinations shall be made.

(3) If the SIP submittal for a PM10 NAA or for a CO NAA with a design value of 12.7 ppm or greater is found to be incomplete by EPA:

(a) If the incompleteness finding is because measures committed to in the SIP are not in an enforceable form as required by section 110 (a)(2)(A) of the CAA then twelve months after the finding the conformity status of the existing plan and TIP shall lapse;

(b) Four months after the finding no new plan or TIP shall be found to conform; and

(c) Twelve months after the finding the conformity status of the existing plan and TIP shall lapse and no new project-level conformity determinations shall be made.

(4) For a complete SIP for a PM10 NAA or for a CO NAA with a design value of 12.7 ppm or greater or for a maintenance plan disapproved by EPA:

(a) No new plan, TIP or project shall be found to conform;

(b) If the disapproval is because the measures committed to in the SIP are not in an enforceable form as required by section 110 (a)(2)(A) of the CAA then twelve months after the disapproval the conformity status of the existing plan and TIP shall lapse; and

(c) Four months after the disapproval the conformity status of the existing plan and TIP shall lapse and no new project-level conformity determinations shall be made.

(5) If a SIP submitted for a marginal ozone NAA or a CO NAA with a design value less than 12.7 ppm contains control strategies then the requirements of subsections (3) and (4) of this section shall apply.

(6) The provisions of subsections (2), (3), (4), and (5) of this section shall be removed upon receipt of a letter from the EPA regional administrator acknowledging remedying of the deficiencies.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-055, filed 8/25/95, effective 9/25/95.]

WAC 173-420-060 General criteria. (1) Transportation plans, improvement programs, and projects shall meet the purpose and intent of the current SIP of eliminating or reducing the severity and number of violations of the NAAQS and expeditiously achieving those standards, comply with the federal transportation conformity regulations, (40 C.F.R. Part 51 Subpart T), and shall not preclude the implementation of any transportation control measures identified in the SIP.

(2) All transportation plans, improvement programs, and projects shall comply with the criteria in subsection (3) of this section, in addition to the specific criteria contained in WAC 173-420-080, 173-420-090, and 173-420-100, respectively.

(3) Transportation plans, improvement programs, or projects shall not:

(a) Cause or contribute to any new violation of the NAAQS;

(b) Increase the frequency or severity of any existing violation of the NAAQS; or

(c) Delay the timely attainment of the NAAQS.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-060, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-060, filed 1/22/93, effective 2/22/93.]

WAC 173-420-065 Specific criteria. (1) All transportation plans, improvement programs, and projects shall comply with the criteria in subsections (2), (3), and (4) of this section.

(2) At all times the following criteria shall be met:

(a) The conformity determination for plans, TIPs, and projects shall:

(i) Be based on the latest planning assumptions.

(ii) Be based on the latest EPA approved emission estimation model available.

(iii) Be made according to the consultation procedures contained in WAC 173-420-070.

(b) The plan and TIP shall provide for the timely implementation of TCMs from the SIP or maintenance plan.

(c) There shall be a currently conforming plan and currently conforming TIP at the time of project approval.

(d) The project shall come from a conforming plan and conforming TIP.

(e) In CO and PM10 nonattainment and maintenance areas the project shall not cause or contribute to any new localized CO or PM10 violations or increase the frequency or severity of any existing CO or PM10 violations.

(f) In PM10 nonattainment and maintenance areas the project shall comply with PM10 measures in the applicable SIP or maintenance plan.

(3) Until approval of an applicable SIP by EPA the following criteria shall also be met:

(a) Plans and TIPs:

(i) In O3 nonattainment areas the action scenario emissions shall be less than the baseline scenario emissions.

(ii) In O3 nonattainment areas the action scenario emissions shall be less than the 1990 emissions.

(iii) In all CO nonattainment areas the action scenario emissions shall be less than the baseline scenario emissions.

(iv) In all CO nonattainment areas the action scenario emissions shall be less than the 1990 emissions.

(v) In CO nonattainment areas with a design value of 12.7 ppm or greater, the emissions shall be less than or equal to the motor vehicle emissions budget.

(vi) In PM10 nonattainment areas the emissions shall be less than or equal to the motor vehicle emissions budget.

(vii) In PM10 nonattainment areas the action scenario emissions shall be less than or equal to the baseline scenario emissions or the 1990 emissions.

(b) Projects in CO nonattainment areas shall eliminate or reduce the severity and number of localized CO violations in the area substantially affected by the project.

(4) After approval of the SIP by EPA or when the maintenance plan is in effect the following criteria shall be met:

(a) The plan and TIP shall be consistent with the Motor Vehicle Emissions Budget (MVEB) in the applicable SIP or maintenance plan.

(b) No additional criteria are required for projects.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-065, filed 8/25/95, effective 9/25/95.]

WAC 173-420-070 Air quality analysis procedures. (1) Air quality analysis for transportation plans, programs, and projects shall be modeled for criteria pollutants using EPA and the federal Department of Transportation approved methods.

(2) Air quality analysis procedures and methodology used in determining conformity for transportation plans and improvement programs shall be determined through consultation with the MPO, the United States Department of Transportation and the Environmental Protection Agency, the state departments of ecology and transportation, the local air authority, and other interested representatives of the public. The consultation procedure for SIP and maintenance plan development in the applicable SIP shall be used for the consultation process required by this section. The consultation process shall also be used for determining research and data collection efforts, and regional transportation model development, events that will trigger new conformity determinations, the status of TCMs, significant changes in project design and scope, and projects which require PM10 analysis. The specific analysis procedures and methodology selected shall comply with this chapter, the federal transportation conformity regulation (40 C.F.R. Part 51 Subpart T), and the applicable SIP. Agreement on the methods and assumptions including modeling parameters, model accuracy, and the base year against which alternatives are compared, shall be reached on all programs and plans prior to the conformity determination. Procedures, methodologies, and input parameters shall be reviewed and updated at least once every two years under the direction of the departments of ecology and transportation. Such review shall occur prior to conformity determination of transportation plan or TIP revisions.

(3) Procedures, methodologies, and assumptions for project analysis shall be consistent with those procedures, methodologies, and assumptions developed for analysis of transportation plans and improvement programs in subsection (2) of this section.

(4) Each MPO shall conduct conformity analyses of the transportation plan and improvement program developed in its region.

(5) The lead agency shall be responsible for project conformity analysis.

(6) The impact of preferred alternative transportation plans, improvement programs, and projects shall be quantified and compared for compliance to the SIP requirements, and the requirements of WAC 173-420-060, and 173-420-065. If modeling does not indicate that the requirements of this section are met, mitigating measures shall be required and the plan, improvement program, or project remodeled. All else being equal, the alternative with the lowest concentration shall be chosen over all other alternatives.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-070, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-070, filed 1/22/93, effective 2/22/93.]

WAC 173-420-080 Transportation plan conformity. Transportation plans shall include policies and provisions that promote the reduction of criteria pollutants. Transportation plans shall identify those aspects of the existing transportation system whose modification offers the best opportunity for improving air quality. Transportation plans shall include descriptions of the existing and proposed transportation system in sufficient detail, to permit conformity determinations using the criteria in WAC 173-420-060 and 173-420-065. Plans shall be analyzed with regional emission analysis for criteria pollutants. Local plans that are consistent under RCW 47.80.030 with a conforming regional transportation plan are deemed to comply with this chapter provided that the requirements of WAC 173-420-050 are met. Upon a conformity finding by the MPO, the plan shall be submitted to the United States Department of Transportation for federal conformity determination.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-080, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-080, filed 1/22/93, effective 2/22/93.]

WAC 173-420-090 Transportation improvement program conformity. (1) This section applies to all transportation improvement programs that authorize purchase of right of way or that fund construction of projects on the regional transportation system within a metropolitan area boundary of any region that is contained either wholly or partially in a nonattainment area for each criteria pollutant. The metropolitan planning organization that has responsibility for such a program shall complete all program modeling as required herein and shall conduct an analysis to determine conformity with the current SIP. After a conformity finding by the MPO, the TIP shall be submitted to the United States Department of Transportation for federal conformity determination.

(2) The current SIP is the plan that has been adopted by the department of ecology and submitted to the United States

Environmental Protection Agency. Upon adoption of a new state implementation plan, a MPO may use the previous SIP for up to ninety days when making conformity determinations on new TIPs. Ninety days after adoption of a new SIP, MPOs shall use the current SIP when making conformity determinations for new TIPs.

(3) Transportation improvement programs shall comply with WAC 173-420-060. After the attainment year, projects contained in a transportation program shall not cause any violations of the NAAQS. Transportation improvement programs shall be consistent with a conforming transportation plan as described in WAC 173-420-080. Local improvement programs that are consistent with a conforming regional TIP are deemed to comply with this chapter provided that the requirements of WAC 173-420-050 are met.

(4) Metropolitan planning organizations shall update TIP conformity findings whenever the TIP is updated. Projects that are no longer current to the program, or that are no longer intended to begin construction within the period of the program, shall be removed from the conformity analysis.

(5) Transportation improvement programs that have been approved and found to conform to the state implementation plan before adoption of this chapter need not be updated until two years after the enactment of this chapter.

(6) The lead agency of each transportation project on the regional transportation system within the MPO's jurisdiction shall submit sufficient documentation to support the MPO's modeling efforts. This documentation shall include design speed, anticipated speed limit, number of lanes, and lane capacity as relevant for all transportation projects that must comply with WAC 173-420-100 and that are not exempted under WAC 173-420-110.

(7) The TIP shall include the status of each transportation control measure in the state implementation plan as an attached appendix. All transportation control measures shall be scheduled for implementation and funded for completion before the proposed attainment demonstration date for each criteria pollutant. Projects in the transportation improvement program shall not interfere with or cause a delay in the implementation of a transportation control measure. Those transportation control measures that are no longer viable shall be documented and removed from the status report.

[Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-090, filed 1/22/93, effective 2/22/93.]

WAC 173-420-100 Transportation project conformity. (1) This section applies to all transportation projects on the regional transportation system regardless of funding base within a metropolitan area boundary of any region that is contained either wholly or partially in a nonattainment area. Projects that are exempted from these requirements because they are deemed to have neutral impact on air quality are listed in WAC 173-420-110.

(2) Transportation projects shall meet the analysis requirements of this section before approval of plans, specifications, and estimates; before acquisition of right of way not exempted under WAC 173-420-110; and before expenditure of funds for construction. In no instance shall funds be obligated nor approvals granted that will commit a lead agency to construction of a project if the requirements of this section have not been met.

(3) Transportation projects on the regional transportation system that are located outside a nonattainment area but affect a nonattainment area shall meet the requirements of this section and SEPA (chapter 197-11 WAC). Such transportation projects need not come from a conforming transportation improvement program.

(4) Any temporary construction-related measures shall not prevent a conformity determination, but shall be subject to permit conditions to minimize pollution during construction.

(5) Transportation projects shall be modeled by the lead agency with the methodology determined in WAC 173-420-070. The lead agency shall provide sufficient documentation to demonstrate to the MPO that the requirements of this section are met. Such transportation projects shall be included in a conforming transportation improvement program as described in WAC 173-420-090.

(6) Transportation projects that are not on the regional transportation system and are located in a MAB with a conforming transportation plan and improvement program are deemed to comply with this chapter. Such projects may include, but are not limited to, intersection signalization and channelization, or construction of local or collector streets. In no instances shall the requirements of WAC 173-420-060 be contravened. Transportation projects that are not on a regional transportation system and are not located in a nonattainment area for criteria pollutants are deemed to comply with this chapter.

(7) Transportation projects that are included in a conforming transportation improvement program and that have completed the public comment period of the environmental review requirements of the SEPA or the NEPA before adoption of this chapter, are not required to comply with the conformity requirements of this chapter unless there are significant changes in the project scope.

[Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-100, filed 1/22/93, effective 2/22/93.]

WAC 173-420-110 Exempt projects. The following types of projects because of their nature, will not affect the outcome of any air quality analyses nor add any substance to those analyses and are exempted from all conformity requirements.

(1) Safety, preservation, or maintenance projects of the following type:

(a) Railroad/highway crossing signing;

(b) Pavement marking that does not add lanes or capacity;

(c) Hazard elimination program;

(d) Off-system road safety;

(e) Emergency relief;

(f) Shoulder improvements;

(g) Truck size and weight inspection stations;

(h) Safety improvement program;

(i) Railroad/highway crossing warning devices;

(j) Increasing sight distance that does not require changes in horizontal or vertical alignments;

(k) Guardrails, median barriers, crash cushions;

(l) Pavement resurfacing or rehabilitation;

(m) Widening narrow pavements or bridges (less than one travel lane);

(n) Noise attenuation;
(o) Fencing;
(p) Skid treatments;
(q) Safety roadside rest areas;
(r) Truck climbing lanes outside the urbanized area;
(s) Lighting improvements;
(t) Median additions;
(u) Emergency truck pullovers.
(2) Mass transit projects of the following type:
(a) Purchase of office, shop, and operating equipment for existing facilities;
(b) Purchase of operating equipment for vehicles, including ferries, trains, and buses;
(c) Construction or renovation of power, signal, and communication systems;
(d) Operating assistance;
(e) Rehabilitation of transit vehicles, including buses, ferries, and trains;
(f) Reconstruction or renovation of transit buildings and structures;
(g) Construction of small passenger shelters and information/ticketing kiosks;
(h) Rehabilitation or reconstruction of track structures, track, and trackbed in existing right of way;
(i) Noise attenuation;
(j) Purchase of vehicles to replace existing vehicles or for minor expansions of fleets to provide new service (less than five percent per year);
(k) Construction of new vehicle storage and maintenance facilities;
(l) Purchase of support vehicles.
(3) Air quality projects of the following type:
(a) Continuation of rideshare and vanpooling promotion activities at current levels;
(b) Bicycle projects;
(c) Pedestrian facilities.
(4) Other projects of the following type:
(a) Acquisition of scenic easements;
(b) Planting and landscaping;
(c) Sign removal;
(d) Wetland mitigation, fish passage mitigation, and other environmental mitigation not related to air quality;
(e) Historical and cultural markers;
(f) Preliminary engineering through design, provided that funds are not expended or assurance is not made that will commit to the construction of a project;
(g) Access permits except when there is a break in full, modified, or partial access control;
(h) Advanced land acquisitions that do not influence the environmental assessment of a project, the decision of the need to construct the project, or the selection of project design or location;
(i) Planning and technical studies that do not commit to project implementation;
(j) Training and research programs;
(k) Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-110, filed 8/25/95, effective 9/25/95. Statutory Authority: Chapter 70.94 RCW and RCW 70.94.037. 93-04-006 (Order 92-07), § 173-420-110, filed 1/22/93, effective 2/22/93.]

WAC 173-420-120 Projects exempt from regional analysis. The following types of projects because of their nature, will not affect the outcome of regional air quality emissions analyses nor add substance to those analyses and are exempted from regional conformity analysis. Project level conformity analysis is required for these types of projects.
(1) Intersection channelization projects;
(2) Intersection signalization projects at individual intersections;
(3) Interchange reconfiguration projects;
(4) Changes in vertical and horizontal alignment;
(5) Truck size and weight inspection stations;
(6) Bus terminals and transfer points.

[Statutory Authority: Chapter 70.94 RCW and 40 CFR Part 51 Subpart T. 95-18-022 (Order 94-31), § 173-420-120, filed 8/25/95, effective 9/25/95.]

Chapter 173-421 WAC
MOTOR VEHICLE EMISSION CONTROL SYSTEMS

WAC

173-421-010 Purpose.
173-421-020 Assumption of jurisdiction and applicability.
173-421-030 Definitions.
173-421-100 Emission control systems.

WAC 173-421-010 Purpose. This chapter promulgated under RCW 70.94.305 and 70.94.331 establishes requirements to preserve emission control equipment installed on motor vehicles.

[Statutory Authority: Chapter 70.94 RCW. 87-19-078 (Order 87-17), § 173-421-010, filed 9/16/87.]

WAC 173-421-020 Assumption of jurisdiction and applicability. The department finds that the prevention and control of air pollution from motor vehicles should be regulated on a statewide basis and, hereby assumes jurisdiction over motor vehicles for the purpose of controlling air contaminant emissions from the operation of such motor vehicles.

[Statutory Authority: Chapter 70.94 RCW. 87-19-078 (Order 87-17), § 173-421-020, filed 9/16/87.]

WAC 173-421-030 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings; general terms common with other chapters of Title 173 WAC as defined in chapter 173-403 WAC, and terms specific to motor vehicle emission control systems as follows:
"Motor vehicle" means a self-powered operating vehicle or one capable of operating, designed to transport people or property, and of a type required to be licensed for operation on public highways.

[Statutory Authority: Chapter 70.94 RCW. 87-19-078 (Order 87-17), § 173-421-030, filed 9/16/87.]

WAC 173-421-100 Emission control systems. A person shall not remove or render inoperable any component or change any element of design of a motor vehicle including

adjustments outside the range of manufacturer's specifications that could affect the amount of air contaminants emitted from that vehicle subject to the following conditions:

(1) Components of emission control systems may be disassembled and assembled for the purpose of repair and maintenance. These components or elements of design shall be restored to proper working order when they are repaired or maintained.

(2) When components of emission control systems require replacement they may be removed and replaced with a part intended by the vehicle manufacturer as a replacement part for that specific vehicle. Under circumstances established by the United States Environmental Protection Agency, an aftermarket replacement part may be used. A replaced part shall be installed and adjusted so that it is in proper working order.

[Statutory Authority: Chapter 70.94 RCW. 87-19-078 (Order 87-17), § 173-421-100, filed 9/16/87.]

Chapter 173-422 WAC
MOTOR VEHICLE EMISSION INSPECTION

WAC

173-422-010 Purpose.
173-422-020 Definitions.
173-422-030 Vehicle emission inspection requirement.
173-422-031 Vehicle emission inspection schedules.
173-422-035 Registration requirements.
173-422-040 Noncompliance areas.
173-422-050 Emission contributing areas.
173-422-060 Gasoline vehicle emission standards.
173-422-065 Diesel vehicle exhaust emission standards.
173-422-070 Gasoline vehicle exhaust emission testing procedures.
173-422-075 Diesel vehicle inspection procedure.
173-422-090 Exhaust gas analyzer specifications.
173-422-095 Exhaust opacity testing equipment.
173-422-100 Testing equipment maintenance and calibration.
173-422-120 Quality assurance.
173-422-130 Inspection fees.
173-422-145 Fraudulent certificates of compliance/acceptance.
173-422-160 Fleet and diesel owner vehicle testing requirements.
173-422-170 Exemptions.
173-422-175 Fraudulent exemptions.
173-422-190 Emission specialist authorization.
173-422-195 Listing of authorized emission specialists.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-422-080 Vehicle inspection data handling procedures. [Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-080, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE-81-32), § 173-422-080, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-080, filed 2/28/80.] Repealed by 93-10-062 (Order 91-46), filed 5/3/93, effective 6/3/93. Statutory Authority: Chapter 70.120 RCW.

173-422-110 Date system requirements. [Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-110, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-110, filed 2/28/80.] Repealed by 93-10-062 (Order 91-46), filed 5/3/93, effective 6/3/93. Statutory Authority: Chapter 70.120 RCW.

173-422-140 Inspection forms and certificates. [Statutory Authority: Chapter 70.120 RCW. 93-10-062 (Order 91-46), § 173-422-140, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-140, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-140, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-140, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-140, filed 2/28/80.] Repealed by 94-05-039 (Order 93-10), filed 2/8/94, effective 3/11/94. Statutory Authority: Chapter 70.120 RCW.

173-422-150 Inspection personnel requirements. [Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-150, filed 2/28/80.] Repealed by 93-10-062 (Order 91-46), filed 5/3/93, effective 6/3/93. Statutory Authority: Chapter 70.120 RCW.

173-422-180 Air quality standards. [Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-180, filed 2/28/80.] Repealed by 93-10-062 (Order 91-46), filed 5/3/93, effective 6/3/93. Statutory Authority: Chapter 70.120 RCW.

WAC 173-422-010 Purpose. This chapter implements the Washington Clean Air Act, chapter 70.94 RCW, as supplemented by the motor vehicle emission inspection provisions codified as chapter 70.120 RCW.

Gasoline motor vehicles are the primary emitters of carbon monoxide and emit significant quantities of hydrocarbons and oxides of nitrogen. Diesel motor vehicles are emitters primarily of particulates, hydrocarbons, and oxides of nitrogen. Emission controls required by the federal government are designed to reduce motor vehicle related air pollution. However, the effectiveness of these controls is substantially reduced through deterioration, maladjustment and tampering. Motor vehicle emission inspection serves to identify high polluting vehicles and vehicles with tampered or missing emission controls and to reduce their emissions, when such reduction can be accomplished at reasonable cost. These rules establish the emission standards, testing procedures, and associated activities necessary to implement a program of air pollution prevention and control resulting from motor vehicle emission inspections.

[Statutory Authority: Chapter 70.120 RCW. 93-10-062 (Order 91-46), § 173-422-010, filed 5/3/93, effective 6/3/93. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-010, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-010, filed 2/28/80.]

WAC 173-422-020 Definitions. Unless a different meaning is clearly indicated by context, the following definitions will apply:

(1) "Appropriate repair" means the diagnosis of the cause(s) of an emission test failure and/or the repair of one or more of these causes. An appropriate repair should reduce at least one emission test reading or diagnose and/or repair an emission problem identified by the on-board diagnostic (OBD) system.

(2) "Certificate of acceptance" means an official form, issued by someone authorized by the department, which certifies that the following conditions have been met:

(a) The vehicle failed an emission inspection; and

(b) The vehicle failed a reinspection; and

(c) All primary emission control components installed by the vehicle manufacturer, or its appropriate replacement, are installed and operative; and

(d) The recipient has provided original receipts listing and providing the cost of each appropriate repair performed by an authorized emission specialist between the initial and last inspection; and

(e) The total cost of the appropriate repairs must equal or exceed:

Pre-1981 vehicles	$100

1981 and newer	$150

(3) "Certificate of compliance" means an official form, issued by someone authorized by the department, which certifies that the recipient's vehicle on inspection complied with applicable emission inspection standards.

(4) "Authorized emission specialist" means an individual who has been issued a certificate of instruction by the department as authorized in RCW 70.120.020 (2)(a) and has maintained the certification by meeting requirements of WAC 173-422-190(2).

(5) "Dealer" means a motor vehicle dealer, as defined in chapter 46.70 RCW as amended, that is licensed pursuant to chapter 46.70 RCW.

(6) "Department" means the department of ecology.

(7) "Emission contributing area" means a land area within whose boundaries are registered motor vehicles that contribute significantly to the violation of motor vehicle related air quality standards in a noncompliance area.

(8) "Fleet" means a group of fifteen or more motor vehicles owned or leased concurrently by one owner assigned a fleet identifier code by the department of licensing.

(9) "Gross vehicle weight rating (GVWR)" means the manufacturer stated gross vehicle weight rating.

(10) "Motor vehicle" means any self-propelled vehicle required to be licensed pursuant to chapter 46.16 RCW.

(11) "Noncompliance area" means a land area within whose boundaries any air quality standard for any air contaminant from the emissions of motor vehicles will probably be exceeded.

(12) "PPM" means parts per million by volume.

(13) "Primary emission control components" means the components of the vehicle installed by the manufacturer for the purpose of reducing emissions or its replacement or modification which is acceptable to the United States Environmental Protection Agency. These components are, but are not limited to, the catalytic converter or thermal reactor, the air injection system components, the thermostatic air cleaner, the exhaust gas recirculation system components, the evaporative emission system components including the gas cap, the positive crankcase ventilation system components and the electronic control unit components that control the air/fuel mixture and/or ignition timing including all related sensors.

The primary emission control components of a vehicle with a different engine than the engine originally installed shall be an Environmental Protection Agency certified engine/emission control combination for that vehicle or its newer model.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-020, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-020, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-020, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-020, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-020, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-020, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-020, filed 2/28/80.]

WAC 173-422-030 Vehicle emission inspection requirement. All motor vehicles, not specifically exempted by WAC 173-422-170, which are registered or reregistered within the boundaries of an emission contributing area, as specified in WAC 173-422-050, are subject to the vehicle emission inspection requirements of this chapter. In addition, the department may require an emission inspection of a motor vehicle, except military tactical vehicles, operated for more than sixty days a year on a federal installation located within an emission contributing area, or a vehicle garaged at a location within an emission contributing area, or a vehicle which has previously passed an emission inspection but has been identified using on road testing as likely to no longer comply with the inspection standards. Neither the department of licensing, county auditors nor subagents appointed under RCW 46.01.140 may change the registered owner or may issue or renew a motor vehicle license for any vehicle registered in an emission contributing area, as that area is established under RCW 70.120.150, unless the application for issuance or renewal is: (1) Accompanied by a valid certificate of compliance issued pursuant to RCW 70.120.080 or 70.120.170 or a valid certificate of acceptance issued pursuant to RCW 70.120.070; or (2) exempted from this requirement pursuant to RCW 46.16.015(2). Certificates must have a date of validation which is within twelve months of the assigned license renewal date.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-030, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-030, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-030, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-030, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-030, filed 5/3/93, effective 6/3/93. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-030, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-030, filed 2/28/80.]

WAC 173-422-031 Vehicle emission inspection schedules. (1) Vehicles defined in RCW 46.16.015(2) or WAC 173-422-170 are exempt from emission inspections. Vehicles five through twenty-five years old, other than state and local government vehicles, shall be inspected every other year as described in the table below. This inspection schedule does not apply to vehicles that have already been issued a certificate of compliance or a certificate of acceptance within twelve months of the assigned license renewal date.

Year	Model Year of Vehicles Needing Inspection
2002	1978, 1980, 1982, 1984, 1986, 1988, 1990, 1992, 1994, 1997
2003	1979, 1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1996, 1998
2004	1980, 1982, 1984, 1986, 1988, 1990, 1992, 1994, 1997, 1999
2005	1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1996, 1998, 2000
2006	1982, 1984, 1986, 1988, 1990, 1992, 1994, 1997, 1999, 2001
2007	1983, 1985, 1987, 1989, 1991, 1993, 1995, 1996, 1998, 2000, 2002
2008	1984, 1986, 1988, 1990, 1992, 1994, 1997, 1999, 2001, 2003
2009	1985, 1987, 1989, 1991, 1993, 1995, 1996, 1998, 2000, 2002, 2004
2010	1986, 1988, 1990, 1992, 1994, 1997, 1999, 2001, 2003, 2005

Year	Model Year of Vehicles Needing Inspection
2011	1987, 1989, 1991, 1993, 1995, 1996, 1998, 2000, 2002, 2004, 2006
2012	1988, 1990, 1992, 1994, 1997, 1999, 2001, 2003, 2005, 2007

(2) State and local government vehicles five through twenty-five years old shall be inspected yearly as described in the table below.

Year	Model Year of Vehicles Needing Inspection
2002	1977 through 1997
2003	1978 through 1998
2004	1979 through 1999
2005	1980 through 2000
2006	1981 through 2001
2007	1982 through 2002
2008	1983 through 2003
2009	1984 through 2004
2010	1985 through 2005
2011	1986 through 2006
2012	1987 through 2007

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-031, filed 6/3/02, effective 7/4/02; 00-22-120 (Order 00-15), § 173-422-031, filed 11/1/00, effective 12/2/00.]

WAC 173-422-035 Registration requirements. (1) Persons residing in emission contributing areas as defined under WAC 173-422-050 shall register their motor vehicles within that area.

(2) Any person who violates this section shall reregister their motor vehicle within the emission contributing area, obtain a certificate of compliance or acceptance within thirty days, and is subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(3) Any civil penalty imposed by the department hereunder shall be appealable to the pollution control hearings board as provided for in chapter 43.21B RCW.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-035, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-035, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-035, filed 3/6/90, effective 4/6/90.]

WAC 173-422-040 Noncompliance areas. The following areas are designated noncompliance areas for the air contaminants specified: Carbon monoxide

(1) The city of Seattle.

(2) The city of Bellevue.

(3) The city of Spokane.

(4) The city of Tacoma.

(5) The city of Vancouver.

(6) The city of Everett.

[Statutory Authority: Chapter 70.120 RCW. 93-10-062 (Order 91-46), § 173-422-040, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-040, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-040, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-040, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-040, filed 2/28/80.]

WAC 173-422-050 Emission contributing areas. Emission contributing areas within which the motor vehicle emission inspection program applies are designated by the following United States Postal Service ZIP codes as of September 1, 1994, set forth below:

(1) Puget Sound Region

98001	98036	98083
98002	98037	98092
98003	98038	98093
98004	98039	98101 thru 98199
98005	98040	inclusive except 98110
98006	98041	98201 thru 98208
98007	98042	98258
98008	98043	98270
98009	98046	98271
98011	98047	98275
98012	98052	98290
98015	98053	98291
98020	98054	98327
98021	98055	98332
98023	98056	98335
98025	98057	98338
98026	98058	98344
98027	98059	98352
98028	98062	98354
98031	98063	98371 thru 98374
98032	98064	98387
98033	98071	98388
98034	98072	98390
98035	98073	98401 thru 98499

(2) Spokane Region

99001
99005
99014
99016
99019
99021
99025
99027
99037
99201 thru 99299

(3) Vancouver Region

98604 except north of N.E. 279th Street
98606
98607
98629 except east of N.E. 50th Avenue
98642
98660 thru 98668
98671 except Skamania County
98682-86

[Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-050, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-050, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-050, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-050, filed 5/3/93, effective 6/3/93; 84-09-087 (Order DE 84-7), § 173-422-050, filed 4/18/84. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-050, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-050, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-050, filed 2/28/80.]

WAC 173-422-060 Gasoline vehicle emission standards. Gasoline motor vehicles subject to this chapter shall:

(1) When tested using the exhaust emission testing procedures described in (II) Two Speed Idle Test of Appendix B Test Procedures of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of Chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, meet the applicable exhaust emission standards from the following table during both the idle and higher speed mode.

Two Speed Idle Test Exhaust Emission Standards

Model Year	CO(%)*	HC (ppm)*
80 and earlier	3.0	600
81 and newer (0-8500 GVWR)	1.2	220
81 and newer (Greater than 8500 GVWR)	3.0	400

* Carbon monoxide (CO) and hydrocarbons (HC), measured as a percentage (%) or parts per million (ppm) of the exhaust volume.

(2) When tested using the acceleration simulation mode (ASM) procedure specified in WAC 173-422-070 meet the following standards during that mode and the applicable standard from WAC 173-422-060(1) during the idle mode.

ASM Mode Exhaust Emission Standards

Model Year Test Weight (lbs.)	CO(%)*	HC(ppm)
1980 and earlier model year cars and trucks (0-8500 lbs. GVWR)		
1750	4.2	400
1875	4.0	380
2000	3.8	350
2125	3.6	340
2250	3.4	320
2375	3.2	300
2500	3.0	290
2625	2.9	270
2750	2.8	260
2875	2.7	250
3000	2.6	240
3125	2.5	230
3250	2.4	220
3375	2.3	220
3500	2.2	210
3625	2.1	200
cars 3750 & greater	2.1	200
trucks 3750 & greater	2.5	300
1981 & later model year cars and trucks (0-8500 lbs. GVWR)		
1750	1.8	250
1875	1.7	240
2000	1.6	220
2125	1.5	210
2250	1.5	200
2375	1.4	190
2500	1.3	180
2625	1.3	180
2750	1.2	170
2875	1.2	160
3000	1.1	160
3125	1.1	150
3250	1.0	150
3375	1.0	150
3500	1.0	150
3625	1.0	150
cars 3750 & greater	1.0	150
trucks 3750 & greater	1.5	200

* Carbon monoxide (CO) and hydrocarbons (HC), measured as a percentage (%) or parts per million (ppm) of the exhaust volume.

(3) The gasoline filler cap must not leak more than 60 cubic centimeters per minute at a pressure of 30 inches of water.

(4) Standardized on-board diagnostic (OBD) systems (also known as OBDII) were required by Environmental Protection Agency starting with 1996 model gasoline vehicle cars and light trucks. If a 1996 or newer model vehicle is equipped with an Environmental Protection Agency certified on-board diagnostic (OBD) system, the information stored in the on-board computer must indicate that all emission-related functional checks have been completed except for 1996 to 2000 model year vehicles that can have up to two readiness monitors not set to ready, or 2001 or newer model year vehicles that have one readiness monitor not set to ready, and no malfunctions detected that would command the malfunction indicator light to be illuminated.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-060, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-060, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-060, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-060, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-060, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-060, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-060, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-060, filed 2/28/80.]

WAC 173-422-065 Diesel vehicle exhaust emission standards. (1) Diesel motor vehicles subject to this chapter shall meet the following opacity standards when using the snap-acceleration test procedures specified in WAC 173-422-075.

Model Year	Opacity (%)
1991 and earlier	55
1992 and later	40

(2) When using the Acceleration Simulation Mode (ASM) test procedures specified in WAC 173-422-070 adapted for the testing of diesel cars or light trucks (0-8500 pounds gross vehicle weight rating), these vehicles shall meet a 20% opacity standard.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-065, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-065, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-065, filed 5/3/93, effective 6/3/93.]

WAC 173-422-070 Gasoline vehicle exhaust emission testing procedures. All persons certified by, or under contract to, the department to conduct motor vehicle emission inspections shall use the exhaust emission testing procedures described in (II) Two Speed Idle Test of Appendix B-Test Procedures of Subpart S-Inspection/Maintenance Program

Requirements of Part 51 of chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, except that the department may require that the following Acceleration Simulation Mode (ASM) test procedure replace the 2500 rpm mode of the Two Speed Idle Test. Equivalent procedures may be approved by the department.

Variations to the procedures specified may be established by the department for all or certain vehicles. Vehicles, not repaired as required by an emission recall for which owner notification was attempted after January 1, 1995, shall not be inspected until compliance with the recall is established.

Acceleration Simulation Mode (ASM)

1. Dynamometer Load: Set dynamometer horsepower load equal to [Vehicle Weight (lbs.) + 300]/300. An Environmental Protection Agency specified loading may also be used.
2. Vehicle Gear Selection: Vehicles with automatic transmissions use Drive (not Overdrive), vehicles with manual transmissions use second gear. Shift to the next higher gear if the engine speed exceeds 2500 revolutions per minute.
3. Vehicle Speed: Set vehicle speed at 25 miles per hour (mph) 1.5 ± mph.
4. Pass or Fail Determinations: Once the vehicle has been operating at 25 mph for 15 seconds, begin measuring exhaust HC, CO, and CO2, each second. The reading for pass or fail determinations is the running average of five measurements. When a final pass or fail determination is made, this mode will be stopped and the final readings recorded.
5. Fast Pass: Once HC and CO readings are equal to or less than the HC and CO standards and are within 20 ppm HC and 0.20% CO of each other.
6. Fast Fail: The vehicle will fail after 15 or more seconds of measurements when the HC reading exceeds 1800 ppm, or the CO reading exceeds 9.0 percent.
7. Full Term Pass/Fail: The vehicle will pass or fail the ASM mode after 90 seconds of measurements unless emission readings are declining at a rate that indicates that a failing vehicle will pass within the next 30 seconds. Then the failing vehicle will receive up to an additional 30 seconds of measurements before the final pass/fail determination is made.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-070, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-070, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-070, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-070, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-070, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-070, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-070, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-070, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-070, filed 2/28/80.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-422-075 Diesel vehicle inspection procedure. Diesel vehicles shall be tested using the following snap-acceleration test procedure unless the department requires the Acceleration Simulation Mode (ASM) test procedure specified in WAC 173-422-070 adapted for the testing of diesel cars or light trucks (0-8500 pounds gross vehicle weight rating) be used in lieu of the snap-acceleration test procedure.

Prior to beginning the test verify the engine is within its normal operating temperature range, all vehicle accessories including air conditioning are off, the parking brake and an engine brake or retarder is off, the transmission is in neutral (and clutch released if manual transmission).

(1) The vehicle shall receive at least three preliminary snap-acceleration test cycles until consistent engine operation is achieved. The snap-acceleration test cycle consists of moving the accelerator pedal from normal idle as rapidly as possible to the full power position, then fully releasing the throttle so the engine returns to idle.

(2) Then perform additional snap-acceleration test cycles while measuring the smoke opacity with an opacity meter which meets the requirements specified in WAC 173-422-095. The engine must be allowed to remain at idle for at least ten seconds between snap-acceleration test cycles. If a subsequent snap-acceleration cycle is not begun within 45 seconds, the entire sequence of snap-acceleration test cycles must be restarted. The three preliminary snap-acceleration test cycles described in (1) need not be repeated.

(3) Record peak opacity readings from each snap-acceleration test cycle up to nine times if necessary to obtain a peak opacity reading and two consecutive peak readings that are equal to or less than the standard established in WAC 173-422-065.

If a peak opacity reading and two consecutive peak readings that are equal to or less than the standard established in WAC 173-422-065 are not obtained, the vehicle fails the test.

(4) Steps 2 and 3 are repeated for any additional exhaust pipes.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-075, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 94-05-039 (Order 93-10), § 173-422-075, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-075, filed 5/3/93, effective 6/3/93.]

WAC 173-422-090 Exhaust gas analyzer specifications. Only exhaust gas analyzers meeting the specifications contained in (I) Steady-State Exhaust Analysis System of Appendix D-Steady-State Short Test Equipment of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, at the time of certification testing may be used for certification testing, unless equivalent specifications have been approved by the department.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-090, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-090, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-090, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-090, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-090, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-090, filed 2/28/80.]

WAC 173-422-095 Exhaust opacity testing equipment. The exhaust opacity measurement shall be conducted using an opacity meter approved by the department.

The opacity meter shall:

(1) Automatically calibrates itself before each test.

(2) Provide for continuous measurement of exhaust opacity unaffected by rain or wind.

[Statutory Authority: Chapter 70.120 RCW. 94-05-039 (Order 93-10), § 173-422-095, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-095, filed 5/3/93, effective 6/3/93.]

WAC 173-422-100 Testing equipment maintenance and calibration. (1) Unless alternative procedures have been approved or required by the department all equipment used in the inspection shall be calibrated and maintained according to the manufacturer's specifications and recommendations. Complete logs as approved by the department shall be kept for maintenance, repair, and calibration.

(2) The procedures for equipment maintenance and calibration procedures described in (I) Steady-State Test Equipment of Appendix A-Calibrations, Adjustments and Quality Control of Subpart S-Inspection/Maintenance Program Requirements of Part 51 of chapter 1, Title 40 of the Code of Federal Regulations adopted November 1, 1992, shall be followed by all testing facilities unless equivalent procedures have been approved by the department.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-100, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-100, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-100, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-100, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-100, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-100, filed 2/28/80.]

WAC 173-422-120 Quality assurance. The department, or its designee, may monitor the operation of each authorized emission inspection/certification facility with unidentified or unannounced and unscheduled inspections to check the calibration and maintenance of the exhaust analyzers, test procedures, and records.

The department (or its designee) may immediately require the suspension of vehicle inspections/certifications in all or part by the inspection/certification facility if violations of this chapter are found during an audit of the inspection facility.

[Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-120, filed 2/28/95, effective 3/31/95; 93-10-062 (Order 91-46), § 173-422-120, filed 5/3/93, effective 6/3/93. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-120, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 80-03-070 (Order DE 79-35), § 173-422-120, filed 2/28/80.]

WAC 173-422-130 Inspection fees. At an inspection facility operated under contract to the state, the fee for the first emission inspection on each vehicle applicable to a vehicle license year shall be fifteen or less dollars. If the vehicle fails, one reinspection will be provided free of charge at any inspection station operated under contract to the state, provided that the reinspection is applicable to the same vehicle license year. Any additional reinspection of a failed vehicle applicable to the same vehicle license year will require the payment of fifteen or less dollars.

[Statutory Authority: RCW 70.120.080, 70.120.170 (4)(a), 46.16.015 (2)(h) and 70.120.120. 99-24-021 (Order 99-19), § 173-422-130, filed 11/22/99, effective 12/31/99. Statutory Authority: Chapter 70.120 RCW. 94-05-039 (Order 93-10), § 173-422-130, filed 2/8/94, effective 3/11/94. Statutory Authority: RCW 70.120.170 (4)(a). 93-20-010 (Order 93-15), § 173-422-130, filed 9/22/93, effective 10/23/93. Statutory Authority: Chapter 70.120 RCW. 93-10-062 (Order 91-46), § 173-422-130, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-130, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.040(7). 87-02-051 (Order DE 86-32), § 173-422-130, filed 1/7/87, effective 4/1/87. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-130, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-130, filed 2/28/80.]

WAC 173-422-145 Fraudulent certificates of compliance/acceptance. (1)(a) Obtaining or attempting to obtain a certificate of compliance by (i) providing false information or (ii) any fraudulent means; or

(b) Obtaining or attempting to obtain a certificate of acceptance (i) through the use of receipts or other documentation containing false information, or (ii) any fraudulent means shall be construed as a violation of these rules implementing chapter 70.94 RCW as supplemented by chapter 70.120 RCW.

(2) Any person who commits such violation or who aids or abets another in committing the same shall be subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(3) For the purposes of this section the term "expended" refers to the net actual cost to the vehicle owner in the purchase of repairs or parts derived after the amount of any rebate, discount or cash-return has been subtracted.

(4) Any civil penalty imposed by the department hereunder shall be appealable to the pollution control hearing board as provided for in chapter 43.21B RCW.

[Statutory Authority: Chapter 70.120 RCW. 90-06-062, § 173-422-145, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-145, filed 11/23/83, effective 1/2/84.]

WAC 173-422-160 Fleet and diesel owner vehicle testing requirements. The department may authorize emission inspections by fleet operators including government agencies and the owners of diesel motor vehicles with a gross vehicle weight rating in excess of 8500 pounds or by an automotive service or testing facility engaged by the vehicle owner for such activity. Authorizations to conduct emission tests and issue certificates of compliance under this section are limited to authorized fleet vehicles or diesel vehicles with a gross vehicle weight rating in excess of 8500 pounds.

(1) All persons engaged in testing of gasoline fleet or diesel vehicles must comply with all applicable provisions of this chapter except as approved by the department.

(2) All persons conducting tests for the purpose of issuing certificates for fleet or diesel vehicles shall be ecology authorized emission specialists.

(3) Legibly completed forms will constitute certificates of compliance for licensing purposes. Any person conducting testing under this section shall forward to the department within ten working days after the end of each month, a copy of each certificate of compliance issued during that month. Copies of each certificate of compliance shall be retained by the person issuing the certificate for at least two years from date of issuance. Alternative arrangements for providing and or storing this information using automated data storage devices may be approved or required by the department.

Forms must be purchased from the department in advance of issuance through payment of fifteen or less dollars to the department for each certificate requested. Refunds or credit may be given for unused certificates returned to the department.

Payment for fleet forms is waived for state and local government fleets.

Test forms provided under this section are official documents. Persons receiving the forms from the department are accountable for each form provided.

Voided forms must be handled the same as certificates of compliance. One copy shall be sent to the department within ten days after the end of the month in which the form was voided and one copy shall be retained by the person accountable for the forms for at least two years after date of voiding. Refunds will not be made for voided forms.

(4) All persons authorized to conduct fleet or government vehicle inspections under this section shall be subject to performance audits and compliance inspections by the department, during normal business hours.

(5) Fleet vehicles may be inspected any time between their scheduled license renewals.

(6) Certificates of acceptance may not be issued under this section.

[Statutory Authority: RCW 70.120.080, 70.120.170 (4)(a), 46.16.015 (2)(h) and 70.120.120. 99-24-021 (Order 99-19), § 173-422-160, filed 11/22/99, effective 12/31/99. Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-160, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-160, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-160, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-160, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-160, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-160, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-160, filed 2/28/80.]

WAC 173-422-170 Exemptions. The following motor vehicles are exempt from the inspection requirement:

(1) Vehicles proportionally registered pursuant to chapter 46.85 RCW.

(2) New motor vehicles whose equitable or legal title has never been transferred to a person who in good faith purchases the vehicle for purposes other than resale; this does not exempt motor vehicles that are or have been leased.

(3) Motor vehicles that use propulsion units powered exclusively by electricity.

(4) Motor-driven cycles as defined in chapter 46.04 RCW as amended.

(5) Farm vehicles as defined in chapter 46.04 RCW as amended.

(6) Vehicles not required to be licensed.

(7) Mopeds as defined in chapter 46.04 RCW as amended.

(8) Vehicles garaged and operated out of the emission contributing area.

(9) Vehicles registered with the state but not for highway use.

(10) Used vehicles at the time of sale by a Washington licensed motor vehicle dealer.

(11) Motor vehicles fueled by propane, compressed natural gas, or liquid petroleum gas and so registered by the department of licensing.

(12) Motor vehicles whose manufacturer or engine manufacturer provides information that the vehicle cannot meet emission standards because of its design. In lieu of exempting these vehicles, alternative standards and or inspection procedures may be established.

(13) Motor vehicles whose registered ownership is being transferred between parents, siblings, grandparents, grandchildren, spouse or present co-owners and all transfers to the legal owner or a public agency.

(14) Vehicles less than five years old.

(15) Vehicles more than twenty-five years old.

[Statutory Authority: RCW 70.120.120. 00-22-120 (Order 00-15), § 173-422-170, filed 11/1/00, effective 12/2/00. Statutory Authority: RCW 70.120.080, 70.120.170 (4)(a), 46.16.015 (2)(h) and 70.120.120. 99-24-021 (Order 99-19), § 173-422-170, filed 11/22/99, effective 12/31/99. Statutory Authority: Chapter 70.120 RCW. 96-23-030 (Order 96-11), § 173-422-170, filed 11/15/96, effective 12/16/96; 96-21-029 (Order 95-11), § 173-422-170, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-170, filed 2/28/95, effective 3/31/95; 94-05-039 (Order 93-10), § 173-422-170, filed 2/8/94, effective 3/11/94; 93-10-062 (Order 91-46), § 173-422-170, filed 5/3/93, effective 6/3/93; 90-06-062, § 173-422-170, filed 3/6/90, effective 4/6/90. Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-170, filed 11/23/83, effective 1/2/84. Statutory Authority: RCW 70.120.120. 82-02-027 (Order DE 81-32), § 173-422-170, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-170, filed 2/28/80.]

WAC 173-422-175 Fraudulent exemptions. (1) Obtaining or attempting to obtain an exemption from emission inspection requirements by false statements, or failure to comply with the exemption procedures established to implement WAC 173-422-170, shall be construed as a violation of these rules implementing chapter 70.94 RCW as supplemented by chapter 70.120 RCW.

(2) Any person who commits such violation or who aids or abets another in committing the same shall be subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(3) Any civil penalty imposed by the department hereunder shall be appealable to the pollution control board as provided for in chapter 43.21B RCW.

[Statutory Authority: RCW 70.120.120, 43.21A.080, 70.94.331 and 70.94.141(1). 83-23-115 (Order DE 83-31), § 173-422-175, filed 11/23/83, effective 1/2/84.]

WAC 173-422-190 Emission specialist authorization. (1) To become an authorized emission specialist an individual shall:

(a) Pass a course of study, approved by the department; and

(b) Agree in writing to meet the requirements of subsection (2) of this section and all requirements of law or regulation regarding the serving of motor vehicle emission control systems or the motor vehicle emission inspection program.

(2) To maintain certification, an authorized emission specialist shall:

(a) Successfully complete a department-approved course on emission repair within ninety days of being required to do so by the department unless an extension has been granted in writing by the department; and

(b) Sign, including the specialist identification number, all receipts and other forms required by the department for emission repairs or adjustments performed. These receipts

must be prenumbered, preprinted with the business's name and address and clearly itemize all appropriate repairs performed by the specialist; and

(c) Record on all receipts:

(i) The vehicle's emission readings after appropriate repairs or the diagnosis and/or repair of problem(s) identified by the on-board diagnostic (OBD) during an emission inspection; and

(ii) A vehicle description including the license number and vehicle identification number (VIN); and

(iii) Any missing or inoperative primary emission control components; and

(iv) Any further recommended appropriate repairs; and

(d) Not tamper with emission control systems, including adjusting an engine outside of the manufacturer's specifications (chapter 173-421 WAC); and

(e) Not obtain or attempt to obtain a certificate of compliance, a certificate of acceptance (repair waiver) or an exemption from the inspection requirements by providing false information or by any fraudulent means (chapter 173-422 WAC); and

(f) Not aid or abet any individual in committing a violation of chapter 173-421 or 173-422 WAC.

(3) The certification of an authorized emission specialist may be revoked for a first violation of chapter 173-421 WAC or WAC 173-422-145, for a period of no more than one year, and may be permanently revoked for a second violation of chapter 173-421 or 173-422 WAC.

The certification of an authorized emission specialist may be temporarily revoked for violation of subsection (2) of this section and may be permanently revoked for continued willful violation of subsection (2) of this section.

An authorized emission specialist whose certification is revoked permanently or temporarily may appeal to the pollution control hearings board as provided for in RCW 43.21B.-310.

(4) An authorized emission specialist whose certification has been temporarily revoked may reapply for certification twelve months after the date of revocation by applying to the department and meeting all requirements of subsection (1) of this section. An application for certification by a permanently revoked authorized emission specialist will be denied.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-190, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 96-21-029 (Order 95-11), § 173-422-190, filed 10/9/96, effective 11/9/96; 95-06-068 (Order 93-35), § 173-422-190, filed 2/28/95, effective 3/31/95; 90-06-062, § 173-422-190, filed 3/6/90, effective 4/6/90.]

WAC 173-422-195 Listing of authorized emission specialists. (1) A list of authorized emission specialists will be available to the public. Specialists will be listed under one employer's business name when the business is approved for listing. The list will be updated by the department at least once every six months.

(2) The employer's business name and address will be listed by the department, when the employer agrees in writing to:

(a) Require the use of a properly maintained and correctly calibrated exhaust analyzer and a scan tool capable of communicating with the on-board diagnostic (OBD) systems installed on all U.S. Environmental Protection Agency certified 1996 model year and newer gasoline vehicles to diagnosis emission test failures and as a final check for emission repairs or adjustments;

(b) Have all emission repairs or adjustments performed by an authorized emission specialist;

(c) Require the authorized emission specialist to sign the customer's receipt for emission repairs or adjustments, and to record the vehicle's emission readings or which problem(s) identified by the on-board diagnostic (OBD) system during an emission inspection that have been diagnosed and/or repaired on the receipt after the work is completed;

(d) Require that all employees not aid or abet any person to tamper with emission control systems, including adjusting a vehicle outside of the manufacturer's specifications (chapter 173-421 WAC); and

(e) Require that all employees not aid or abet any person to obtain a fraudulent certificate of compliance, certificate of acceptance or an exemption from the inspection requirement (repair waiver) (chapter 173-422 WAC).

(f) Notify the department when an authorized emission specialist begins or ends employment.

(3) An employer may be removed from the authorized emission specialist list for a first violation of chapter 173-421 or 173-422 WAC for a period of no more than one year and may be permanently removed after a second violation of chapter 173-421 or 173-422 WAC.

An employer may be temporarily removed from the authorized emission specialist list when failing to comply with the requirements of subsection (2) of this section and may be permanently revoked for continued and willful violation of subsection (2) of this section.

(4) An employer who has been temporarily removed from the authorized emission specialist list may reapply for listing twelve months after the date of removal from the listing by applying to the department and meeting all requirements of subsection (2) of this section. An application for listing from an employer permanently removed from the authorized emission specialist list will be denied.

(5) An employer who is removed from an authorized emission specialist list or denied listing in an authorized emission specialist list may appeal to the pollution control hearings board as provided for in RCW 43.21B.310.

(6)(a) An employer approved for listing may display the "state authorized emission specialist" sign available from the department. Any employer advertising or providing of information to the public based on the department's certification of an authorized emission specialist must be discontinued immediately when the employer no longer meets the requirements.

(b) An employer violating (a) of this subsection shall be subject to a civil penalty not to exceed two hundred fifty dollars for each violation.

(c) A civil penalty imposed by the department may be appealed to the pollution control hearings board as provided for in RCW 43.21B.310.

[Statutory Authority: RCW 70.120.120. 02-12-072 (Order 02-04), § 173-422-195, filed 6/3/02, effective 7/4/02. Statutory Authority: Chapter 70.120 RCW. 95-06-068 (Order 93-35), § 173-422-195, filed 2/28/95, effective 3/31/95; 90-06-062, § 173-422-195, filed 3/6/90, effective 4/6/90.]

Chapter 173-423 WAC
LOW EMISSION VEHICLES

WAC

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173-423-100	Manufacturer delivery reporting requirements.
173-423-110	Warranty requirements.
173-423-120	Recalls.
173-423-130	Surveillance.
173-423-140	Enforcement.
173-423-150	Severability.

WAC 173-423-010 Purpose. The purpose of this chapter is to establish rules implementing the California motor vehicle emission standards adopted by the 2005 legislature and codified in chapters 70.120A and 46.16 RCW.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-010, filed 11/30/05, effective 12/31/05.]

WAC 173-423-020 Applicability. This chapter applies to all 2009 and subsequent model year passenger cars, light duty trucks and medium duty passenger vehicles registered, leased, rented or sold for use in the state of Washington, except as provided in WAC 173-423-060, Exemptions.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-020, filed 11/30/05, effective 12/31/05.]

WAC 173-423-025 Effective date. This chapter is effective on January 1, 2006, provided the state of Oregon has adopted the California motor vehicle emission standards as provided in RCW 70.120A.010.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-025, filed 11/30/05, effective 12/31/05.]

WAC 173-423-030 Incorporation by reference. (1) This chapter incorporates by reference certain sections of the California Code of Regulations, Title 13, relating to implementing the California motor vehicle emission standards in the state of Washington. Table 070(1) found in WAC 173-423-070 lists the sections of the California Code of Regulations, Title 13 incorporated by reference and the California effective date for each section.

(2) Copies of the relevant sections of the California Code of Regulations, Title 13 incorporated by reference in this chapter are available on ecology's web site or by contacting:

Washington State Department of Ecology
Air Quality Program
300 Desmond Drive
Lacey, Washington 98503
360-407-6800

(3) For purposes of applying the incorporated sections of the California Code of Regulations, Title 13 in Washington, "California" means "Washington" unless otherwise specified in this chapter or clearly inappropriate.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-030, filed 11/30/05, effective 12/31/05.]

WAC 173-423-040 Definitions and abbreviations. The following definitions apply to the administration of this chapter. Any term that is not defined in this section shall be as defined or described in the California Code of Regulations, Title 13, section 1900. Definitions in the California Code of Regulations, Title 13, section 1900 will prevail if any discrepancy arises between them and those set forth in this section.

(1) "Emission credits" are earned when a manufacturer's reported fleet average is less than the required fleet average. Credits are calculated according to formulas contained in the California Code of Regulations, Title 13, section 1961(c) and 1961.1(b).

(2) "Emission debits" are earned when a manufacturer's reported fleet average exceeds the required fleet average. Debits are calculated according to formulas contained in the California Code of Regulations, Title 13, section 1961(c) and 1961.1(b).

(3) "Fleet average greenhouse gas emission requirements" are generally referred to as limitations on greenhouse gas exhaust mass emission values from passenger cars, light-duty trucks and medium-duty passenger vehicles. The fleet average greenhouse gas emission requirements are set forth in CCR, Title 13, section 1961.1, and incorporated herein by reference.

(4) "Gross vehicle weight rating" or "GVWR" is the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.

(5) "Independent low volume manufacturer" is defined in the California Code of Regulations, Title 13, section 1900 and incorporated herein by reference.

(6) "Intermediate volume manufacturer" is defined in the California Code of Regulations, Title 13, section 1900 and incorporated herein by reference.

(7) "Large volume manufacturer" is defined in the California Code of Regulations, Title 13, section 1900 and incorporated herein by reference.

(8) "Light duty truck" is any 2000 and subsequent model motor vehicle certified to the standards in Title 13, CCR, section 1961 (a)(1) rated at 8,500 pounds gross vehicle weight or less, and any other motor vehicle rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for the purposes of transportation of property or is a derivative of such vehicle, or is available with special features enabling off-street or off-highway operation and use.

(9) "Medium duty passenger vehicle" (MDPV) is any medium-duty vehicle with a gross vehicle weight rating of less than 10,000 pounds that is designed primarily for the transportation of persons. The medium-duty passenger vehicle definition does not include any vehicle which:

(a) Is an "incomplete truck," i.e., is a truck that does not have the primary load carrying device or container attached; or

(b) Has a seating capacity of more than twelve persons; or

(c) Is designed for more than nine persons in seating rearward of the driver's seat; or

(d) Is equipped with an open cargo area of 72.0 inches in interior length or more. A covered box not readily accessible from the passenger compartment will be considered an open cargo area for the purpose of this definition.

(10) "Model year" is the manufacturer's annual production period which includes January 1 of a calendar year. If the manufacturer has no annual production period, "model year" is the calendar year. In the case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

(11) "Nonmethane organic gas" or "NMOG" is the sum of nonoxygenated and oxygenated hydrocarbons contained in a gas sample as measured in accordance with the "*California Non-Methane Organic Gas Test Procedures*," and incorporated herein by reference.

(12) "NMOG fleet average emissions" is a motor vehicle manufacturer's average vehicle emissions of all nonmethane organic gases from passenger cars and light duty trucks in any model year delivered in Washington that are subject to this regulation.

(13) "Passenger car" is any motor vehicle designed primarily for transportation of persons and having a design capacity of twelve persons or less.

(14) "Small volume manufacturer" is defined as set forth in the California Code of Regulations, Title 13, section 1900 and incorporated herein by reference.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-040, filed 11/30/05, effective 12/31/05.]

WAC 173-423-050 Requirement to meet California vehicle emission standards. (1) Starting with the 2009 model year, no vehicle shall be registered, leased, rented, licensed or sold for use in the state of Washington unless such vehicle is certified to California emission standards, except as provided in WAC 173-423-060, Exemptions.

(2) The state of Washington will use the vehicle emission standards used by California including:

(a) The exhaust emission standards set forth in the California Code of Regulations, Title 13, section 1961;

(b) The emission control label or smog index label requirements set forth in the California Code of Regulations, Title 13, section 1965;

(c) The evaporative emission standards set forth in the California Code of Regulations, Title 13, section 1976;

(d) The refueling emissions standards set forth in the California Code of Regulations, Title 13, section 1978;

(e) The malfunction and diagnostic system requirements set forth in the California Code of Regulations, Title 13, 1968.2;

(f) The specifications for fill pipes and openings of motor vehicle fuel tanks set forth in the California Code of Regulations, Title 13, section 2235; and

(g) The greenhouse gas emission standards as set forth in the California Code of Regulations, Title 13, section 1961.1.

(3) All vehicle manufacturers shall comply with the fleet average emission requirement, and the warranty, recall and other applicable requirements set forth in this chapter.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-050, filed 11/30/05, effective 12/31/05.]

WAC 173-423-060 Exemptions. The following vehicles are not subject to this chapter:

(1) Military tactical vehicles;

(2) Vehicles sold for registration and use out-of-state;

(3) Previously registered vehicles where the mileage at the time of sale exceeds seven thousand five hundred miles, provided that for vehicle dealers, the mileage at the time of sales is determined by the odometer statement at the time the vehicle dealer acquired the vehicle;

(4) Vehicles which are only available for rent to a final destination outside of Washington;

(5) Vehicles purchased by a nonresident prior to establishing residency in the state of Washington, regardless of the mileage on the vehicle;

(6) Vehicles transferred by inheritance or as a result of divorce, dissolution or legal separation; and

(7) An emergency vehicle when a public safety agency has demonstrated to the department of ecology's satisfaction that a vehicle that will meet said agency's needs is not otherwise reasonably available.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-060, filed 11/30/05, effective 12/31/05.]

WAC 173-423-070 Emission standards, warranty, recall and other California provisions adopted by reference. Each manufacturer and each new 2009 and subsequent model year passenger car, light duty truck and medium duty passenger vehicle subject to this chapter shall comply with each applicable standard set forth in Table 070(1) and incorporated by reference:

Table 070(1)
California Code of Regulations (CCR)
Title 13
Provisions Incorporated by Reference
Effective in Washington January 1, 2006

Title 13 CCR	Title	California Effective Date
Chapter 1 Motor Vehicle Pollution Control Devices		
Article 1 General Provisions		
Section 1900	Definitions	1/01/06
Article 2 Approval of Motor Vehicle Pollution Control Devices (New Vehicles)		
Section 1956.8 (g) and (h)	Exhaust Emission Standards and Test Procedures - 1985 and Subsequent Model Heavy Duty Engines and Vehicles	1/31/05
Section 1960.1	Exhaust Emission Standards and Test Procedures - 1981 and through 2006 Model Passenger Cars, Light-Duty and Medium-Duty Vehicles	3/26/04

Title 13 CCR	Title	California Effective Date
Section 1961	Exhaust Emission Standards and Test Procedures - 2004 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles	1/01/06
Section 1961.1	Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2009 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles	1/01/06
Section 1965	Emission Control and Smog Index Labels - 1979 and Subsequent Model Year Vehicles	12/04/03
Section 1968.2	Malfunction and Diagnostic System Requirements - 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles	4/21/03
Section 1968.5	Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines	4/21/03
Section 1976	Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions	11/27/99
Section 1978	Standards and Test Procedures for Vehicle Refueling Emissions	12/04/03
Article 6 Emission Control System Warranty		
Section 2035	Purpose, Applicability and Definitions	12/26/90
Section 2037	Defects Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle	11/27/99
	Engines Used in Such Vehicles	
Section 2038	Performance Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles	11/27/99
Section 2039	Emission Control System Warranty Statement	12/26/90
Section 2040	Vehicle Owner Obligations	12/26/90
Section 2046	Defective Catalyst	1/16/79
Chapter 2 Enforcement of Vehicle Emission Standards and Enforcement Testing		
Article 2 Enforcement of New and In-Use Vehicle Standards		
Section 2109	New Vehicle Recall Provisions	11/30/83
Article 2.1 Procedures for In-Use Vehicle Voluntary and Influenced Recalls		
Section 2111	Applicability	8/21/02
Section 2112	Definitions	11/15/03
	Appendix A to Article 2.1	11/15/03
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[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-070, filed 11/30/05, effective 12/31/05.]

WAC 173-423-080 Fleet average nonmethane organic gas (NMOG) exhaust emission requirements, reporting and compliance. (1) Fleet average requirement. Effective model year 2009, each motor vehicle manufacturer's NMOG fleet average emissions from passenger cars and light duty trucks delivered for sale in Washington shall not exceed the Fleet Average NMOG Exhaust Emission Requirement set forth in the California Code of Regulations, Title 13, section 1961. Compliance shall be based on the number of vehicles, subject to this regulation, delivered for sale in the state of Washington.

(2) Fleet average NMOG exhaust emission credits and debits. Effective model year 2009, each vehicle manufacturer can accrue NMOG emission credits and debits and use credits in accordance with the procedures in the California Code of Regulations, Title 13, section 1961. Debits and credits accrued and used shall be based on the number of vehicles, subject to this chapter, produced and delivered for sale by each manufacturer, in the state of Washington.

(3) Reporting. Commencing with the 2009 model year, each manufacturer shall submit by March 1 a report to the department of ecology that shall include:

(a) Premodel year data which projects the fleet average NMOG exhaust emissions for vehicles expected to be delivered for sale in Washington.

(b) End-of-model year data which calculates the fleet average NMOG exhaust emissions for the model year just ended.

The report shall follow the procedures in the California Code of Regulations, Title 13, section 1961 and shall be in the same format used to report such information to the California Air Resources Board.

(4) Compliance with fleet average NMOG requirement. Beginning in model year 2012, if a report submitted by the manufacturer under subsection (3) of this section demonstrates that the manufacturer is not in compliance with the fleet average emission standard, the manufacturer must submit to the department of ecology within sixty days a Fleet Average Enforcement Report. The Fleet Average Enforcement Report shall:

(a) Describe how the manufacturer intends to equalize any accrued debits, as required in the California Code of Regulations, Title 13, section 1961, and in accordance with subsection (2) of this section.

(b) Identify all vehicle models delivered for sale in Washington, their corresponding certification standards, and the percentage of each model delivered for sale in Washington and California in relation to total fleet sales in the respective state.

(c) Describe how the manufacturer plans to achieve compliance with the fleet average in future model years.

For model years 2009 through 2011 the Fleet Average Enforcement Report, if needed, must be submitted to the department of ecology by March 1, 2012. If debits are accrued in all three years, one year of debits must be equalized by the end of the 2012 model year.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-080, filed 11/30/05, effective 12/31/05.]

WAC 173-423-090 Fleet average greenhouse gas exhaust emission requirements, reporting and compliance. (1) Each manufacturer subject to the greenhouse gas provisions of this regulation shall comply with emissions standards, fleet average greenhouse gas exhaust mass emission requirements for passenger car, light duty truck, medium duty passenger vehicle weight classes, and other requirements of the California Code of Regulations, Title 13, section 1961.1.

(2) Large volume manufacturer. The fleet average greenhouse gas exhaust emission levels for passenger cars, light-duty trucks, and medium-duty passenger vehicles produced and delivered for sale in the state of Washington by a large volume manufacturer for each 2009 and subsequent model year are established in the California Code of Regulations, Title 13, section 1961.1.

(3) Small, intermediate and independent manufacturers. The fleet average greenhouse gas exhaust emission requirements for passenger cars, light-duty trucks, and medium-duty passenger vehicles delivered for sale in the state of Washington by small volume, intermediate volume and independent low volume manufacturers are set forth in the California Code of Regulations, Title 13, section 1961.1, which specifies that requirements for these manufacturers are waived prior to the 2016 model year.

(4) Greenhouse gas credits and debits. Greenhouse gas credits and debits may be accrued and used based on each

manufacturer's sale of vehicles in Washington in accordance with the California Code of Regulations, Title 13, section 1961.1.

(5) Optional alternative compliance with greenhouse gas emission standards. Greenhouse gas vehicle test groups that are certified pursuant to the California Code of Regulations, Title 13, section 1961.1 (a)(1)(B)2.a in the state of California may receive equivalent credit if delivered for sale and use in the state of Washington.

(6) Alternative compliance credit. A manufacturer shall submit to the department of ecology the data set forth in the California Code of Regulations, Title 13, section 1961.1 (a)(1)(B)2.a.i for Washington specific sale and use in order to receive the credit identified in subsection (5) of this section.

(7) Reporting on greenhouse gas requirements. Beginning with the 2009 model year, each manufacturer shall submit by March 1 a report to the department of ecology that shall include:

(a) Premodel year data which projects the fleet average greenhouse gas emissions for vehicles expected to be delivered for sale in Washington.

(b) End-of-model year data which calculates the fleet average greenhouse gas emissions for the model year just ended. The report shall include the number of greenhouse gas vehicle test groups, delineated by model type, certified pursuant to the California Code of Regulations, Title 13, section 1961.1.

The report shall follow the procedures in the California Code of Regulations, Title 13, section 1961.1 and shall be in the same format used to report such information to the California Air Resources Board.

(8) Compliance with fleet average greenhouse gas requirements. Beginning in model year 2009, if the report submitted by the manufacturer under subsection (7) of this section demonstrates that the manufacturer is not in compliance with the fleet average emission standards, the manufacturer must submit to the department of ecology within sixty days a Fleet Average Enforcement Report. The Fleet Average Enforcement Report shall:

(a) Describe how the manufacturer intends to equalize any accrued debits, as required in the California Code of Regulations, Title 13, section 1961.1.

(b) Identify all vehicle models delivered for sale in Washington, their corresponding certification standards, and the percentage of each model delivered for sale in Washington and California in relation to total fleet sales in the respective state.

(c) Describe how the manufacturer plans to achieve compliance with the fleet average in future model years.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-090, filed 11/30/05, effective 12/31/05.]

WAC 173-423-100 Manufacturer delivery reporting requirements. (1) The manufacturer shall submit to the department of ecology one copy of the California Executive Order and Certificate of Conformity for certification of new motor vehicles for each engine family to be sold in the state of Washington within thirty days of receiving the Executive Order from the California Air Resources Board. If such reports are available electronically, the manufacturer shall send the record in an electronic format acceptable to the department of ecology. Manufacturers may discontinue submitting these reports if so notified by the department of ecology.

(2) Commencing with the 2009 model year and prior to the beginning of each model year, upon request, each manufacturer shall submit to the department of ecology a list of all models of medium duty vehicles and medium duty passenger vehicles that will be delivered to Washington dealers. Medium duty vehicles are those with a GVWR of 8,501 to 14,000 pounds.

(3) Upon request, each manufacturer shall report to the department of ecology the vehicle identification numbers (VIN) of each passenger car, light duty truck and medium duty passenger vehicle delivered to each Washington dealer that is not certified to California emission standards.

(4) For the purposes of determining compliance with this chapter, the department of ecology may require any vehicle manufacturer to submit any documentation the department of ecology deems necessary to the effective administration and enforcement of this chapter, including all certification materials submitted to the California Air Resources Board.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-100, filed 11/30/05, effective 12/31/05.]

WAC 173-423-110 Warranty requirements. (1) For all 2009 and subsequent model year vehicles subject to the provisions of this chapter, each manufacturer shall provide, to the ultimate purchaser and each subsequent purchaser, a warranty that complies with the requirements set forth in the California Code of Regulations, Title 13, sections 2035 through 2038, 2040, and 2046.

(2) For all 2009 and subsequent model year vehicles subject to the provisions of this chapter, each manufacturer shall include the emission control system warranty statement that complies with the requirements in the California Code of Regulations, Title 13, section 2039. Manufacturers may modify this statement as necessary to inform Washington vehicle owners of the applicability of the warranty. The manufacturer shall provide a telephone number appropriate for Washington residents.

(3) All manufacturers shall submit to the department of ecology Failure of Emission-Related Components reports as defined in the California Code of Regulations, Title 13, section 2144 for vehicles subject to this regulation. For purposes of compliance with this requirement, manufacturers may submit copies of the Failure of Emission-Related Components reports that are submitted to the California Air Resources Board, in lieu of submitting reports for vehicles subject to this chapter. Manufacturers may discontinue submitting these reports if so notified by the department of ecology.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-110, filed 11/30/05, effective 12/31/05.]

WAC 173-423-120 Recalls. (1) Any order or enforcement action taken by the California Air Resources Board to correct noncompliance with any section of Title 13, which results in the recall of any vehicle pursuant to the California Code of Regulations, Title 13, sections 2109 through 2135, shall be applicable to vehicles registered in the state of Washington. If the manufacturer can demonstrate to the department of ecology's satisfaction that the action is not applicable

to vehicles registered in Washington, the action shall not apply in Washington.

(2) Any voluntary or influenced emission-related recall campaign initiated by any manufacturer pursuant to the California Code of Regulations, Title 13, sections 2113 through 2121 shall extend to all applicable vehicles registered in Washington. If the manufacturer can demonstrate to the department of ecology's satisfaction that said campaign is not applicable to vehicles registered in Washington, the campaign shall not apply in Washington.

(3) For vehicles subject to an action pursuant to subsection (1) of this section, each manufacturer shall send to owners of vehicles registered in the state of Washington a notice that complies with the requirements in the California Code of Regulations, Title 13, sections 2118 or 2127. Such notice shall contain a telephone number appropriate for Washington residents.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-120, filed 11/30/05, effective 12/31/05.]

WAC 173-423-130 Surveillance. (1) The department of ecology may inspect new and used motor vehicles and related records for the purposes of determining compliance with the requirements of this chapter. Department of ecology inspections shall occur during regular business hours and on any premises owned, operated or used by any dealer or rental car agency.

(2) For the purposes of determining compliance with this chapter, the department of ecology may require any vehicle dealer or rental car agency to submit any documentation the department of ecology deems necessary to the effective administration and enforcement of this chapter. This provision does not require creation of new records.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-130, filed 11/30/05, effective 12/31/05.]

WAC 173-423-140 Enforcement. Any person who violates any provision of this chapter shall be liable for a civil penalty not to exceed five thousand dollars per vehicle. Penalties provided in this section shall be imposed pursuant to RCW 43.21B.300.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-140, filed 11/30/05, effective 12/31/05.]

WAC 173-423-150 Severability. Each section of this regulation shall be deemed severable, and in the event that any section of this regulation is held invalid, the remainder shall continue in full force and effect.

[Statutory Authority: RCW 70.120A.010. 05-24-044, § 173-423-150, filed 11/30/05, effective 12/31/05.]

Chapter 173-425 WAC
OUTDOOR BURNING

WAC

173-425-010 Purpose.
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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-425-035 Episodes. [Order DE 77-19, § 173-425-035, filed 10/24/77. Formerly WAC 18-12-035.] Repealed by 89-02-055 (Order 88-39), filed 1/3/89. Statutory Authority: Chapters 70.94 and 43.21A RCW.

173-425-036 Curtailment during episodes or impaired air quality. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-036, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-036, filed 1/3/89.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-045 Prohibited materials. [Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-045, filed 1/3/89; Order DE 77-19, § 173-425-045, filed 10/24/77. Formerly WAC 18-12-045.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-055 Exceptions. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-055, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-055, filed 10/24/77. Formerly WAC 18-12-055.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-065 Residential open burning. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-065, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-065, filed 1/3/89; Order DE 77-19, § 173-425-065, filed 10/24/77. Formerly WAC 18-12-065.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-075 Commercial open burning. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-075, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-075, filed 1/3/89; Order DE 77-19, § 173-425-075, filed 10/24/77. Formerly WAC 18-12-075.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-085 Agricultural open burning. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-085, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-085, filed 1/3/89; Order DE 77-19, § 173-425-085, filed 10/24/77. Formerly WAC 18-12-085.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-090 Local air authority may issue variance. [Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-090, filed 12/1/92, effective 1/1/93.] Repealed by 00-07-066 (Order 97-39), filed 3/13/00, effective 4/13/00. Statutory Authority: RCW 70.94.-700, [70.94.]755 and Governor's Executive Order 97-02.

173-425-095 No burn area designation. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-095, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-095, filed 1/3/89; Order DE 77-19, § 173-425-095, filed 10/24/77. Formerly WAC 18-12-095.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

173-425-100 Penalties. [Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-100, filed 12/1/92, effective 1/1/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-100, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-100, filed 10/24/77. Formerly WAC 18-12-100.] Repealed by 00-07-066 (Order 97-39), filed 3/13/00, effective 4/13/00. Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02.

173-425-110	Severability. [Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-110, filed 12/1/92, effective 1/1/93.] Repealed by 00-07-066 (Order 97-39), filed 3/13/00, effective 4/13/00. Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02.
173-425-115	Land clearing projects. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-115, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-115, filed 10/24/77. Formerly WAC 18-12-115.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.
173-425-120	Department of natural resources—Smoke management plan. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-120, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-120, filed 10/24/77. Formerly WAC 18-12-120.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.
173-425-130	Notice of violation. [Statutory Authority: RCW 70.94.-331. 90-19-062 (Order 90-10), § 173-425-130, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-130, filed 1/3/89; Order DE 77-19, § 173-425-130, filed 10/24/77. Formerly WAC 18-12-130.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.
173-425-140	Remedies. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-140, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-140, filed 10/24/77. Formerly WAC 18-12-140.] Repealed by 92-24-077 (Order 91-57), filed 12/1/92, effective 1/1/93. Statutory Authority: Chapter 70.94 RCW.

WAC 173-425-010 Purpose. The purpose of this rule is to establish a program to implement the limited burning policy authorized by sections 743 through 765 of the Washington Clean Air Act (chapter 70.94 RCW) and other provisions of the act that pertain to outdoor burning (except any outdoor burning listed in WAC 173-425-020(1)). Statutory authority for particular provisions of the rule is shown in parentheses throughout the rule.

The limited burning policy requires ecology and other agencies to:

(1) Reduce outdoor burning to the greatest extent practical, especially by prohibiting it in certain circumstances; (RCW 70.94.743(1))

(2) Establish a permit program for limited burning, one that requires permits for most types of outdoor burning; and (RCW 70.94.745)

(3) Foster and encourage development of reasonable alternatives to burning. (RCW 70.94.745(6))

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-010, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-010, filed 12/1/92, effective 1/1/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-010, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-010, filed 10/24/77. Formerly WAC 18-12-010.]

WAC 173-425-020 Applicability. (1) This chapter applies to all outdoor burning in the state except:

(a) Agricultural burning (which is governed by chapter 173-430 WAC);

(b) Silvicultural burning (which is governed by chapter 332-24 WAC, the Washington state smoke management plan, and various laws including chapter 70.94 RCW); and

(c) Any outdoor burning on lands within the exterior boundaries of Indian reservations (unless provided for by intergovernmental agreement).

(2) Specifically, this chapter applies to:

(a) Residential burning. (RCW 70.94.745)

(b) Land clearing burning. (RCW 70.94.745)

(c) Storm or flood debris burning. (RCW 70.94.743)

(d) Tumbleweed burning. (RCW 70.94.745)

(e) Weed abatement fires. (RCW 70.94.650)

(f) Fire fighting instruction fires. (RCW 70.94.650)

(g) Rare and endangered plant regeneration fires. (RCW 70.94.651)

(h) Indian ceremonial fires. (RCW 70.94.651)

(i) Recreational fires. (RCW 70.94.765)

(j) Other outdoor burning. (RCW 70.94.765)

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-020, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-020, filed 12/1/92, effective 1/1/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-020, filed 9/17/90, effective 10/18/90; Order DE 77-19, § 173-425-020, filed 10/24/77. Formerly WAC 18-12-020.]

WAC 173-425-030 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter shall have the following meanings:

(1) **"Agricultural burning"** means outdoor burning regulated under chapter 173-430 WAC, including, but not limited to, any incidental agricultural burning or agricultural burning for pest or disease control.

(2) **"Air pollution episode"** means a period when a forecast, alert, warning, or emergency air pollution stage is declared, as stated in chapter 173-435 WAC.

(3) **"Construction/demolition debris"** means all material resulting from the construction, renovation, or demolition of buildings, roads, and other man-made structures.

(4) **"Ecology"** means the Washington state department of ecology.

(5) **"Fire fighting instruction fires"** means fires for instruction in methods of fire fighting, including, but not limited to, training to fight structural fires, aircraft crash rescue fires, and forest fires.

(6) **"Firewood"** means bare untreated wood used as fuel in a solid fuel burning device, Indian ceremonial fire, or recreational fire.

(7) **"Impaired air quality"** means a first or second stage impaired air quality condition declared by ecology or a local air authority in accordance with WAC 173-433-140.

(8) **"Indian ceremonial fires"** means fires necessary for Native American ceremonies (i.e., conducted by and for Native Americans) if part of a religious ritual.

(9) **"Land clearing burning"** means outdoor burning of trees, stumps, shrubbery, or other natural vegetation from land clearing projects (i.e., projects that clear the land surface so it can be developed, used for a different purpose, or left unused). (RCW 70.94.750(2))

(10) **"Local air authority"** means an air pollution control authority activated under chapter 70.94 RCW that has jurisdiction over the subject source.

(11) **"Natural vegetation"** means unprocessed plant material from herbs, shrubbery, and trees, including grass, weeds, leaves, clippings, prunings, brush, branches, roots, stumps, and trunk wood.

(12) **"Nonattainment area"** means a clearly delineated geographic area which has been designated by the Environmental Protection Agency because it does not meet (or it contributes to ambient air quality in a nearby area that does not meet) a national ambient air quality standard or standards for one or more of the criteria pollutants, which include carbon monoxide, particulate matter (PM-10 and PM2.5), sulfur dioxide, nitrogen dioxide, lead, and ozone.

(13) **"Nonurban areas"** means unincorporated areas within a county that are not designated as an urban growth area. (RCW 70.94.745(8))

(14) **"Nuisance"** means an emission of smoke or any other air contaminant that unreasonably interferes with the use and enjoyment of the property upon which it is deposited. (RCW 70.94.030(2))

(15) **"Other outdoor burning"** means any type of outdoor burning not specified in WAC 173-425-020 (1) or (2)(a) through (i), including, but not limited to, any outdoor burning necessary to protect public health and safety. (RCW 70.94.650(7) and 70.94.765)

(16) **"Outdoor burning"** means the combustion of material of any type in an open fire or in an outdoor container without providing for the control of combustion or the control of emissions from the combustion. For the purposes of this rule, "outdoor burning" means all types of outdoor burning except agricultural burning and silvicultural burning. (RCW 70.94.743(2))

(17) **"Permitting agency"** means the agency responsible for issuing permits (including adopting a general permit) for, and/or enforcing all requirements of this chapter that apply to, a particular type of burning in a given area (unless another agency agrees to be responsible for certain enforcement activities in accordance with WAC 173-425-060 (1)(a) and (6)).

(18) **"Pollutants emitted by outdoor burning"** means carbon monoxide, carbon dioxide, particulate matter, sulfur dioxide, nitrogen oxides, lead, and various volatile organic compounds and toxic substances.

(19) **"Rare and endangered plant regeneration fires"** means fires necessary to promote the regeneration of rare and endangered plants found within natural area preserves as identified in chapter 79.70 RCW.

(20) **"Reasonable alternative"** means a method for disposing of organic refuse (such as natural vegetation) that is available, reasonably economical, and less harmful to the environment than burning.

(21) **"Recreational fire"** means cooking fires, campfires, and bonfires using charcoal or firewood that occur in designated areas or on private property for cooking, pleasure, or ceremonial purposes. Fires used for debris disposal purposes are not considered recreational fires.

(22) **"Residential burning"** means the outdoor burning of leaves, clippings, prunings and other yard and gardening refuse originating on lands immediately adjacent and in close proximity to a human dwelling and burned on such lands by the property owner or his or her designee. (RCW 70.94.750 (1))

(23) **"Silvicultural burning"** means outdoor burning relating to the following activities for the protection of life or property and/or the public health, safety, and welfare:

(a) Abating a forest fire hazard;

(b) Prevention of a forest fire hazard;

(c) Instruction of public officials in methods of forest fire fighting;

(d) Any silvicultural operation to improve the forest lands of the state; and

(e) Silvicultural burning used to improve or maintain fire dependent ecosystems for rare plants or animals within state, federal, and private natural area preserves, natural resource conservation areas, parks, and other wildlife areas. (RCW 70.94.660(1))

(24) **"Storm or flood debris burning"** means fires consisting of natural vegetation deposited on lands by storms or floods that have occurred in the previous two years and resulted in an emergency being declared or proclaimed in the area by the city, county, or state government and burned on such lands by the property owner or his or her designee. (RCW 70.94.743 (1)(c))

(25) **"Tumbleweed burning"** means outdoor burning to dispose of dry plants (typically Russian Thistle and Tumbleweed Mustard plants) that have been broken off, and rolled about, by the wind.

(26) **"Urban growth area"** means land, generally including and associated with an incorporated city, designated by a county for urban growth under RCW 36.70A.030.

(27) **"Weed abatement fires"** means any outdoor burning to dispose of weeds that is not regulated under chapter 173-430 WAC, which applies to agricultural burning.

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-030, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-030, filed 12/1/92, effective 1/1/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-425-030, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-425-030, filed 1/3/89; Order DE 77-19, § 173-425-030, filed 10/24/77. Formerly WAC 18-12-030.]

WAC 173-425-040 Areas where certain types of outdoor burning are prohibited. (1) **Nonattainment areas.** Residential burning and land clearing burning may not be allowed in any areas of the state that exceed federal or state ambient air quality standards for pollutants emitted by outdoor burning. These areas are limited to all nonattainment areas and former nonattainment areas for carbon monoxide, particulate matter (PM-10 and PM2.5), sulfur dioxide, nitrogen dioxide, and lead. However, ecology may, in cooperation with any local air authority having jurisdiction, authorize the omission of parts of a nonattainment area if ambient air quality standards for the pollutants that caused the area to be designated nonattainment have not been exceeded in those parts, and outdoor burning in those parts has not contributed, and is not expected to contribute, significantly to exceedances of the standards in the nonattainment area. (RCW 70.94.743 (1)(a))

(2) **Urban growth areas.** Residential burning and land clearing burning may not be allowed in any urban growth areas after December 31, 2000, except as follows: Residential burning and land clearing burning may be allowed in the following types of urban growth areas until December 31, 2006: (RCW 70.94.743 (1)(b))

(a) Urban growth areas for incorporated cities having a population of less than five thousand people that are neither within nor contiguous with any area identified in subsection (1) of this section; and

(b) Urban growth areas that do not include an incorporated city.

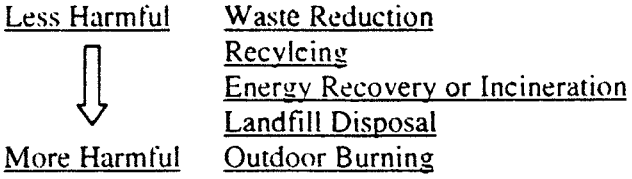
(3) **Cities over 10,000.** Residential burning and land clearing burning may not be allowed in any cities having a population greater than ten thousand people after December 31, 2000. Cities having this population must be identified by using the most current population estimates available for each city. (RCW 70.94.743 (1)(b))

(4) **High density areas.** Land clearing burning may not be allowed in any area having a general population density of one thousand or more persons per square mile after December 31, 2000, if the area is contiguous with any area where land clearing burning has already been, or must be, prohibited by that date under subsection (1), (2), or (3) of this section, and it may not be allowed in any other areas having this density after December 31, 2006. All areas having this density must be identified by using the most current population data available for each census block group and dividing by the land area of the block group in square miles. (RCW 70.94.750(2))

(5) **Areas with a reasonable alternative to burning.** Residential burning, land clearing burning, storm or flood debris burning, tumbleweed burning, weed abatement fires, and other outdoor burning of organic refuse may not be allowed in any area of the state (including any areas or parts of areas identified in subsections (1) through (4) of this section) when a reasonable alternative to burning is found to exist in the area for that type of burning. (RCW 70.94.745(6))

By December 31, 2000, and at least every third year after that, each local air authority, and ecology in cooperation with counties, must determine whether any areas within their jurisdiction where a type of burning listed in this subsection is allowed (except other outdoor burning of organic refuse) have a reasonable alternative to burning. Determinations for other outdoor burning of organic refuse must be made on a permit-by-permit basis by applying the criteria in (a) and (b) of this subsection. A reasonable alternative exists for any area where the answers to both of the following questions are "Yes" for the specified type of burning: Provided, That parts of an area may be excluded for the purpose of defining practical boundaries for the area.

	Yes	No
(a) **Available and reasonably economical.** Is the area served by: (i) A county or municipally sponsored service for recycling (i.e. composting) of the organic refuse (e.g. natural vegetation); or (ii) Any other method for disposing of the organic refuse (such as a public or private chipping or chipper rental service, an energy recovery or incineration facility, or a solid waste drop box, transfer station, or landfill) that is located within a reasonable distance and will accept the type and volume of organic refuse at a cost that is less than or equivalent to the median of all county tipping fees in the state for disposal of municipal solid waste?	❑	❑
(b) **Less harmful to the environment.** Is any available and reasonably economical alternative method for disposing of the organic refuse less harmful to the environment than outdoor burning according to the following hierarchy?:	❑	❑



[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-040, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-040, filed 12/1/92, effective 1/1/93.]

WAC 173-425-050 Other prohibitions/requirements that apply to all outdoor burning. No person may cause or allow an outdoor fire in an area where the type of burning involved is prohibited under WAC 173-425-040, or where it requires a permit under WAC 173-425-060(2), unless a permit has been issued and is in effect. In addition, the following general requirements apply to all outdoor burning regulated by this chapter, including any outdoor burning allowed without a permit under WAC 173-425-060(2), unless a specific exception is stated in this section:

(1) **Prohibited materials.** The following materials may not be burned in any outdoor fire: Garbage, dead animals, asphalt, petroleum products, paints, rubber products, plastics, paper (other than what is necessary to start a fire), cardboard, treated wood, construction/demolition debris, metal, or any substance (other than natural vegetation) that normally releases toxic emissions, dense smoke, or obnoxious odors when burned, except that: (RCW 70.94.775(1) and Attorney General Opinion 1993 #17)

(a) Fire fighting instruction fires for aircraft crash rescue training fires approved and conducted in compliance with RCW 70.94.650(5) may contain uncontaminated petroleum products. (RCW 70.94.650(6))

(b) Ecology or a local air authority may allow the limited burning of prohibited materials for other fire fighting instruction fires, including those that are exempt from permits under WAC 173-425-060 (2)(f), and other outdoor burning necessary to protect public health and safety. (RCW 70.94.650(7))

(2) **Hauled material.** No outdoor fire may contain material (other than firewood) that has been hauled from an area where outdoor burning of the material is prohibited under WAC 173-425-040. Any outdoor burning of material hauled from areas where outdoor burning of the material is allowed requires an appropriate permit under WAC 173-425-060(2), and any use of property for this purpose on an on-going basis, must be limited to the types of burning listed in WAC 173-351-200 (5)(b) (criteria for municipal solid waste landfills) and approved in accordance with other laws,

including chapter 173-304 WAC (Minimum functional standards for solid waste handling) and chapter 173-400 WAC (General regulations for air pollution sources). (RCW 70.94.-745(6))

(3) **Curtailments.**

(a) No outdoor fire may be ignited in a geographical area where:

(i) Ecology has declared an air pollution episode; (RCW 70.94.775(2) and 70.94.780)

(ii) Ecology or a local air authority has declared impaired air quality; or (RCW 70.94.775(2) and 70.94.780)

(iii) The appropriate fire protection authority has declared a fire danger burn ban, unless that authority grants an exception.

(b) The person responsible for the fire must contact the permitting agency and/or any other designated source for information on the burning conditions for each day.

(c) The person responsible for an outdoor fire must extinguish the fire when an air pollution episode, impaired air quality condition, or fire danger burn ban that applies to the burning, is declared. In this regard:

(i) Smoke visible from all types of outdoor burning, except land clearing burning, after a time period of three hours has elapsed from the time an air pollution episode, impaired air quality condition, or fire danger burn ban is declared, will constitute prima facie evidence of unlawful outdoor burning.

(ii) Smoke visible from land clearing burning after a time period of eight hours has elapsed from the time an air pollution episode, impaired air quality condition, or fire danger burn ban is declared, will constitute prima facie evidence of unlawful outdoor burning.

(4) **Unlawful outdoor burning:** It is unlawful for any person to cause or allow outdoor burning that causes an emission of smoke or any other air contaminant that is detrimental to the health, safety, or welfare of any person, that causes damage to property or business, or that causes a nuisance. (RCW 70.94.040, 70.94.650(1), and 70.94.780)

(a) Any person affected by outdoor burning may file a complaint with the permitting agency or other designated enforcing agency.

(b) Any agency responding to an outdoor burning complaint should attempt to determine if the burning on any particular property is unlawful. This may include, but is not limited to, considering whether the burning has caused an emission of smoke or any other air contaminant in sufficient quantity to be unlawful.

(c) Any person responsible for such unlawful outdoor burning must immediately extinguish the fire.

(5) **Burning in outdoor containers.** Outdoor containers (such as burn barrels and other incinerators not regulated under WAC 173-400-070(1)) used for outdoor burning, must be constructed of concrete or masonry with a completely enclosed combustion chamber and equipped with a permanently attached spark arrester constructed of iron, heavy wire mesh, or other noncombustible material with openings not larger than one-half inch, and they may only be used in compliance with this chapter.

(6) **Other general requirements:**

(a) A person capable of extinguishing the fire must attend it at all times, and the fire must be extinguished before leaving it.

(b) No fires are to be within fifty feet of structures.

(c) Permission from a landowner, or owner's designated representative, must be obtained before starting an outdoor fire.

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-050, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-050, filed 12/1/92, effective 1/1/93.]

WAC 173-425-060 Outdoor burning permit program/requirements. (1) **Permit program.**

(a) Ecology or local air authorities may consult with fire protection authorities, conservation districts, or counties to determine if any of these agencies are capable and willing to serve as the permitting agency and/or enforcing agency for particular types of burning in an area of the state. Ecology or local air authorities may enter into agreements with any capable agencies to identify the permitting agencies and enforcing agencies for each type of burning and determine the type of permit appropriate for each area where a permit is required. (RCW 70.94.654)

(b) Permitting agencies may use, as appropriate, a verbal, electronic, written, or general permit established by rule, for any type of burning that requires a permit: Provided, That a written permit should be used, where feasible, for land clearing burning, storm or flood debris burning in areas where residential burning and land clearing burning are prohibited under WAC 173-425-040 (1), (2), or (3), and other outdoor burning (except any other outdoor burning necessary to protect public health and safety). (RCW 70.94.745(4))

(c) The rule for a general permit must establish periods of time when any burning under the permit must occur. General permits must also include all appropriate conditions for burning as stated in subsection (4) of this section.

(2) **Types of burning that require a permit.** Except as otherwise stated, a permit is required for the following types of outdoor burning in all areas of the state under the jurisdiction of this chapter:

(a) Residential burning (except in the nonurban areas of any county with an unincorporated population of less than fifty thousand; (RCW 70.94.745(2))

(b) Land clearing burning; (RCW 70.94.745(2))

(c) Storm or flood debris burning; (RCW 70.94.743 (1)(c))

(d) Tumbleweed burning (except in counties with a population of less than two hundred fifty thousand); (RCW 70.94.745(5))

(e) Weed abatement fires; (RCW 70.94.650 (1)(a))

(f) Fire fighting instruction fires for training to fight structural fires in urban growth areas and cities with a population over ten thousand, and all other fire fighting instruction fires, except fire fighting instruction fires for training to fight structural fires as provided in RCW 52.12.150, aircraft crash rescue fires as provided in RCW 70.94.650(5), and forest fires; (RCW 70.94.650 (1)(b))

(g) Rare and endangered plant regeneration fires; (RCW 70.94.651(1))

(h) Indian ceremonial fires (except on lands within the exterior boundaries of Indian reservations unless provided for by intergovernmental agreement); (RCW 70.94.651(2))

(i) Recreational fires with a total fuel area that is greater than three feet in diameter and/or two feet in height (except in the nonurban areas of counties with an unincorporated population of less than fifty thousand; and (RCW 70.94.765)

(j) Other outdoor burning (if specifically authorized by the local air authority or ecology). (RCW 70.94.765)

(3) **Fees.** Permitting agencies may charge a fee for any permit issued under the authority of this chapter: Provided, That a fee must be charged for all permits issued for weed abatement fires and fire fighting instruction fires. All fees must be set by rule and must not exceed the level necessary to recover the costs of administering and enforcing the permit program. (RCW 70.94.650(2) and 70.94.780)

(4) **Permit decisions.** Permitting agencies must approve with conditions, or deny outdoor burning permits as needed to achieve compliance with this chapter. All permits must include conditions to satisfy the requirements in WAC 173-425-050, and they may require other conditions, such as restricting the time period for burning, restricting permissible hours of burning, imposing requirements for good combustion practice, and restricting burning to specified weather conditions. Permitting agencies may also include conditions to comply with other laws pertaining to outdoor burning. (RCW 70.94.745, 70.94.750, and 70.94.780)

(5) **Establishment of a general permit and requirements for residential burning.**

(a) A general permit for residential burning is hereby adopted for use in any area where ecology (or a local air authority that has adopted this general permit by reference) and any designated enforcing agencies have agreed that a general permit is appropriate for residential burning, and have notified the public where the permit applies. All burning under this permit must comply with the conditions in (c) of this subsection, and it must be restricted to the first and second weekends (Saturday and Sunday) in April and the third and fourth weekends in October, unless alternative days are substituted by the enforcing agency and adequate notice of the substitution is provided to the public. Alternative days may only be substituted if conditions on the prescribed days are unsuitable due to such things as poor air quality, high fire danger, unfavorable meteorology, likely interference with a major community event, or difficulties for enforcement. (RCW 70.94.745(4))

(b) Local air authorities may also adopt a general permit for residential burning that prescribes a different set of days, not to exceed eight days per year, when any burning under the permit must occur: Provided, That the public must be given adequate notice regarding where and when the permit will apply. (RCW 70.94.745(4))

(c) The following conditions apply to all residential burning allowed without a permit under WAC 173-425-060 (2)(a) or allowed under a general, verbal, or electronic permit:

(i) The person responsible for the fire must contact the permitting agency and/or any other designated source for information on the burning conditions for each day.

(ii) A fire may not be ignited, and must be extinguished, if an air pollution episode, impaired air quality condition, or fire danger burn ban that applies to the burning, is declared for the area.

(iii) The fire must not include garbage, dead animals, asphalt, petroleum products, paints, rubber products, plastics, paper (other than what is necessary to start a fire), cardboard, treated wood, construction/demolition debris, metal, or any substance (other than natural vegetation) that normally releases toxic emissions, dense smoke, or obnoxious odors when burned.

(iv) The fire must not include materials hauled from another property.

(v) If any emission from the fire is detrimental to the health, safety, or welfare of any person, if it causes damage to property or business, or if it causes a nuisance, the fire must be extinguished immediately.

(vi) A person capable of extinguishing the fire must attend it at all times, and the fire must be extinguished before leaving it.

(vii) No fires are to be within fifty feet of structures.

(viii) Permission from a landowner, or owner's designated representative, must be obtained before starting an outdoor fire.

(ix) Any burn pile must not be larger than four feet by four feet by three feet.

(x) Only one pile at a time may be burned, and each pile must be extinguished before lighting another.

(xi) If an outdoor container is used for burning, it must be constructed of concrete or masonry with a completely enclosed combustion chamber and equipped with a permanently attached spark arrester constructed of iron, heavy wire mesh, or other noncombustible material with openings not larger than one-half inch.

(xii) No fire is permitted within five hundred feet of forest slash.

Persons not able to meet these requirements or the requirements in WAC 173-425-050 must apply for and receive a written permit before burning. Failure to comply with all requirements of this subsection voids any applicable permit, and the person responsible for burning may be subject to enforcement action under subsection (6) of this section.

(6) **Field response and enforcement.** Any agency that issues permits, or adopts a general permit for any type of burning in an area, is responsible for field response to outdoor burning complaints and enforcement of all permit conditions and requirements of this chapter related to that type of burning in the area, unless another agency has agreed under WAC 173-425-060 (1)(a) to be responsible for certain field response or enforcement activities. Except for enforcing WAC 173-425-050 (3)(a)(iii), local air authorities and ecology may also perform these activities. Local air authorities or ecology will also be responsible for enforcing any requirements that apply to burning that is prohibited or exempt from permits in areas under their jurisdiction, unless another agency agrees to be responsible.

Permitting agencies and enforcing agencies may require that corrective action be taken, and may assess penalties to the extent allowed under their general and specific authorities if they discover noncompliance with this chapter. A fire protection authority called to respond to, control, or extinguish an illegal or out-of-control fire may charge, and recover from

the person responsible for the fire, the costs of its response and control action.

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-060, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-060, filed 12/1/92, effective 1/1/93.]

WAC 173-425-070 Variances. Any person who proposes to engage in outdoor burning may apply to ecology or a local air authority for a variance from provisions of this chapter governing the quality, nature, duration, or extent of discharges of air contaminants from the proposed burning. All variance applications must be reviewed, and approved or disapproved, in accordance with RCW 70.94.181. (RCW 70.94.181)

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-070, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-070, filed 12/1/92, effective 1/1/93.]

WAC 173-425-080 Severability. The provisions of this regulation are severable. If any provision is held invalid, the application of that provision to other circumstances and the remainder of the regulation will not be affected.

[Statutory Authority: RCW 70.94.700, [70.94.]755 and Governor's Executive Order 97-02. 00-07-066 (Order 97-39), § 173-425-080, filed 3/13/00, effective 4/13/00. Statutory Authority: Chapter 70.94 RCW. 92-24-077 (Order 91-57), § 173-425-080, filed 12/1/92, effective 1/1/93.]

Chapter 173-430 WAC
AGRICULTURAL BURNING

WAC

173-430-010	Purpose of the regulation.
173-430-020	General applicability and conditions.
173-430-030	Definition of terms.
173-430-040	Agricultural burning requirements.
173-430-045	Alternatives to burning field and/or turf grasses grown for seed.
173-430-050	Best management practices.
173-430-060	Research into alternatives to agricultural burning.
173-430-070	General agricultural burning permit conditions and criteria.
173-430-080	Responsibilities of a permitting authority.
173-430-090	Receiving delegation—Counties, conservation districts, and fire protection agencies.
173-430-100	Severability.

WAC 173-430-010 Purpose of the regulation. Chapter 70.94 RCW, the Washington Clean Air Act, declares it is the intent of the state to protect public health and it is the policy of the state that the responsibilities and costs of protecting the air resource and operating state and local air pollution control programs be shared as equitably as possible among all sources whose emissions cause air pollution. Some of the sources whose emissions contribute to air pollution in the state include industrial sources (large and small), mobile sources such as vehicles, and area sources such as woodstoves, general outdoor burning, and agricultural burning. A variety of strategies to control and reduce the impact of emissions are described throughout chapter 70.94 RCW, including controls on emissions created from agricultural burning. The act intends that public health be protected and also allows for agricultural burning that is reasonably necessary. The act also requires that burning be restricted and regulated to address the potentially competing goals of both limiting air pollution and allowing agricultural burning. Chapter 70.94 RCW authorizes the department of ecology and local air authorities to implement the provisions of that act related to agricultural burning. This rule establishes controls for agricultural burning in the state in order to minimize adverse health and the environment effects from agricultural burning in accord with the most reasonable procedures to follow in safeguarding life and property under all circumstances or is reasonably necessary to carry out the enterprise or both. The control strategies include:

(1) Establishing a permit program with minimum statewide requirements and specific burn authorizations.

(2) Providing for implementation of a research program to explore and identify economical and practical alternatives to agricultural burning.

(3) Encouraging and developing economically feasible alternative methods to agricultural burning.

(4) Limiting the scope of the rule to agricultural burning and distinguishing between agricultural burning and other types of burning.

(5) Providing for local administration of the permitting program through delegation.

(6) Assessing air quality within a region and incorporating this data into an evaluation tailored to emissions from agricultural burning.

(7) Making use of metering as a component of the agricultural burning permit program. Metering is a technique of limiting emissions from agricultural burning at specific times and places by taking into account potential emission rates, forecasted weather (dispersion), and current and projected air quality.

(8) Using improved and proven technology in evaluating the conditions under which burning is authorized, including those related to meteorology, emissions, and air pollution.

(9) Providing for education and communication.

[Statutory Authority: RCW 70.94.650, 70.94.743, and 70.94.745. 06-16-052 (Order 04-10), § 173-430-010, filed 7/26/06, effective 8/26/06. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-010, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-010, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-010, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-010, filed 11/9/77. Formerly WAC 18-16-010.]

WAC 173-430-020 General applicability and conditions. (1) This regulation applies to burning related to agricultural activities. It does not apply to silvicultural burning or other outdoor burning (chapter 173-425 WAC).

(2) Burning of organic debris related to agricultural activities is allowed when it is reasonably necessary to carry out the enterprise. Agricultural burning is reasonably necessary to carry out the enterprise when it meets the criteria of the best management practices and no practical alternative is reasonably available (RCW 70.94.650).

(3) Anyone conducting burning related to agricultural activities must comply with local fire safety laws and regulations, and burn when wind takes the smoke away from roads, homes, population centers, or other public areas.

(4) Burning related to agricultural activities must not occur during an air pollution episode or any stage of impaired air quality. Definitions of air pollution episode and impaired air quality are found in WAC 173-430-030.

(5) Burning of organic debris related to agricultural activities requires a permit and fee, except for agricultural burning that is incidental to commercial agricultural activities (RCW 70.94.745). An agricultural operation burning under the incidental agricultural burning exception must still notify the local fire department within the area and not burn during an air pollution episode or any stage of impaired air quality. The specific types of burning that qualify as exceptions to the permit requirement are:

(a) Orchard prunings. An orchard pruning is a routine and periodic operation to remove overly vigorous or nonfruiting tree limbs or branches to improve fruit quality, facilitate tree canopy training and improve the management of plant and disease, and pest infestations;

(b) Organic debris along fencelines. A fenceline or fencerow is the area bordering a commercial agricultural field that is or would be unworkable by equipment used to cultivate the adjacent field;

(c) Organic debris along or in irrigation or drainage ditches. An irrigation or drainage ditch is a waterway which predictably carries water (not necessarily continuously) and is unworkable by equipment used to cultivate the adjacent field;

(d) Organic debris blown by wind. The primary example is tumbleweeds.

[Statutory Authority: RCW 70.94.650, 70.94.743, and 70.94.745. 06-16-052 (Order 04-10), § 173-430-020, filed 7/26/06, effective 8/26/06. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-020, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-020, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-020, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-020, filed 11/9/77. Formerly WAC 18-16-020.]

WAC 173-430-030 Definition of terms. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the meanings of the following words and phrases used in this chapter are listed below.

(1) **Agricultural burning:** Means the burning of vegetative debris from an agricultural operation necessary for disease or pest control, necessary for crop propagation and/or crop rotation, or where identified as a best management practice by the agricultural burning practices and research task force established in RCW 70.94.650 or other authoritative source on agricultural practices. Propane flaming for the purpose of vegetative debris removal is considered commercial agricultural burning.

(2) **Agricultural operation:** Means a farmer who can substantiate that the operation is commercial agriculture by showing the most recent year's IRS schedule F form or its corporate equivalent. It also includes burning conducted by irrigation district or drainage district personnel as part of water system management.

(3) **Ag task force:** Means the agricultural burning practices and research task force.

(4) **Air pollution episode:** Means a period when a forecast, alert, warning, or emergency air pollution stage is declared as described in RCW 70.94.715.

(5) **Best management practice:** Means the criteria established by the agricultural burning practices and research task force (Ag task force).

(6) **Certify:** Means to declare in writing, based on belief after reasonable inquiry, that the statements and information provided are true, accurate, and complete.

(7) **Department:** Means the department of ecology.

(8) **Farmer:** Means any person engaged in the business of growing or producing for sale any agricultural product upon their own lands, or upon the land in which they have a present right of possession, any agricultural product. Farmer does not mean persons growing or producing such products primarily for their own consumption.

(9) **Impaired air quality:** Means a first or second stage impaired air quality condition declared by ecology or a local air authority with jurisdiction in accordance with RCW 70.94.715, 70.94.775, and 70.94.473.

(a) A first stage of impaired air quality is reached when:

(i) Fine particulates are at an ambient level of thirty-five micrograms per cubic meter measured on a twenty-four-hour average; and

(ii) Forecasted meteorological conditions are not expected to allow levels of fine particulates to decline below thirty-five micrograms per cubic meter for a period of forty-eight hours or more from the time that the fine particulates are measured at the trigger level.

(b) A second stage of impaired air quality is reached when:

(i) A first stage of impaired air quality has been in force and not been sufficient to reduce the increasing fine particle pollution trend;

(ii) Fine particulates are at an ambient level of sixty micrograms per cubic meter measured on a twenty-four-hour average; and

(iii) Forecasted meteorological conditions are not expected to allow levels of fine particulates to decline below sixty micrograms per cubic meter for a period of forty-eight hours or more from the time that the fine particulates are measured at the trigger level.

(10) **Outdoor burning:** Means all forms of burning except those listed as exempt in WAC 173-425-020.

(11) **Permitting authority:** Means ecology or its delegate or a local air authority with jurisdiction or its delegate. Conservation districts, counties, fire districts, or fire protection agencies may receive delegation for all or portions of the agricultural burning permit program as identified in a delegation agreement. The permitting authority will issue agricultural burning permits for a given locale.

(12) **Silvicultural burning:** Means burning on any land the department of natural resources protects per RCW 70.94.030(13), 70.94.660, 70.94.690, and pursuant to chapter 76.04 RCW.

[Statutory Authority: RCW 70.94.650, 70.94.743, and 70.94.745. 06-16-052 (Order 04-10), § 173-430-030, filed 7/26/06, effective 8/26/06. Statutory Authority: RCW 70.94.656. 98-12-016 (Order 97-45), § 173-430-030, filed 5/26/98, effective 6/26/98. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-030, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-030, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-030, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-030, filed 11/9/77. Formerly WAC 18-16-030.]

WAC 173-430-040 Agricultural burning requirements. (1) Agricultural burning is allowed when it is reasonably necessary to carry out the enterprise. A farmer can show

it is reasonably necessary when it meets the criteria of the best management practices and no practical alternative is reasonably available. In certain circumstances, ecology may certify an alternative to burning. Where the certified alternative is reasonably available, burning is not allowed. Certified alternatives are described in WAC 173-430-045.

(2) For allowed agricultural burning, the department of ecology or local air authorities with jurisdiction will make daily or specific fire burn calls (during times of anticipated burning) and use metering when necessary to minimize the potential for adverse air quality impacts. Metering is a technique of limiting emission from burning at specific times and places by taking into account potential emission rates, forecasted weather (dispersion), and current and projected air quality. The burn decision process will consider: The potential number of burns and their expected size(s) and duration(s); recent and current ambient concentrations of pollutants; other potential emissions sources; and evaluations and judgments about how foreseeable meteorological conditions will affect concentrations of pollutants in the air sheds.

(a) For the purposes of this section: The smoke management index is a set of conditions that guide the production of certain reports as described in (c) of this subsection and evaluations as described in (d) of this subsection. The smoke management index is not an air quality standard as defined in RCW 70.94.030(4) and further identified in RCW 70.94.331. The smoke management index is not an emission standard as defined in RCW 70.94.030(9) and further identified in RCW 70.94.331. The smoke management index is not an air pollution episode as described in RCW 70.94.710.

(b) Ecology and local air authorities making daily or specific fire burn calls in areas where PM2.5 concentrations are regularly monitored will follow the procedures in (c) of this subsection at the time of making the burn decision whenever either of the following smoke management index conditions exist:

(i) A most recent daily average (twenty-four-hour) PM2.5 concentration was equal to or greater than 16 micrograms per cubic meter. This is division between "good" and "moderate" classifications of the U.S. Environmental Protection Agency's Air Quality Index (AQI) for particulate matter based on the National Ambient Air Quality Standard of 65 micrograms per cubic meter.

(ii) A two-hour rolling average PM2.5 concentration, during the most recent twenty-four to thirty hours was equal to or greater than the regional seasonal average PM2.5 concentration plus 15 micrograms per cubic meter.

(c) In authorizing additional burning, a determination will be documented explaining that the decision to allow additional burning is not expected to result in a further significant deterioration of air quality. The determination will be entered on a standard form noting the date, time, the location of the additional burning, the size of the burn(s), and a brief explanation of the opinion as to why the additional burning is not expected to result in a further, significant reduction of air quality. The purpose of the determination and recordkeeping requirements of this section is to enhance agency and public understanding of the effectiveness of the daily burn and metering decision-making process, and to improve its application over time. A notice of such determinations will be made by ecology or a local air authority with jurisdiction at the time the daily burn decision is communicated. Ecology or a local air authority with jurisdiction will also periodically make the determination forms conveniently available to the public.

(d) Following a determination described in (c) of this subsection and a deterioration of air quality to levels equal to or greater than a two-hour rolling average concentration of the regional seasonal average PM2.5 concentration plus 25 micrograms per cubic meter in the specific area during the twenty hours following such determination, ecology or the local air authority with jurisdiction will evaluate the deterioration and document any findings and opinions regarding why the deterioration occurred. Ecology or the local air authority with jurisdiction will make evaluations under this subsection conveniently available to the public.

(e) Ecology or a local air authority with jurisdiction may evaluate emission dispersion impacts in the regular course of business. In addition, ecology or the local air authority with jurisdiction will produce an annual report summarizing determinations and evaluations pursuant to the smoke management index.

(f) Pursuant to RCW 70.94.473 and 70.94.775, no burning shall be authorized when an air quality alert, warning, emergency or impaired air quality condition has been issued.

(g) For purposes of protecting public health (not eliminating agricultural burning), if an area exceeds or threatens to exceed unhealthy air pollution levels, the permitting authority may limit the number of acres, on a pro rata basis as provided by RCW 70.94.656 and/or by RCW 70.94.650.

(3) Except as described in WAC 173-430-020(5), all agricultural burning requires a permit.

(a) Ecology or local air authorities with jurisdiction will provide agricultural burning application forms for agricultural burning.

(b) To qualify for an agricultural burning permit the farmer must be an agricultural operation or government entity with specific agricultural burning needs, such as irrigation districts, drainage districts, and weed control boards.

(c) A farmer must fill out the information requested on a permit application, pay the permitting fee, and submit it to the permitting authority for review and approval prior to burning.

(i) The application must describe the reason for burning and include at least the following information: Name and address of the person or corporation responsible for the burn, the specific location (county; legal description: Section, township, range, block and unit number), the crop type, the type or size of the burn, driving directions to the burn, specific reason for the burn, the target date for burning, a map, signature of the responsible party, and any additional information required by the permitting authority. Each permitting authority may require additional information on the application.

(ii) All applications must comply with other state or local regulations.

(d) The permitting authority must evaluate the application, and approve the permit prior to burning.

(e) Permit decisions including the issuance, denial, or conditioning must be based on consideration of air quality conditions in the area affected by the proposed burning, the time of year, meteorological conditions, the size and duration of the proposed burning activity, the type and amount of veg-

etative material to be burned, the applicant's need to carry out such burning, existence of extreme burning conditions, risk of escape onto property owned by another, and the public's interest in the environment.

(f) Ecology or its delegate, or a local air authority with jurisdiction, or its delegate must approve or deny the permit in part or in whole based on information in the application.

(g) Ecology and its delegate or a local air agency with jurisdiction or its delegate may issue permits for appropriate agricultural burning activities in nonattainment areas, maintenance areas, and urban growth areas as described in RCW 70.94.743.

(4) All agricultural burning permits require a fee. Maximum fee level is set by statute at two dollars and fifty cents per acre (RCW 70.94.650(2)) and is established by the agricultural burning practices and research task force (RCW 70.94.650(4)). The fee is the greater of a minimum fee level or a variable fee level.

(a) Minimum fee levels:

(i) Twenty-five dollars per calendar year per agricultural operation based on burning up to ten acres or equivalent;

(ii) Fifty dollars for orchard tear-out burning per calendar year per agricultural operation based on burning debris from up to twenty acres or equivalent.

(b) The variable fee level (based on the acreage or equivalent):

(i) Through the calendar year 2007, the fee is two dollars per acre.

(ii) Beginning in calendar year 2008, the fee is two dollars and twenty-five cents per acre.

(c) Permit fee uses. The permit fee is used to off-set the cost of administering and enforcing the agricultural burning permit program. There are three components: Local administration, research, and ecology administration.

(i) Local permitting program administration. The permitting authority may set the fee as an amount per agricultural operation per calendar year, a set amount per fire, or a set rate no greater than one dollar and twenty-five cents per acre burned. The permitting authority must establish this portion of the fee by an appropriate, public process such as a local rule, ordinance, or resolution. In areas of the state where the department has not delegated permitting authority, this portion of the fee shall be one dollar and twenty-five cents per acre burned.

(ii) Ecology administration. This portion of the fee shall be used to off-set the statewide administrative, education, and oversight costs of the department for the agricultural burning program.

(iii) Research fund. The agricultural burning applied research portion of the fee shall be no greater than one dollar per acre burned. The amount assessed may be less than one dollar per acre burned as periodically determined by the agricultural burning practices and research task force based on applied research needs, regional needs and the research fund budget. The agricultural burning practices and research task force may also establish discounted assessment rates based on the use of best management practices.

(iv) The chart below shows the permit fee break-out per category:

Fee Level	Section	Local Administration	Research	Ecology Administration
$25.00	WAC 173-430-040 (4)(a)(i)	$12.50	$12.50	-0-
$50.00	WAC 173-430-040 (4)(a)(ii)	$12.50	$12.50	$25.00
2006 - $2.00 per acre	WAC 173-430-040 (4)(b)(i)	Up to $1.25 per acre	50 cents per acre	25 cents per acre
2007 - $2.00 per acre	WAC 173-430-040 (4)(b)(i)	Up to $1.25 per acre	25 cents per acre	50 cents per acre
2008 and beyond - $2.25 per acre	WAC 173-430-040 (4)(b)(ii)	Up to $1.25 per acre	50 cents per acre	50 cents per acre

(d) A farmer must pay the fee when submitting the application. Refunds are allowed for portions not burned provided the adjusted fee after subtracting refunds is no less than twenty-five dollars.

(e) The agricultural burning practices and research task force may set acreage equivalents, for nonfield style agricultural burning practices, based on the amount of emissions relative to typical field burning emissions. Any acreage equivalents, established by rule, shall be used in determining fees. For agricultural burning conducted by irrigation or drainage districts, each mile of ditch (including banks) burned is calculated on an equivalent acreage basis.

(5) All agricultural burning permits must include conditions intended to minimize air pollution.

(a) A farmer must comply with the conditions on the agricultural burning permit.

(b) Permits must be conditioned to minimize emissions and impacts insofar as practical, including denial of permission to burn during periods of adverse meteorological conditions. When necessary as determined by ecology or the local air authorities to ensure compliance with the act, permit conditions will include the use of a daily burn decision, permit specific decisions and/or metering.

(c) The permitting authority must act on a complete application (as determined by the agency) within seven days of receipt.

(i) The permitting authority must evaluate the application and approve or deny all or part of it.

(ii) The permitting authority must evaluate the application to determine if the requested burning is within the general or crop-specific best management practices.

(iii) If the application is denied, the reason must be stated.

(6) Additional requirements for burning of field and turf grasses grown for seed.

The department of ecology will proceed with the process to certify alternatives to burning as identified in RCW 70.94.656(3). In addition to the certification process, ecology is also limiting the number of acres allowed to be burned as specified in RCW 70.94.656(4).

(a) Beginning in 1997 and until approved alternatives become available, each farmer shall be limited to burning no more than one-third of the number of acres in grass seed production on May 1, 1996. "In production" means planted, growing and under the control of the farmer.

Without regard to any previous burn permit history, in 1996, each farmer shall be limited to burning the greater of:

(i) Two-thirds of the number of acres the farmer burned under a valid permit issued in 1995; or

(ii) Two-thirds of the number of acres in grass seed production on May 1, 1996. "In production" means planted, growing and under the control of the farmer.

(b) Exemptions to the requirements for burning of field and turf grasses grown for seed ((a) of this subsection). A farmer may request an exemption for extraordinary circumstances, such as property where a portion(s) of the field is oddly shaped or where the slope is extremely steep. This provision does not apply to WAC 173-430-045 Alternatives to burning field and/or turf grasses grown for seed. Under this subsection, relief from the acreage/emissions reduction requirements of (a) of this subsection shall be limited to no more than five percent of the acreage in production on May 1, 1996, and is also subject to the following provisions:

(i) The exemption request must be certified by an agronomic professional;

(ii) The farmer must be able to show full compliance with the emissions reductions in (a) of this subsection for the acreage not exempted; and

(iii) The farmer must be in full compliance with permit requirements for other crops under WAC 173-430-040.

(c) Measurement for emission reduction for grass seed field and turf grass. Ecology will use acres as the basis for determining emission reductions as provided by RCW 70.94.656, until another method(s) is shown to be better and meets with the intent of RCW 70.94.656(4). Ecology will investigate alternate methods, as they become available. If ecology finds that an alternate method is appropriate and meets the criteria, it may certify this method using an administrative order.

(d) The department of ecology or local air authority may provide for trading of permits using the method described in this subsection. This trading system uses a straight transfer of acres, a transfer requiring mandatory compensation, or a combination of both. If ecology or the local air authority finds that emissions resulting from trading are creating a health impact, as defined by ecology or the local air authority, the trading system, once created, may be dissolved. This provision does not apply to WAC 173-430-045 Alternatives to burning field and/or turf grasses grown for seed.

(i) Ecology or the local air authority may develop a system that allows the trading of permits by:

(A) Adding a signed transfer line to the written permit that provides for a signature for the current holder of the permit;

(B) Providing a tracking system that identifies the current holder of the permit, that identifies when the permit was last used to allow burning of acreage, and that allows the name of the holder to be changed if the transfer line is signed by the current holder;

(C) Requiring that the new holder of the permit must turn in the permit with the signed transfer line at least sixty days before the new holder plans to burn; and

(D) Assuring that the permits are used only once in a calendar year.

(ii) By signing the transfer line on the permit the permit holder must indicate that he or she understands that the acres transferred may no longer be burned, that a permit for the acres transferred will not be issued to the signing permit holder in future years, and that the acres being transferred were not already burned during the calendar year during which the transfer takes place.

(iii) Ecology and the local air authorities may add restrictions to the transfer of permits closer to areas with higher population densities.

(iv) Only permits for acreage which has not yet been burned may be transferred or traded. The seller of the permit is responsible for permanently reducing the acreage burned by the amount of acreage transferred from January 1 of the year during which the transaction takes place.

(v) Acreage that is exempted under (e) of this subsection is not eligible for the trading system.

(vi) The authorities are encouraged to work together to use the same system and to allow trading between authority jurisdictions so as to allow the grass seed growers to adjust to the two-thirds overall reduction in acres permitted for burning as easily as possible.

(e) Alternate open burning practices for field and turf grass grown for seed. Ecology acknowledges that there may be practices that involve some burning, but which produce emissions quantifiably below those of open field burning. If ecology finds that a practice involves open burning and still substantially reduces emissions below open field burning, ecology may certify the alternate burning practice(s) by administrative order. Any certified practice may be used to satisfy the acreage/emissions reduction requirements of (a) of this subsection provided:

(i) The acreage application of the practice is adjusted to reflect effectiveness in reducing emissions so as to meet or exceed the emissions reduction required by (a) of this subsection; and

(ii) In no case shall the emission reduction requirement for the field and turf grass grown for seed be less than that required in (a) of this subsection.

(7) Other laws. A farmer must obtain any local permits, licenses, or other approvals required by any other laws, regulations, or ordinances. The farmer must also honor other agreements entered into with any federal, state, or local agency.

[Statutory Authority: RCW 70.94.650, 70.94.743, and 70.94.745. 06-16-052 (Order 04-10), § 173-430-040, filed 7/26/06, effective 8/26/06. Statutory Authority: RCW 70.94.656. 98-12-016 (Order 97-45), § 173-430-040, filed 5/26/98, effective 6/26/98. Statutory Authority: RCW 70.94.656(4). 97-03-021 (Order 96-05), § 173-430-040, filed 1/7/97, effective 2/7/97. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-040, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-040, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-040, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-040, filed 11/9/77. Formerly WAC 18-16-040.]

WAC 173-430-045 Alternatives to burning field and/or turf grasses grown for seed. (1) When is open burning of field and turf grasses grown for seed prohibited?

The Washington Clean Air Act prohibits open burning of field and turf grasses grown for seed whenever ecology has concluded, through a process spelled out in the act, that any procedure, program, technique, or device constitutes a practical alternate agricultural practice to open burning, and that alternate is reasonably available.

(2) Has ecology certified practical alternatives to open burning of field or turf grasses grown for seed?

Yes. Ecology concludes that mechanical residue management constitutes a practical alternate agricultural practice to the open burning of field and/or turf grasses grown for seed. Mechanical residue management means removing, including arranging for removal of, the residue using nonthermal, mechanical techniques including, but not limited to: Tilling, swathing, chopping, baling, flailing, mowing, raking, and other substantially similar nonthermal, mechanical techniques. Ecology further concludes that mechanical residue management is practical throughout all phases of seed production including:

(a) When the field is planted (establishment);

(b) When the field is producing seed (harvest years);

(c) When the field is prepared for replanting (tear-out).

(3) Are the alternatives to open burning that have been certified by ecology reasonably available?

Ecology concludes that mechanical residue management is reasonably available throughout the state wherever baling can be used. Baling is the process of gathering the residue and moving it off the field. Typically, a machine known as a "baler" is used to gather and bundle residue that is already cut.

Based on this conclusion, the open burning of field and/or turf grasses grown for seed is prohibited except as described in subsection (4) of this section. This rule does not require the use of any particular practice or technique. A farmer may use any alternate practice that does not involve field burning.

(4) Under what circumstances may open burning of field or turf grasses grown for seed be allowed?

(a) Where a farmer establishes that mechanical residue management is not reasonably available on specific portions of a field under specific production conditions due to slope. In a request for a waiver, a farmer must certify in writing to ecology or local air authority the following:

(i) Baling is not reasonably available due to slope. A farmer must explain why baling is not reasonably available, referring to specific facts supporting this belief. Unacceptable facts include, but are not limited to, general statements about burning as a tool for the routine control of weed and disease, for seed propagation purposes, or as a less costly alternative to mechanical residue management. A farmer may use statements from three separate businesses providing baling services as part of their commercial operation to support the belief that baling is not reasonably available due to slope. In the statements, the businesses must certify that they are independent from the farmer and have no financial interest in the farmer's operation;

(ii) Current harvest practices have not diminished the ability to use mechanical residue management;

(iii) Field production is after the first harvest season and prior to the fourth harvest season;

(iv) The ground or portions of the field have not been burned three years in a row in the three years preceding the request for a waiver;

(v) The ground or portions of the field will remain, without replanting, in grass production at least through the next harvest season following burning;

(vi) Residue from any neighboring fields or portions of fields under the control of the farmer will be removed prior to burning and reasonable precautions will be taken to prevent fire from spreading to areas where burning is not allowed; and

(vii) Adjustments in field rotations and locations cannot be made at any time during the rotational cycle and could not have been made when planted to allow the use of mechanical residue management techniques.

(b) Where a farmer establishes that extreme conditions exist. Ecology or a local air authority, at their discretion, may grant a request for a waiver for extreme conditions. The farmer must certify in writing the following:

(i) Why mechanical residue management is not reasonably available, referring to specific facts supporting this belief. Unacceptable facts include, but are not limited to, general statements about burning as a tool for the routine control of weed and disease, for seed propagation purposes, or as a less costly alternative to mechanical residue management;

(ii) He/she did not cause or create the condition to purposefully avoid using mechanical residue management techniques;

(iii) Field production is after the first harvest season and prior to the fourth harvest season;

(iv) The ground or portions of the field have not been burned three years in a row in the three years preceding the request for a waiver;

(v) The field will remain, without replanting, in grass production at least through the next harvest season following burning;

(vi) Residue from any neighboring fields or portions of fields under the control of the farmer will be removed prior to burning and that reasonable precautions will be taken to prevent fire from spreading to areas where burning is not allowed; and

(vii) Adjustments in field rotations and locations cannot be made at any time during the rotational cycle, and could not have been made when planted to allow the use of mechanical residue management techniques.

(c) Where a farmer demonstrates to ecology or local air authority that his/her small agricultural operation is eligible for mitigation.

For 1998 only, ecology or a local air authority may allow burning on a small agricultural operation. A small agricultural operation owner has a gross 1997 revenue from all agricultural operations of less than $300,000. A farmer must show information of sufficient quantity and quality to ecology or a local air authority to establish gross revenue from agricultural operations. A small farm owner may burn current acreage up to 25% of 1997 acreage burned under a valid permit. Fields taken out of production after the 1997 harvest season and in 1998 cannot be counted in the determination of 1997 acreage burned for the purpose of eligible burn acreage.

(d) Where a request for a waiver is approved under (a), (b), and (c) of this subsection, the following additional limitations also apply:

Total burn acreage must not exceed 1/3 of a farmer's acreage in production on May 1, 1996. Permits issued pursuant to (a), (b), or (c) of this subsection are not eligible for the permit trading program identified in WAC 173-430-040.

(5) What is the process for a farmer to request a waiver for circumstances described in subsection (4) of this section?

(a) A farmer submits a request for a waiver.

Sixty days prior to the planned burn date, a farmer must submit in writing a request to ecology or a local air authority. In the request, the farmer must identify the circumstances and meet the specific requirements of subsection (4)(a), (b), and/or (c) of this section. Ecology or the local air authority may require the request to be submitted on a form or in a format provided by ecology or the local air authority.

(b) Ecology or local air authority evaluates the request for a waiver.

Upon receiving a request for a waiver, ecology or the local air authority will determine if the necessary documents and information provided is complete enough to evaluate the request. If incomplete, ecology or local air authority will advise the farmer and suspend further evaluation until the request for a waiver is complete. The documents and information identified as necessary to complete the request must be delivered to ecology or the local air authority at least thirty days prior to burning. Once a request for a waiver is deemed complete, ecology or the local air authority will evaluate the request and decide whether the burning waiver is appropriate. As part of the evaluation, ecology or the local air may conduct an on-site inspection.

If ecology or local air authority denies a request for a waiver, the reasons will be provided to the farmer in writing. If approved, ecology or the local air authority will notify the farmer by convenient means. Ecology will also notify the appropriate delegated authority.

(c) The farmer applies for an agricultural burning permit.

If ecology or local air authority approves a request for a waiver, the farmer must complete a permit application and pay the fee as described in WAC 173-430-040. A delegated authority must receive written authorization from ecology that a waiver has been approved prior to processing a permit application.

[Statutory Authority: RCW 70.94.656. 98-12-016 (Order 97-45), § 173-430-045, filed 5/26/98, effective 6/26/98.]

WAC 173-430-050 Best management practices. (1) The Ag task force must identify best management practices for agricultural burning that are economically feasible and socially acceptable. Practical alterative production methods and controls which would reduce or eliminate agricultural burning must be used when reasonably available.

(2) The Ag task force may establish an agricultural burning general best management practice and crop-specific best management practices as appropriate. The Ag task force will work in conjunction with conservation districts and extension agents or other local entities in developing best management practices. The Ag task force may review and approve crop-specific best management practices which have been developed or recommended by an individual or group.

(3) Approved best management practices information will be available from permitting authorities. The Ag task force, as it deems necessary, will hold public workshops on best management practices that have changed or are new and will periodically review the best management practices starting three years after approval.

(4) The Ag task force will clarify best management practices and make interpretative decisions as needed, considering all authoritative sources on the subject.

(a) An individual or group may request a best management practice clarification from the task force.

(b) The chair of the Ag task force may direct the questioned practice to a subgroup of task force members, provided that agricultural, research, and regulatory interests are included and all task force members are notified, or may direct it to the whole Ag task force.

(5) The Ag task force will modify best management practices as necessary to incorporate the latest research.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-050, filed 1/17/95, effective 2/17/95. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-050, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-050, filed 11/9/77. Formerly WAC 18-16-050.]

WAC 173-430-060 Research into alternatives to agricultural burning. (1) The department shall administer the research portion of the permit fee to carry out the recommendations of the Ag task force. In carrying out the recommendations, the department may conduct, cause to be conducted, or approve of a study or studies to explore and test economical and practical alternative practices to agricultural burning. To conduct any such study, the department may contract with public or private entities. Any approved study shall provide for the identification of such alternatives as soon as possible.

(2) No less than every two years, the Ag task force will review research needs and submitted proposals and make its recommendations to the department.

[Statutory Authority: RCW 70.94.650, 70.94.743, and 70.94.745. 06-16-052 (Order 04-10), § 173-430-060, filed 7/26/06, effective 8/26/06. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-060, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-060, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-060, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-060, filed 11/9/77. Formerly WAC 18-16-060.]

WAC 173-430-070 General agricultural burning permit conditions and criteria. Permit decisions including the issuance, denial, or conditioning must be based on consideration of air quality conditions in the area affected by the proposed burning, the time of year, meteorological conditions, the size and duration of the proposed burning activity, the type and amount of vegetative material to be burned, the applicant's need to carry out such burning, existence of extreme burning conditions, risk of escape onto property owned by another, and the public's interest in the environment.

(1) Permits must include the following general conditions:

(a) Do not burn at night unless it is specified as a best management practice;

(b) Comply with all fire safety regulations of the local fire protection agency including any no-burn directives it may issue;

(c) Call the local air authority burning information line (if there is one) before lighting the fire;

(d) Burn only during times specified by the permitting authority;

(e) Burn when wind takes the smoke away from roads, homes, population centers, or other public areas, to the greatest extent possible;

(f) Do not burn when adverse meteorological conditions exist;

(g) Burn only natural vegetation;

(h) Do not burn or add fuel during any stage of an air pollution episode or local air quality burning ban;

(i) Attend the fire at all times;

(j) Submit a postburn report to the permitting authority.

(2) If the permitting authority determines a specific situation will cause a nuisance under chapter 173-400 WAC or RCW 70.94.640, agricultural burning will not be allowed.

[Statutory Authority: RCW 70.94.650, 70.94.743, and 70.94.745. 06-16-052 (Order 04-10), § 173-430-070, filed 7/26/06, effective 8/26/06. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-070, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-070, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-070, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-070, filed 11/9/77. Formerly WAC 18-16-070.]

WAC 173-430-080 Responsibilities of a permitting authority. (1) The permitting authority is ecology or its delegate or a local air authority with jurisdiction or its delegate. The permitting authority must establish and administer an agricultural burning permit system. The minimum responsibilities are described in this section.

(2) The permitting authority must act on a complete application (as determined by ecology or a local air authority with jurisdiction) within seven days of receipt.

(a) Local air authorities are required to use application templates and permit templates supplied by ecology. Ecology delegated authorities are required to use applications and permits supplied by ecology.

(b) A map is required to accompany all permit applications.

(i) The map must accurately depict the topography of the area where the requested burn would take place and include roads, landmarks, etc.

(ii) The map must accurately show affected acreage to be burned.

(iii) The map must show the position of the field within each section the field occupies, down to the 1/4 - 1/4 section. All four border lines of each section shall be outlined with the section number, township, and range clearly marked.

(c) The permitting authority must evaluate the application and approve or deny all or part of it.

(d) The permitting authority must evaluate the application to determine if the requested burning is within the general or crop-specific best management practices.

(e) If the application is denied, the reason must be stated.

(3) Permitting authorities must issue permits where appropriate on complete applications. Delegated permitting authorities may issue permits when agreed to as part of the delegation order.

(4) Permitting authorities must determine day-to-day burning restrictions near populated areas and arrange for dissemination of the results. Delegated permitting authorities must arrange for assisting in dissemination of results.

(5) The permitting authority or its delegate is responsible for responding to agricultural burning complaints.

(6) The permitting authority must collect the fee, determine the local administration portion of the fee, and issue refunds.

(a) Permitting authorities must issue a permit fee refund for permitted acres not burned on confirmation by the permitting authority. The refund request deadline must be included on the permits.

(b) Local air authorities and delegated permitting authorities must formally adopt the local administration portion of the fee through rule, regulation, ordinance, or resolution.

(7) Delegated permitting authorities must provide ecology with copies of all permits and supporting documentation and transfer the research and ecology administration portion of the fee to the department.

(a) Local air authorities and delegated permitting authorities must transfer funds twice a year by July 15 and January 15.

(b) Local air authorities and delegated permitting authorities must provide ecology copies of all permits, applications with supporting documentation, maps, and postburn reports. All spring (January-June) permits need to be provided by July 15th and all fall (July-December) permits by January 15th.

(c) The department must deposit all agricultural burning permit fees in the air pollution control account. Permitting authorities may deduct the local administration portion before forwarding the remainder to the department.

(8) The permitting authority must coordinate compliance. Violations are subject to the remedies of chapter 70.94 RCW, Washington Clean Air Act.

(9) The permitting authority or its delegate must require a postburn report for all permits.

(10) The permitting authority or its delegate must utilize the web-based data base.

(a) Local air authorities and its delegates must make arrangements with ecology to enter information into the web-based data base.

(b) Ecology-delegated permitting authorities must attend a minimum of one data base training per calendar year or as provided by ecology.

[Statutory Authority: RCW 70.94.650, 70.94.743, and 70.94.745. 06-16-052 (Order 04-10), § 173-430-080, filed 7/26/06, effective 8/26/06. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-080, filed 1/17/95, effective 2/17/95; 93-14-022 (Order 92-58), § 173-430-080, filed 6/28/93, effective 7/29/93. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-430-080, filed 9/17/90, effective 10/18/90; Order DE 77-20, § 173-430-080, filed 11/9/77. Formerly WAC 18-16-080.]

WAC 173-430-090 Receiving delegation—Counties, conservation districts, and fire protection agencies. (1) The permitting authority is ecology or its delegate or a local air authority with jurisdiction or its delegate. The permitting authority is responsible for administering the agricultural burning permit program. The agricultural burning permit program may be delegated to conservation districts, counties, or fire protection agencies.

(2) When ecology or a local air authority with jurisdiction finds that a county, fire protection agency or conserva-

tion district is capable of administering the permit program and desires to do so, it may delegate by administrative order the administration and/or enforcement authority of the program. The delegated permitting authority must, at a minimum, meet all of the following criteria:

(a) Demonstrating that the responsibilities listed under permitting authority responsibilities section can be fulfilled;

(b) Employing, contracting with, or otherwise accessing someone educated and trained in agronomics;

(c) Providing a copy of the ordinance adopting the local administration portion of the fee;

(d) Providing a copy of agreements between counties, fire districts, and conservation districts when more than one agency will have responsibilities for the agricultural burning program; and

(e) Agreeing to periodic audits and performance reviews.

(3) Delegation may be withdrawn if the department or the local air authority with jurisdiction finds that the agricultural burning program is not effectively being administered and/or enforced. Before withdrawing delegation, the delegated agency shall be given a written statement of the deficiencies in the program and a compliance schedule to correct program deficiencies. If the delegated agency fails to correct the deficiencies according to the compliance schedule, then the department or the local air authority may withdraw delegation.

(4) Permitting authorities must work through agreement with counties (if the county is not the permitting authority) and cities to provide convenient methods for evaluating applications, issuing permits and granting permission to burn.

Once a delegation order has been issued, ecology or the local air authority with jurisdiction must approve of any changes to the agreement prior to implementation.

[Statutory Authority: RCW 70.94.650, 70.94.743, and 70.94.745. 06-16-052 (Order 04-10), § 173-430-090, filed 7/26/06, effective 8/26/06. Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-090, filed 1/17/95, effective 2/17/95.]

WAC 173-430-100 Severability. The provisions of this regulation are severable. If any provision is held invalid, the application of such provision to other circumstances and the remainder of the regulation will not be affected.

[Statutory Authority: RCW 70.94.650. 95-03-083 (Order 94-17), § 173-430-100, filed 1/17/95, effective 2/17/95.]

Chapter 173-433 WAC
SOLID FUEL BURNING DEVICES

WAC

173-433-010	Purpose.
173-433-020	Applicability.
173-433-030	Definitions.
173-433-100	Emission performance standards.
173-433-110	Opacity standards.
173-433-120	Prohibited fuel types.
173-433-130	General emission standards.
173-433-140	Impaired air quality criteria.
173-433-150	Curtailment.
173-433-170	Retail sales fee.
173-433-200	Regulatory actions and penalties.

WAC 173-433-010 Purpose. This chapter, promulgated under chapters 43.21A and 70.94 RCW, establishes emission standards, certification standards and procedures, curtailment rules, and fuel restrictions for solid fuel burning devices.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056 (Order 87-44), § 173-433-010, filed 12/16/87.]

WAC 173-433-020 Applicability. The provisions of this chapter apply to solid fuel burning devices in all areas of the state of Washington.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056 (Order 87-44), § 173-433-020, filed 12/16/87.]

WAC 173-433-030 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter, shall have the following meanings:

(1) "Adequate source of heat" means the ability to maintain seventy degrees Fahrenheit at a point three feet above the floor in all normally inhabited areas of a dwelling.

(2) "Certified" means that a woodstove meets emission performance standards when tested by an accredited independent laboratory and labeled according to procedures specified by the EPA in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990.

(3) "Coal-only heater" means an enclosed, coal burning appliance capable of and intended for residential space heating, domestic water heating, or indoor cooking, which has all of the following characteristics:

(a) An opening for emptying ash which is located near the bottom or the side of the appliance;

(b) A system which admits air primarily up and through the fuel bed;

(c) A grate or other similar device for shaking or disturbing the fuel bed or power driven mechanical stoker; and

(d) The model is listed by a nationally recognized safety testing laboratory for use of coal only, except for coal ignition purposes.

(4) "EPA" means United States Environmental Protection Agency.

(5) "New woodstove" means a woodstove that has not been sold at retail, bargained, exchanged, or given away for the first time by the manufacturer, the manufacturer's dealer or agency, or a retailer, and has not been so used as to become what is commonly known as "second hand" within the ordinary meaning of that term.

(6) "Nonaffected pellet stove" means that a pellet stove has an air-to-fuel ratio equal to or greater than 35.0 when tested by an accredited laboratory in accordance with methods and procedures specified by the EPA in "40 CFR 60 Appendix A, REFERENCE METHOD 28A - MEASUREMENT OF AIR TO FUEL RATIO AND MINIMUM ACHIEVABLE BURN RATES FOR WOOD-FIRED APPLIANCES" as amended through July 1, 1990.

(7) "Retailer" means any person engaged in the sale of solid fuel burning devices directly to the public. A contractor who sells dwellings with solid fuel burning devices installed or a mail order outlet which sells solid fuel burning devices directly to the public is considered to be a solid fuel burning device retailer.

(8) "Seasoned wood" means wood of any species that has been sufficiently dried so as to contain twenty percent or less moisture by weight.

(9) "Solid fuel burning device" (same as solid fuel heating device) means a device that burns wood, coal, or any other nongaseous or nonliquid fuels, and includes any device burning any solid fuel except those prohibited by WAC 173-433-120. This also includes devices used for aesthetic or space-heating purposes in a private residence or commercial establishment, which has a heat input less than one million British thermal units per hour.

(10) "Treated wood" means wood of any species that has been chemically impregnated, painted, or similarly modified to prevent weathering and deterioration.

(11) "Woodstove" (same as "wood heater") means an enclosed solid fuel burning device capable of and intended for residential space heating and domestic water heating that meets the following criteria contained in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990:

(a) An air-to-fuel ratio in the combustion chamber averaging less than 35.0, as determined by EPA Reference Method 28A;

(b) A useable firebox volume of less than twenty cubic feet;

(c) A minimum burn rate less than 5 kg/hr as determined by EPA Reference Method 28;

(d) A maximum weight of 800 kg, excluding fixtures and devices that are normally sold separately, such as flue pipe, chimney, and masonry components not integral to the appliance.

Any combination of parts, typically consisting of but not limited to: Doors, legs, flue pipe collars, brackets, bolts and other hardware, when manufactured for the purpose of being assembled, with or without additional owner supplied parts, into a woodstove, is considered a woodstove.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-030, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-030, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-030, filed 1/3/89; 88-01-056 (Order 87-44), § 173-433-030, filed 12/16/87.]

WAC 173-433-100 Emission performance standards. (1) Woodstoves. On or before January 1, 1995, a person shall not advertise to sell, offer to sell, sell, bargain, exchange, or give away a new woodstove in Washington unless it has been tested to determine its emission performance and heating efficiency and certified and labeled in accordance with procedures and criteria specified in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990. After January 1, 1995, woodstove sales shall comply with the requirements of subsection (3) of this section, Solid fuel burning devices.

(2) Fireplaces. After January 1, 1997, a person shall not advertise to sell, offer to sell, sell, bargain, exchange, or give away a factory built fireplace unless it meets the 1990 United States Environmental Protection Agency standards for woodstoves or equivalent standard that may be established by the state building code council by rule. Subsection (3) of this section shall not apply to fireplaces, including factory built fireplaces, and masonry fireplaces.

(3) Solid fuel burning devices. After January 1, 1995, a person shall not advertise to sell, offer to sell, sell, bargain, exchange, or give away a solid fuel burning device in Washington unless it has been certified and labeled in accordance with procedures and criteria specified in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990, and meets the following particulate air contaminant emission standards and the test methodology of the United States Environmental Protection Agency in effect on January 1, 1991, or an equivalent standard under any test methodology adopted by the United States Environmental Protection Agency subsequent to such date:

(a) Two and one-half grams per hour for catalytic woodstoves; and

(b) Four and one-half grams per hour for all other solid fuel burning devices.

(c) For purposes of this subsection, "equivalent" shall mean the emissions limits specified in this subsection multiplied by a statistically reliable conversion factor determined by ecology that relates the emission test results from the methodology established by the United States Environmental Protection Agency prior to May 15, 1991, to the test results from the methodology subsequently adopted by that agency.

[Statutory Authority: Chapter 70.94 RCW and 501-506 ESHB 1028, 1991. 93-04-105 (Order 91-55), § 173-433-100, filed 2/3/93, effective 3/6/93. Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-100, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-100, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-100, filed 1/3/89; 88-01-056 (Order 87-44), § 173-433-100, filed 12/16/87.]

WAC 173-433-110 Opacity standards. (1) A person shall not cause or allow emission of a smoke plume from any solid fuel burning device to exceed an average of twenty percent opacity for six consecutive minutes in any one-hour period.

(2) Statewide opacity standard. An authority shall not adopt or enforce an opacity level for solid fuel burning devices that is more stringent than the statewide standard.

(3) Test method and procedures. Methods and procedures specified by the EPA in "40 CFR 60 Appendix A reference method 9 - VISUAL DETERMINATION OF THE OPACITY OF EMISSIONS FROM STATIONARY SOURCES" as amended through July 1, 1990, shall be used to determine compliance with subsection (1) of this section.

(4) Enforcement. Smoke visible from a chimney, flue or exhaust duct in excess of the opacity standard shall constitute prima facie evidence of unlawful operation of an applicable solid fuel burning device. This presumption may be refuted by demonstration that the smoke was not caused by an applicable solid fuel burning device. The provisions of this requirement shall:

(a) Be enforceable on a complaint basis.

(b) Not apply during the starting of a new fire for a period not to exceed twenty minutes in any four-hour period.

(5) Education. Any person or retailer providing information on the operation of solid fuel burning devices, such as brochures, demonstrations, and public education programs,

should include information that opacity levels of ten percent or less are attainable through proper operation.

[Statutory Authority: Chapter 70.94 RCW and 501-506 ESHB 1028, 1991. 93-04-105 (Order 91-55), § 173-433-110, filed 2/3/93, effective 3/6/93. Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-110, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-110, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056 (Order 87-44), § 173-433-110, filed 12/16/87.]

WAC 173-433-120 Prohibited fuel types. A person shall not cause or allow any of the following materials to be burned in a solid fuel burning device:

(1) Garbage;

(2) Treated wood;

(3) Plastic and plastic products;

(4) Rubber products;

(5) Animal carcasses;

(6) Asphaltic products;

(7) Waste petroleum products;

(8) Paints and chemicals; or

(9) Any substance which normally emits dense smoke or obnoxious odors other than paper to start the fire, properly seasoned fuel wood, or coal with sulfur content less than 1.0% by weight burned in a coal-only heater.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-120, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-120, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-120, filed 1/3/89; 88-01-056 (Order 87-44), § 173-433-120, filed 12/16/87.]

WAC 173-433-130 General emission standards. In addition to the general applicability of chapter 173-400 WAC to all emission sources;

(1) Emissions detrimental to persons or property. No person shall cause or permit the emission of any air contaminant from an identifiable solid fuel burning device, including any air contaminant whose emission is not otherwise prohibited by this chapter, if the air contaminant emission causes detriment to the health, safety, or welfare of a person, plant or animal, or causes damage to property or business.

(2) Odors. Any person who shall cause or allow the generation of any odor from any solid fuel burning device which may interfere with any other property owner's use or enjoyment of his property must use recognized good practice and procedures to reduce these odors to a reasonable minimum.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-130, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-130, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-130, filed 1/3/89.]

WAC 173-433-140 Impaired air quality criteria. Impaired air quality shall be determined by ecology or an authority in accordance with the following criteria:

(1) "First stage impaired air quality" - the first stage indicates the presence of:

(a) Particulate matter ten microns and smaller in diameter (PM_{10}) at or above an ambient level of seventy-five micrograms per cubic meter; or

(b) Carbon monoxide at or above an ambient level of eight parts of contaminant per million parts of air by volume (ppm).

(2) "Second stage impaired air quality" - the second stage indicates the presence of particulate matter ten microns and smaller in diameter (PM_{10}) at or above an ambient level of one hundred five micrograms per cubic meter.

(3) On or after July 1, 1995, if an authority has geographically limited the use of solid fuel burning devices as specified under WAC 173-433-150(6), a single stage of impaired air quality will apply within the geographical area defined by the authority. A single stage of impaired air quality indicates the presence of:

(a) Particulate matter ten microns and smaller in diameter (PM_{10}) at or above an ambient level of ninety micrograms per cubic meter; or

(b) Carbon monoxide at or above an ambient level of eight parts of contaminant ppm.

(4) Acceptable ambient air quality measurement methods.

(a) Particulate matter ten microns and smaller in diameter (PM_{10}).

(i) Procedures specified by the EPA in "40 CFR 50, APPENDIX J - REFERENCE METHOD FOR THE DETERMINATION OF PARTICULATE MATTER AS PM_{10} IN THE ATMOSPHERE" as amended through July 1, 1990, shall be used to gather reference ambient PM_{10} data on a twenty-four-hour average.

(ii) More timely ambient PM_{10} measurement methods may be utilized to evaluate air quality impairment if accepted and approved by ecology. Any alternative method for evaluating air quality impairment for the purpose of curtailing solid fuel burning device use must be done at the same location and in parallel to the reference method, and must be related to the reference method by a mathematical relationship with a correlation coefficient of no less than 0.85.

(b) Carbon monoxide (CO) must be measured on an eight-hour average in accordance with procedures specified by the EPA in "40 CFR 50, APPENDIX C - REFERENCE METHOD FOR THE DETERMINATION OF CARBON MONOXIDE IN THE ATMOSPHERE (NON-DISPURSIVE INFRARED PHOTOMETRY)" as amended through July 1, 1990.

(c) All monitors used to measure PM_{10} for evaluation of air quality impairment due to solid fuel burning device use must be sited in accordance with EPA siting criteria in or near affected residential areas.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-140, filed 3/20/91, effective 4/20/91.]

WAC 173-433-150 Curtailment. (1) Whenever ecology or an authority has declared the first stage of impaired air quality for a geographical area a person in a residence or commercial establishment within that geographical area with an adequate source of heat other than a solid fuel burning device shall not operate any solid fuel burning device, unless the solid fuel burning device is one of the following:

(a) A nonaffected pellet stove; or

(b) A woodstove certified and labeled by the EPA under "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990; or

(c) A woodstove meeting the "Oregon Department of Environmental Quality Phase 2" emissions standards contained in Subsections (2) and (3) of Section 340-21-115, and certified in accordance with "Oregon Administrative Rules, Chapter 340, Division 21 - Woodstove Certification" dated November 1984.

(2) Whenever ecology or an authority has declared the second stage of impaired air quality for a geographical area a person in a residence or commercial establishment within that geographical area with an adequate source of heat other than a solid fuel burning device shall not operate any solid fuel burning device.

(3) Whenever ecology has declared an air pollution episode at a level above forecast a person in a residence or commercial establishment within that geographical area with an adequate source of heat other than a solid fuel burning device shall not operate any solid fuel burning device.

(4) The following matrix graphically illustrates the applicability of different types of solid fuel burning devices to the provisions of subsections (1) through (3) of this section:

Burn Condition	Impaired Air Quality		Episode	
Type of Device	First Stage	Second Stage	Forecast	Alert, Warning, or Emergency
Pellet Stove (nonaffected)	OK	NO	OK	NO
EPA Certified Woodstove	OK	NO	OK	NO
DEQ Phase 2 Woodstove	OK	NO	OK	NO
EPA Exempted Device	NO	NO	OK	NO
All Other Devices	NO	NO	OK	NO

NOTES: "OK" indicates that the device may be operated
"NO" indicates that the device may not be operated

(5) On or after July 1, 1995, an authority may prohibit use of solid fuel burning devices within specific geographical areas:

(a) The following factors shall be considered in the exercise of this limitation:

(i) The contribution of solid fuel devices that do not meet the standards set forth in "40 CFR 60 Subpart AAA -Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990, to nonattainment of national ambient air quality standards;

(ii) The population density of the applicable geographical area; and

(iii) The public health effects of the use of solid fuel devices which do not meet the standards set forth in "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990.

(b) The following solid fuel devices are exempted from this limitation:

(i) Fireplaces;

(ii) Woodstoves certified and labeled by the EPA under "40 CFR 60 Subpart AAA - Standards of Performance for Residential Wood Heaters" as amended through July 1, 1990; or

(iii) Nonaffected pellet stoves.

(c) An authority shall allow an exemption from this subsection for low-income persons who reside in the geographical area affected by this subsection.

(6) On or after July 1, 1995, whenever an authority has declared impaired air quality in accordance with criteria contained in WAC 173-433-140(3) for a geographical area defined under subsection (5) of this section, a person in a residence or commercial establishment within that geographical area shall not operate any solid fuel burning device.

(7) A person responsible for an applicable solid fuel burning device already in operation at the time an episode is declared shall withhold new solid fuel for the duration of the episode. A person responsible for an applicable solid fuel burning device already in operation at the time impaired air quality is declared shall withhold new solid fuel for the duration of the impaired air quality. Smoke visible from a chimney, flue or exhaust duct after three hours has elapsed from the declaration of the episode or impaired air quality shall constitute prima facie evidence of unlawful operation of an applicable solid fuel burning device. This presumption may be refuted by demonstration that the smoke was not caused by a solid fuel burning device.

(8) Ecology, authorities, health departments, fire departments, or local police forces having jurisdiction in the area may enforce compliance with the above solid fuel burning device curtailment rules after three hours has elapsed from the declaration of the episode or impaired air quality.

[Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-150, filed 3/20/91, effective 4/20/91. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-150, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056 (Order 87-44), § 173-433-150, filed 12/16/87.]

WAC 173-433-170 Retail sales fee. Fees can be found in chapter 173-455 WAC.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-433-170, filed 9/6/07, effective 10/7/07. Statutory Authority: Chapter 70.94 RCW and 501-506 ESHB 1028, 1991. 93-04-105 (Order 91-55), § 173-433-170, filed 2/3/93, effective 3/6/93. Statutory Authority: Chapter 70.94 RCW. 91-07-066 (Order 90-58), § 173-433-170, filed 3/20/91, effective 4/20/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-054 (Order 88-38), § 173-433-170, filed 1/3/89.]

WAC 173-433-200 Regulatory actions and penalties. A person in violation of this chapter may be subject to the provisions of WAC 173-400-230 Regulatory actions and WAC 173-400-240 Criminal penalties.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-433-200, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056 (Order 87-44), § 173-433-200, filed 12/16/87.]

Chapter 173-434 WAC

SOLID WASTE INCINERATOR FACILITIES

WAC

173-434-010 Purpose.
173-434-020 Applicability and compliance.
173-434-030 Definitions.
173-434-090 Operation and maintenance plan.
173-434-110 Standards of performance.
173-434-130 Emission standards.
173-434-160 Design and operation.
173-434-170 Monitoring and reporting.
173-434-190 Changes in operation.
173-434-200 Emission inventory.
173-434-210 Special studies.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-434-050	New source review (NSR). [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-050, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-434-050, filed 1/3/89. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-050, filed 3/16/87.] Repealed by 04-01-159 (Order 02-05), filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331 and 70.94.510.
173-434-070	Prevention of significant deterioration (PSD). [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-070, filed 9/17/90, effective 10/18/90.] Repealed by 04-01-159 (Order 02-05), filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331 and 70.94.510.
173-434-100	Requirement for BACT. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-100, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-100, filed 3/16/87.] Repealed by 04-01-159 (Order 02-05), filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331 and 70.94.510.
173-434-120	Emission standards for hazardous air pollutants. [Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-120, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-120, filed 3/16/87.] Repealed by 04-01-159 (Order 02-05), filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331 and 70.94.510.

WAC 173-434-010 Purpose. This chapter, promulgated under chapter 70.94 RCW, establishes emissions standards, design requirements, and performance standards for solid waste incinerator facilities.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-010, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-010, filed 3/16/87.]

WAC 173-434-020 Applicability and compliance. (1) The provisions of this chapter shall apply statewide to all incinerator facilities that:

(a) Are constructed after January 1, 1985, which are designed to burn twelve or more tons per day of solid waste; or

(b) Were constructed prior to January 1, 1985, but begin to burn twelve or more tons per day of solid waste after January 1, 1985.

(2) This chapter subjects solid waste incinerator facilities to either a primary compliance scheme or an alternate compliance scheme. The requirements for the primary compliance scheme are contained in WAC 173-434-090, 173-434-130, 173-434-160, 173-434-170, 173-434-190, 173-434-200, and 173-434-210. The requirements for the alternate compliance scheme are contained in WAC 173-434-110. The alternate compliance scheme applies to solid waste incinerator facilities that meet the criteria specified in WAC 173-434-110 and to solid waste incinerator facilities that opt in to the alternate compliance scheme pursuant to WAC 173-434-110 (3)(b). The primary compliance scheme applies to all other solid waste incinerator facilities.

[Statutory Authority: RCW 70.94.331 and 70.94.510. 04-01-159 (Order 02-05), § 173-434-020, filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-020, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-020, filed 3/16/87.]

WAC 173-434-030 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter, shall have the following meanings.

(1) "Incinerator facility" means all of the emissions unit(s), including quantifiable fugitive emissions, which are located in one or more contiguous or adjacent properties, and are under the control of the same person(s), whose activities are principal or ancillary to the incineration of solid waste. Ancillary activities include, but are not limited to, solid waste receiving, segregating and processing, solid waste derived fuel receiving and handling, fuel storage and mixing, heat recovery equipment, steam generating equipment, cooling towers, emissions control equipment, ash handling, ash storage, and combustion.

(2) "Residence time" means the minimum amount of time that a parcel of gas is subject to a given temperature.

(3) "Solid waste" means all putrescible and nonputrescible solid and semisolid wastes, including but not limited to garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, discarded commodities, septage from septic tanks, dangerous waste, refuse derived fuel, solid waste derived fuel, problem wastes, and all materials which are not primary products of public, private, industrial, commercial, mining, and agricultural operations. This definition includes, but is not limited to, all materials that fit the definitions of municipal solid waste in 40 CFR 60, subparts Cb, Ea, Eb, AAAA, or BBBB, as well as all materials that fit the definitions of commercial and industrial solid waste in 40 CFR 60, subparts CCCC or DDDD, in effect on July 1, 2003. Notwithstanding the above, solid waste does not include:

(a) Creosote treated wood at facilities with an order of approval or Prevention of Significant Deterioration (PSD) permit issued on or after December 1, 2003, for burning such wood, provided that such wood has not been in or repeatedly splashed by marine or brackish water;

(b) At a Portland cement plant kiln;

(i) Tires; and

(ii) Waste oil that is nonhazardous as defined by WAC 173-303-515, Standards for the management of used oil;

(c) Wood waste; or

(d) Sludge from waste water treatment plants.

(4) "Transmissometer" means a device that measures opacity and conforms to EPA Performance Specification Number 1 in Title 40 Code of Federal Regulations, Part 60, Appendix B in effect on July 1, 2003.

[Statutory Authority: RCW 70.94.331 and 70.94.510. 04-01-159 (Order 02-05), § 173-434-030, filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-030, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-030, filed 3/16/87.]

WAC 173-434-090 Operation and maintenance plan. As part of a condition of approval of the notice of construction, the owner or operator of the incinerator shall develop a plan for the operation and maintenance of all equipment and procedures that can cause or control air pollution. This plan must be approved by ecology or the authority prior to initial startup or testing. Every twenty-four months thereafter, the

owner or operator must obtain approval of a new or updated plan to continue operation. The plan may include operating parameters, maintenance procedures and operation personnel training requirements and procedures to assure that the source will comply with all applicable rules, resolutions, regulations, safety practices, and ordinances.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-090, filed 9/17/90, effective 10/18/90.]

WAC 173-434-110 Standards of performance. (1) Notwithstanding WAC 173-400-115, the following sections of 40 CFR part 60, subpart Eb, in effect on July 1, 2003, are hereby incorporated by reference with the exceptions in subsection 110(2):

(a) 40 CFR part 60, subpart Eb, subsections 60.52b (a)(3), (a)(5), (b)(2), (c)(1), and (c)(2);

(b) All the rest of 40 CFR part 60, subpart Eb.

(2) Exceptions.

(a) The 250 tons per day figures throughout 40 CFR part 60, subpart Eb shall be 12 tons per day;

(b) The terms "municipal solid waste," "municipal type solid waste," and "MSW" in subpart Eb shall include all materials that fit the definition of solid waste in this chapter;

(c) 40 CFR part 60, subpart Eb, subsection 60.50b(j) shall not be incorporated by reference with respect to facilities constructed, reconstructed or modified after December 1, 2003;

(d) The November 20, 1997, dates in subsection 60.52b(c) are changed to November 20, 2005.

(3) Except for WAC 173-434-130 (4)(c), the following sections, WAC 173-434-090, 173-434-130, 173-434-160, 173-434-170, 173-434-190 and 173-434-200 shall not apply to:

(a) An incinerator facility regulated under this section; and

(b) An incinerator facility that elects to become subject to this section in an order of approval or other regulatory order from the permitting agency.

(4) The effective date of this section shall be May 1, 2004.

[Statutory Authority: RCW 70.94.331 and 70.94.510. 04-01-159 (Order 02-05), § 173-434-110, filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-110, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-110, filed 3/16/87.]

WAC 173-434-130 Emission standards. In addition to the general applicability of chapters 173-400 and 173-490 WAC to all emission sources; no incinerator facility shall cause or permit air contaminant emissions in excess of the limits listed below. Specific emission standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.

(1) Particulate.

(a) For incinerator facilities that are capable of burning two hundred fifty or more tons of solid waste per day, emissions from each stack shall not exceed 0.046 grams of particulate per dry cubic meter at standards conditions (0.020 grains/dscf) corrected to seven percent oxygen for an hourly average.

(b) For incinerator facilities that have a maximum capability of burning less than two hundred fifty tons of solid waste per day, emissions from each stack shall not exceed 0.069 grams of particulate per dry cubic meter at standards conditions (0.030 grains/dscf) corrected to seven percent oxygen for an hourly average.

(2) Hydrogen chloride. The hydrogen chloride emissions from each stack shall not exceed fifty ppm on a volumetric dry basis corrected to seven percent oxygen for an hourly average, except if the owner or operator demonstrates that uncontrolled emissions of hydrogen chloride are reduced by at least eighty percent and a procedure acceptable to ecology or the authority for monitoring is developed.

(3) Sulfur dioxide. The sulfur dioxide emissions from each stack shall not exceed fifty ppm on a volumetric dry basis corrected to seven percent oxygen for an hourly average, except if the owner or operator demonstrates that the uncontrolled emissions of sulfur dioxide are reduced by at least eighty percent and a procedure acceptable to ecology or the authority for monitoring is developed.

(4) Opacity.

(a) The opacity as measured visually from any incinerator stack shall not exceed an average of five percent opacity for more than six consecutive minutes in any sixty minute period.

(b) The opacity as measured by a transmissometer shall not exceed an average of ten percent opacity for more than six consecutive minutes in any sixty minute period.

(c) The opacity as measured visually shall not exceed an average of zero percent from any emissions unit except incinerator stacks for more than six consecutive minutes in any sixty minute period.

(5) Fugitive emissions. Each operator or owner shall take reasonable precautions to prevent fugitive emissions which includes the paving of all normally traveled roadways within the plant boundary and enclosing or hooding material transfer points.

(6) Source testing. To demonstrate compliance with this chapter, refer to WAC 173-400-105.

[Statutory Authority: RCW 70.94.331 and 70.94.510. 04-01-159 (Order 02-05), § 173-434-130, filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-130, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-130, filed 3/16/87.]

WAC 173-434-160 Design and operation. (1) Combustion.

(a) Combustion zone temperature. Whenever solid waste is being burned, the temperature of the final combustion zone shall not be below 982°C (1800°F) for a fifteen minute average nor below 871°C (1600°F) for any reading.

(b) Combustion zone residence time. The minimum combustion chamber temperature must be maintained for at least one second (1.0 second) in a zone after the last over fire air has entered the combustion chamber. If over fire air is not used, the combustion chamber shall maintain the minimum combustion temperature or greater for at least one second with all combustion gases. Procedures for determining the residence time shall be a part of the new source review.

(c) Excess air. The combustion gases leaving the final combustion zone must contain at least three percent oxygen measured on a wet basis.

(d) Combustion air distribution and control. The air distribution shall be fully controllable where pressurized air is introduced and the air flow shall be monitored and recorded.

(2) Combustion air. To minimize odor, fugitive emissions and to maintain a negative pressure in the tipping area, the combustion air shall be withdrawn from the tipping area, or shall utilize an equivalent means of odor and fugitive emission control acceptable to ecology or the authority.

(3) Particulate control device temperature. The inlet temperature of the primary particulate control device shall not exceed 177°C (350°F).

(4) Operation. At all times, the owner or operator shall, to the extent practicable, maintain and operate any incinerator facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. This may mean that if the emissions limits are being exceeded, no more waste should be fed into the incinerator until the problem is corrected. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to ecology or the authority which may include, but is not limited to, monitoring and recording results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[Statutory Authority: RCW 70.94.331 and 70.94.510. 04-01-159 (Order 02-05), § 173-434-160, filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-160, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-160, filed 3/16/87.]

WAC 173-434-170 Monitoring and reporting. The owners or operators of each incinerator facility shall conduct routine monitoring of emissions in accordance with a program that has been approved by ecology or the authority. The program must contain quality control and quality assurance procedures.

(1) Monitoring.

(a) The owners or operators shall install, operate, and maintain continuous monitors and recorders for the following:

(i) Opacity;

(ii) Combustion zone temperature;

(iii) Particulate control device temperature;

(iv) Hydrogen chloride and/or sulfur dioxide;

(v) Oxygen;

(vi) Carbon monoxide;

(vii) Combustion air distribution.

(b) The monitors for sulfur dioxide, carbon monoxide, and oxygen shall comply with EPA performance specifications and quality assurance and control criteria in Title 40, Code of Federal Regulations, Part 60, Appendix B and Appendix F respectively, in effect on July 1, 2003.

(c) The monitor for opacity shall comply with EPA performance specifications and quality assurance and control criteria in Title 40, Code of Federal Regulations, Part 60, Appendix B in effect on July 1, 2003, and EPA-340/1-86-010, Recommended Quality Assurance Procedure for Opacity Continuous Emission Monitoring Systems.

(2) Reporting. Results of the monitoring shall be reported within fifteen days of the end of each calendar month and shall include but may not be limited to data such as:

(a) The average daily maximum and the daily maximum concentration of each monitored pollutant and the daily amount of solid waste burned.

(b) The date, time, and magnitude of any periods during which the standards were exceeded, and what corrective action was or will be taken.

(c) Any period(s) of monitor down time.

(3) Testing. The owners or operators shall conduct emission tests for particulate, sulfur dioxide and hydrogen chloride on a regular basis. These tests may be used to determine acceptable operating parameters. Testing shall be at least annually for incinerator facilities capable of burning two hundred fifty tons or more of solid waste per day and biennially for other facilities.

(4) Other data. Each owner or operator shall furnish upon request by ecology or the authority, other data required to evaluate the incinerator's emissions or emissions control program.

[Statutory Authority: RCW 70.94.331 and 70.94.510. 04-01-159 (Order 02-05), § 173-434-170, filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-170, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-170, filed 3/16/87.]

WAC 173-434-190 Changes in operation. (1) If a startup, shutdown, breakdown, or upset condition occurs which could result in an emissions violation or a violation of an ambient air quality standard, the owner or operator of the source shall take the following actions as applicable:

(a) For a planned condition, such as a startup or shutdown, the condition shall be reported to ecology or the authority not less than twenty-four hours in advance of its occurrence. For incinerator facilities that normally operate for less than twenty-four hours per day, this provision may be waived provided that daily startup and shutdown procedures are developed that are acceptable to ecology or the authority.

(b) For unplanned conditions, such as a breakdown or upset, the condition shall be reported to ecology or the authority as soon as possible, but no later than the end of the next business day.

(2) If, upon reviewing the available information, ecology or the authority determines that continued operation of any emissions unit is likely to cause a significant risk to the public, it may order an immediate shutdown of the emissions unit.

(3) Upon request ecology or the authority, the owner or operator of the source shall submit a full written report including known causes of any infraction, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

(4) Compliance with the requirement of WAC 173-434-100 does not relieve the owner or operator of the source from the responsibility to maintain continuous compliance with all the requirements of chapter 173-434 WAC nor from the resulting liabilities for failure to comply.

[Statutory Authority: RCW 70.94.331 and 70.94.510. 04-01-159 (Order 02-05), § 173-434-190, filed 12/22/03, effective 1/22/04. Statutory Authority:

RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-190, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-190, filed 3/16/87.]

WAC 173-434-200 Emission inventory. The owner or operator of any solid waste incinerator shall submit an inventory of emissions that complies with WAC 173-400-105. The inventory shall include but may not be limited to stack and fugitive emissions of particulate matter, PM-10, sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds, hydrogen chloride, and other contaminants as requested by ecology or the authority or as required by federal emissions reporting requirements.

[Statutory Authority: RCW 70.94.331 and 70.94.510. 04-01-159 (Order 02-05), § 173-434-200, filed 12/22/03, effective 1/22/04. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-200, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-434-200, filed 1/3/89. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-200, filed 3/16/87.]

WAC 173-434-210 Special studies. Ecology or the authority may require such additional special studies relevant to process emissions and establish completion dates as it determines necessary. These special studies may include the requirement to conduct studies of dioxin emissions and control measures.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-434-210, filed 9/17/90, effective 10/18/90. Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-210, filed 3/16/87.]

Chapter 173-435 WAC
EMERGENCY EPISODE PLAN
(Formerly chapter 18-08 WAC)

WAC

173-435-010	Purpose.
173-435-015	Significant harm levels.
173-435-020	Definitions.
173-435-030	Episode stage criteria.
173-435-040	Source emission reduction plans.
173-435-050	Action procedures.
173-435-060	Enforcement.
173-435-070	Sampling sites, equipment, and methods.

WAC 173-435-010 Purpose. These rules implement chapter 70.94 RCW, the Washington State Clean Air Act.

Air pollution episodes occur under meteorological conditions that reduce the effective volume of air into which air contaminants are introduced. When these conditions occur, there is a possible danger that normal operations at air contaminant sources will be detrimental to public health and safety. The avoidance of high contaminant concentrations reaching significant harm levels during an episode requires a plan which will provide for rapid short-term emission reduction. This chapter sets up such an episode avoidance plan.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-010, filed 1/3/89; Order DE 77-21, § 173-435-010, filed 10/31/77.]

WAC 173-435-015 Significant harm levels. Significant harm levels are reached when any one of the following pollutant concentrations are measured:

(1) Sulfur dioxide - 2,620 $\mu g/m^3$ (1.0 ppm), 24-hour average.

(2) PM-10 - 600 micrograms/cubic meter, 24-hour average.

(3) Carbon monoxide - 57.5 mg/m^3 (50 ppm), 8-hour average, 86.3 mg/m^3 (75 ppm) 4-hour average, 144 mg/m^3 (125 ppm) 1-hour average.

(4) Ozone - 1,200 $\mu g/m^3$ (0.6 ppm) - 2-hour average.

(5) Nitrogen dioxide - 3,750 $\mu g/m^3$ (2.0 ppm) 1-hour average, 938 $\mu g/m^3$ (0.5 ppm) 24-hour average.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-015, filed 1/3/89.]

WAC 173-435-020 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings, general terms common with other chapters as defined in chapter 173-403 WAC, and terms specific to the emergency episode plan as defined below.

(1) "Air quality control region" means an area designated as an air quality control region by the federal environmental protection agency.

(2) "Episode stage" means a prescribed level of air contaminants or meteorological conditions where certain control actions are required to prevent ambient pollutant concentrations from reaching levels which could cause significant harm to the health of persons.

(3) "Emergency action center" means the headquarters for all department actions during an episode stage.

(4) "Hour" means a 60 minute period, beginning and ending on a clock hour.

(5) "8 hours" means any consecutive 8 hours, starting at any clock hour.

(6) "Major source" means any source which is estimated to emit at an annual rate of twenty-five tons per year or more of SO_2, particulates, or carbon monoxide.

(7) "Source emission reduction plan (SERP)" means a plan developed for an individual air pollution source and approved by the director, which sets forth the actions to be taken at that source upon the declaration of various stages of an episode.

(8) "24 hours" means any consecutive 24 hours, starting at any clock hour.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-020, filed 1/3/89; Order DE 77-21, § 173-435-020, filed 10/31/77.]

WAC 173-435-030 Episode stage criteria. The declaration of episode stages shall be in accordance with the following criteria:

(1) **Stage:** "First or forecast" - the forecast stage indicates the presence of meteorological conditions conducive to the accumulation of air contaminants. A forecast stage may be declared when an air stagnation advisory is issued by the national weather service or there is equivalent indication of stagnant atmospheric conditions and conditions are forecast to persist for 24 hours. Declaration of this stage will activate increased air quality surveillance.

(2) **Stage:** "Second or alert" - the alert stage is that concentration of pollutants at which control actions are to begin.

An alert will be declared when any one of the following levels is reached:

(a) SO_2 - 800 μg/m³ (0.3 ppm), 24-hour average.

(b) PM-10 - 350 μg/m³, 24-hour average.

(c) CO - 17 mg/m³ (15 ppm), 8-hour average.

(d) Oxidant (O_3) - 400 μg/m³ (0.2 ppm) - 1-hour average.

(e) NO_2 - 1130 μg/m³ (0.6 ppm) 1-hour average, 282 μg/m³ (0.15 ppm) 24-hour average; and meteorological conditions are such that the pollutant concentrations can be expected to remain at or above the alert levels for 12 or more hours or can be expected to recur within 24 hours unless control actions are taken.

(3) **Stage:** "Third or warning" - the warning stage indicates that air quality is continuing to degrade and that additional control actions are necessary. A warning will be declared when any one of the following levels is reached:

(a) SO_2 - 1,600 μg/m³ (0.6 ppm), 24-hour average.

(b) PM-10 - 420 μg/m³, 24-hour average.

(c) CO - 34 mg/m³ (30 ppm), 8-hour average.

(d) Oxidant (O_3) - 800 μg/m³ (0.4 ppm), 1-hour average.

(e) NO_2 - 2,260 μg/m³ (1.2 ppm), 1-hour average; 565 μg/m³ (0.3 ppm), 24-hour average; and meteorological conditions are such that pollutant concentrations can be expected to remain at or above the warning levels for 12 or more hours or can be expected to recur within 24 hours unless control actions are taken.

(4) **Stage:** "Fourth or emergency" - the emergency stage indicates that air quality is continuing to degrade toward a level of significant harm to the health of persons and that the most stringent control actions are necessary. An emergency will be declared when any one of the following levels is reached at any monitoring site:

(a) SO_2 - 2,100 μg/m³ (0.8 ppm), 24-hour average.

(b) PM-10 - 500 μg/m³, 24-hour average.

(c) CO - 46 mg/m³ (40 ppm), 8-hour average.

(d) Oxidant (O_3) - 1,200 μg/m³, (0.6 ppm), 1-hour average.

(e) NO_2 - 3,000 μg/m³ (1.6 ppm), 1-hour average; 750 μg/m³ (0.4 ppm), 24-hour average; and meteorological conditions are such that this condition can be expected to remain at or above emergency levels for 12 or more hours, or can be expected to recur within 24 hours.

(5) **Stage:** "Termination" - once declared, any stage reached by applying these criteria will remain in effect until the criteria for that level are no longer met. At that time, the next lower stage will be declared. When conditions improve to where the criteria are no longer met for any episode stage, the episode will be terminated.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-030, filed 1/3/89; Order DE 77-21, § 173-435-030, filed 10/31/77.]

WAC 173-435-040 Source emission reduction plans. (1) Any person responsible for the operation of a major source, when requested in writing by the director, shall prepare, in consultation with the department, a source emission reduction plan (SERP). This SERP shall be consistent with good industrial practice and safe operating procedures for reducing the emissions of air contaminants into the ambient air during periods of air pollution alert, warning, and emergency.

(2) SERPs shall be in writing and shall show the source of air contamination, describe the manner in which the reduction of air contaminant emissions will be achieved during periods of air pollution alert, warning, and emergency, and give the amount of reduction for each stage.

(3) During periods of air pollution alert, warning, or emergency, SERPs shall be made available, on the premises of sources required under this section to have them, to any person authorized to enforce the provisions of this episode avoidance plan.

(4) SERPs shall be submitted to the director within 30 days after receipt of a request thereof.

(5) SERPs shall be reviewed and approved by the director. If, in the opinion of the director, and SERP does not, in whole or in part, provide for satisfactory emission reduction during an episode, the director may disapprove such SERP, give the reason for disapproval, and require the resubmittal of same within a specified time period.

If within the time period specified, the person responsible fails to submit a SERP satisfactory to the director, the director may revise the SERP to cause it to meet episode avoidance objectives. This revised plan will then be the SERP for the source to which it applies.

(6) SERPs may be amended after submission to the director of a revised SERP. This revised SERP will be processed in the same manner as the originally submitted SERP.

(7) An emission reduction plan for the purpose of reducing motor vehicle emissions during episode stages, will be developed or approved by the department. These plans may include actions to be taken by other governmental units, citizens, and businesses.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-040, filed 1/3/89; Order DE 77-21, § 173-435-040, filed 10/31/77.]

WAC 173-435-050 Action procedures. (1) Whenever applicable criteria are met, the director may declare and terminate the forecast, alert, and warning stages of an episode. This declaration shall constitute an order for action in accordance with applicable SERPs.

(2) No open fires shall be ignited during any stage of an episode. Any person responsible for an open fire already ignited shall extinguish that fire when informed that an episode has been declared. Open fires conducted under the auspices of the department of natural resources for the purpose of burning forest slash pursuant to RCW 70.94.660 through 70.94.700 are to be extinguished by withholding new fuel and allowing the fire to burn down.

(3) Whenever applicable criteria are met, the governor may declare and terminate the emergency stage of an episode. This declaration shall constitute an order for action in accordance with applicable SERPs.

(4) Adverse air quality need not be region-wide for any episode stage to be declared. Action procedures may be taken for any area affected or likely to be affected by episode conditions. The declaration of any episode stage shall specify the area to which it applies.

(5) The broadest publicity practicable shall be given to the declaration of any episode stage. Such declaration shall,

as soon as possible, be directly communicated to all persons responsible for the carrying out of SERPs within the affected area.

(6) Regardless of whether any episode stages have previously been declared, whenever the governor finds that emissions are causing imminent danger to public health or safety, the governor may declare an air pollution emergency and order the persons responsible for the operation of sources causing the danger, to reduce or discontinue emissions consistent with good operating practice, safe operating procedures, and SERPs, if any.

(7) Whenever an episode stage is declared on the basis of contaminant levels of carbon monoxide, oxidant, or nitrogen dioxide, the director shall take such action as may be required to reduce emissions from motor vehicles. These actions may include, but are not limited to, the rerouting or detouring of traffic. Actions to be taken by cities and businesses will be established and implemented according to plans developed by them and approved by the department. These plans must meet criteria for emission reduction established by the department.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-050, filed 1/3/89; Order DE 77-21, § 173-435-050, filed 10/31/77.]

WAC 173-435-060 Enforcement. (1) Whenever any episode stage has been declared, the department shall establish an emergency action center, which shall be the headquarters for all department actions during the episode.

(2) The department shall develop an operations manual, which shall set forth a plan for the receipt, processing, and dissemination of information and data during an episode.

(3) Enforcement with respect to any episode shall be directed from the emergency action center by the director in consultation with the governor's office.

(4) Authorized personnel of the department, the department of social and health services, and the state police shall have the authority to enforce orders of the director or the governor, issued under this chapter, as directed from the emergency action center. In addition, authorized personnel of any local air pollution control agency or local police force shall have the authority to enforce such orders against sources within the area over which that agency or police force has jurisdiction, as directed from the emergency action center.

(5) To determine compliance with any SERP, those persons authorized to enforce orders, hereunder, shall have the authority to enter upon any private or public property, excepting nonmultiple unit private dwellings, housing two families or less. No person shall refuse entry or access to enforcement personnel who request entry and present appropriate credentials.

(6) Whenever it appears that action being taken in compliance with SERPs will not avert imminent danger to public health and safety, the governor may order the following additional measures:

(a) Stopping and prohibiting motor vehicle travel and traffic;

(b) Closing down or restricting the use of any business, commercial, industrial or other establishment or activity which contributes to the emission of contaminants to the air.

(7) Any declaration or order issued in accordance with WAC 173-435-050 shall be effective immediately and shall not be stayed, pending completion of review.

(8) Whenever any order has been issued hereunder, the attorney general, upon the request of the governor or authorized representative, or the director shall petition the superior court of the county in which a source is located for a temporary restraining order for the immediate reduction or discontinuance of emissions from that source.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-060, filed 1/3/89; Order DE 77-21, § 173-435-060, filed 10/31/77.]

WAC 173-435-070 Sampling sites, equipment, and methods. (1) Data from all stations shall be considered when determining episode conditions. The department shall specify PM-10 monitoring stations to be operated continuously during any episode stage for episode management purposes. Stations from which episode declarations are based must be located in such a manner that the area represented by that station and the sources contributing to the episode condition can reasonably be determined and corrective actions taken.

(2) Sampling and analysis will be done by federal reference or federal equivalent methods; except the department may approve other sampling and analysis methods for PM-10 if reasonable site specific equivalency with the federal reference method has been demonstrated. This equivalency must be reestablished biennially.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-435-070, filed 1/3/89; Order DE 77-21, § 173-435-070, filed 10/31/77.]

Chapter 173-450 WAC

ESTABLISHING REQUIREMENTS FOR THE RECEIPT OF FINANCIAL AID

(Formerly chapter 18-20 WAC)

WAC

173-450-010	Purpose and applicability.
173-450-020	Definitions.
173-450-030	Limitations.
173-450-040	Applications.
173-450-050	Workable program.
173-450-060	Grant conditions.
173-450-070	Payments.
173-450-080	Changes, amendments and supplemental state financial aid.
173-450-090	Termination.
173-450-100	Federal grants.

WAC 173-450-010 Purpose and applicability. These rules and regulations are promulgated under RCW 70.94.143, 70.94.305, and 70.94.385 of the Washington Clean Air Act to establish standard of eligibility for the granting of state and federal financial aid to air authorities.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-010, filed 9/16/87.]

WAC 173-450-020 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings; general terms common with other chapters of Title 173 WAC as

defined in chapter 173-403 WAC, and terms specific to requirements for financial aid as follows:

(1) "Applicant" means an air authority applying for state financial aid under the provisions of chapter 70.94 RCW.

(2) "Grantee" means an applicant for whom state financial aid has been approved by the department.

(3) "Locally funded portion" or "local funds" means the funds provided to the applicant air authority from sources available to it under chapter 70.94 RCW exclusive of state financial aid or federal funds designated specifically for air pollution.

(4) "Payment period" means the period of time for which money for state and federal financial aid is paid to the grantee upon receipt and approval by the department of a properly executed voucher.

(5) "Workable program" means a comprehensive statement of objectives for the prevention and control of air pollution and the existing and proposed measures to achieve these objectives as described in WAC 173-450-050.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-020, filed 9/16/87.]

WAC 173-450-030 Limitations. State financial aid shall be granted to air authorities qualifying under these regulations subject to the following limitations:

(1) State financial aid shall not exceed an amount equal to fifty percent of the locally funded portion of the annual recurring expenditures of such air authority in each of the first three years during which state financial aid is utilized by the air authority and shall not exceed an amount equal to one hundred percent of the locally funded portion in each following year.

(2) The department may limit the amount of financial aid available to a grantee when it becomes necessary due to the lack of sufficient funds available for distribution to meet the needs of all qualified grantees throughout the state.

(3) The department may limit the amount of financial aid to less than the amount for which the applicant applies when the department determines that proposed items of expenditure are not consistent with air pollution control program needs in the applicant's area of jurisdiction, or are not in the best interests of a coordinated statewide air pollution control program, or where such items of expenditure duplicate the responsibilities and activities of the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-030, filed 9/16/87.]

WAC 173-450-040 Applications. Applications for state financial aid shall be prepared and submitted on forms specified by the department under the following conditions:

(1) Applications shall be filed with the department and the department shall take action as to the disposition of an application within sixty-five days of its first presentation. Applications shall be approved, denied, or deferred: Provided, That where action is deferred the applicant shall be advised of the reasons for such deferral and action shall be taken within a reasonable time.

(2) Applications must contain a statement of need for air pollution prevention and control in the applicant's jurisdiction.

(3) The applicant must describe a workable program and its objectives together with a proposed timetable of accomplishment.

(4) The application shall contain the budget of the air authority showing all anticipated revenue and sources of revenue, including requested state financial aid, and shall show proposed expenditures covering salaries, equipment and accessories, expendable supplies, travel, and such other information as may be deemed necessary by the department.

(5) Any air pollution control activity conducted by the applicant air authority during the twelve-month period immediately prior to the proposed grant period shall be described in the application, including funds budgeted and expended.

(6) It shall be the policy of the department in reviewing applications for state financial aid and in administering such financial aid to take into consideration the following factors:

(a) The implementation of coordinated statewide air pollution prevention and control.

(b) The responsibilities of the department with respect to its jurisdiction over any areas or type of air contaminant sources and for monitoring the movement of air contaminants throughout the state.

(c) The needs and financial capability of the air authorities in the various areas of the state and the relative effectiveness of the air authorities.

(d) The capability and reasonable potential of the air authorities to perform.

(7) The department will, from time to time, determine or estimate the amount of state financial aid that will be available and advise the applicants, or potential applicants, as to the availability of such aid or supplemental aid.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-040, filed 9/16/87.]

WAC 173-450-050 Workable program. The applicant shall provide sufficient information to show that its workable program is designed to provide for effective prevention and control of air pollution through an orderly progression of development, establishment, and improvement of air pollution control programs.

(1) The initial activity of an applicant shall be the development of a plan designed to provide an evaluation of existing and potential air pollution within the jurisdiction of the applicant, including a general inventory of the types of air contaminant sources and their relative contribution to the air pollution problem; to provide for the initiation of air quality surveillance appropriate to the air contaminant sources over which the applicant will have jurisdiction; and to provide for the development of regulations appropriate to the existing air contaminant sources or those which may be reasonably anticipated.

(2) The establishment and improvement of air pollution control programs which constitute the operating control activity of an applicant, shall be oriented to attaining compliance with requirements and regulations of the applicant with respect to air contaminant sources under its jurisdiction.

(3) Sampling and monitoring programs shall be oriented to surveillance for control purposes with respect to those air contaminant sources under the applicant's jurisdiction, except as may be requested by the department to supplement the statewide monitoring program.

(4) Budget for personnel, equipment and other operating expenses must be adequate to carry out the program during the grant period for which state financial aid is requested. Total funding from all sources shall provide, as a minimum, for the equivalent of one full time person: Provided, That the department may approve the sharing of personnel with another agency, the utilization of part-time staff, or persons under contract when these methods can be demonstrated as an effective means of carrying out the program and the purposes of the Washington Clean Air Act.

(5) The locally funded portion of the annual operating cost, budgeted and expended in any grant period for which application is made for state financial aid, shall not be less than the locally funded annual expenditure for air pollution control during the twelve-months' period immediately preceding the proposed grant period, unless it can be demonstrated by the applicant that there were necessary nonrecurring expenditures in the previous period or that the program objectives and the purposes of the Washington Clean Air Act can reasonably be met with a reduced expenditure.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-050, filed 9/16/87.]

WAC 173-450-060 Grant conditions. (1) No grant of state funds shall be made to any grantee for a period in excess of twelve months.

(2) Any state financial aid granted shall be used solely for carrying out the program outlined in the approved application or approved amendment as provided in WAC 173-450-040 and 173-450-080.

(3) The grantee shall provide for and maintain such accounting, budgetary, and other fiscal procedures so as to assure the proper and efficient administration of funds. The fiscal records shall be such as to reflect currently the receipt and disposition of all funds including state financial aid. Such records and documents pertinent to the receipt and disposition of funds shall be kept available for review and audit.

(4) As a minimum the grantee shall submit quarterly financial and progress reports to the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-060, filed 9/16/87.]

WAC 173-450-070 Payments. (1) Grantees shall initiate requests for payment of state financial aid for the appropriate payment period utilizing properly executed vouchers furnished by the department. The voucher shall state the requested amount of state financial aid and the expenditure of local funds during the payment period. Local funds expended for any item may be shown as the appropriate portion of the total expenditure when the expenditure properly includes the use of, or anticipates, reimbursement with federal or state grant funds.

(2) Upon approval of the voucher by the department, payment for the appropriate payment period shall be authorized.

(3) Payments of state and federal financial aid shall be made by way of reimbursement as contained in the annual agreement payment schedule or otherwise mutually agreed upon, and changed by an amendment to the annual agreement. All expenditures claimed for reimbursement shall be subject to audit.

(4) Final payment of state and federal financial aid shall be based upon approved vouchers applied to the entire grant period.

(5) Vouchers for the final payment period during a grant period shall be submitted by the grantee by the 15th day of July of that year.

(6) The department may withhold approval of the vouchers submitted by the grantee if it finds that said grantee has failed to comply with any of the grant conditions or any other requirement or condition imposed by these regulations or chapter 70.94 RCW, for a period not to exceed thirty days. If at the end of such period the matter has not been resolved and the department has not approved said vouchers, the grantee may request an administrative hearing before the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-070, filed 9/16/87.]

WAC 173-450-080 Changes, amendments and supplemental state financial aid. (1) Changes in the workable program of a grantee during the grant period which would not substantially affect the workable program, nor increase the total cost to the state, and which are for the purpose of improving the operation and performance of the workable plan, may be made: Provided, That written approval in advance is obtained from the department.

(2) Changes in the workable program of a grantee during the grant period which would significantly alter the workable program shall not be made until the grantee has submitted to, and the department has approved, an amendment to the original application.

(3) Application for supplemental state and federal financial aid may be made by the grantee when notice is given by the department that such supplemental funds have become available. The application shall be made as an amendment to the previously approved workable program of the grantee and shall include proposed additions in or improvements to the workable program and proposed changes in the budget including the additional local funds to be provided. The department may approve additional financial aid to the extent such funds become available having considered the needs of all grantees throughout the state.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-080, filed 9/16/87.]

WAC 173-450-090 Termination. The department may terminate state and federal financial aid, in whole or in part, to any grantee when it finds, after reasonable notice and opportunity for appeal to the director, that the grantee has failed to comply with any of the conditions of the approved application or amendments thereto or any of the requirements or conditions imposed by or pursuant to these regulations or the Washington Clean Air Act.

Upon the effective date of termination, the grantee shall promptly render an accounting and final statement as would similarly be required for request for payment of state financial aid under WAC 173-450-070. The department may authorize payment of the state's share of the amount required to settle at minimum cost any contractual obligations properly incurred by the grantee prior to the date of termination, if the department finds that the grantee acted in good faith in incurring the obligations.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-090, filed 9/16/87.]

WAC 173-450-100 Federal grants. The standards and requirements of these regulations establishing the eligibility of air authorities for state financial aid shall be equally applicable to the applications of such air authorities for federal grants.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-100, filed 9/16/87.]

Chapter 173-455 WAC
AIR QUALITY FEE REGULATION

WAC

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WAC 173-455-010 Overview. It is the purpose of this chapter to consolidate most of the air quality related fees into one chapter. This will allow the regulated community easier access to applicable fees.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-010, filed 5/3/07, effective 6/3/07.]

WAC 173-455-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter shall have the following meanings:

(1) **"Fossil fuel"** means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material to produce heat for the generation of electricity.

(2) **"Solid fuel burning device"** (same as solid fuel heating device) means a device that burns wood, coal, or any other nongaseous or nonliquid fuels, and includes any device burning any solid fuel except those prohibited by WAC 173-433-120. This also includes devices used for aesthetic or space-heating purposes in a private residence or commercial establishment, which has a heat input less than one million British thermal units per hour.

(3) **"Weather modification and control"** means changing or attempting to change or control by artificial methods, the natural development of any or all atmospheric cloud forms or precipitation forms which occur in the troposphere.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-020, filed 5/3/07, effective 6/3/07.]

WAC 173-455-030 Applicability. The provisions of this chapter apply to air quality related activities regulated by the department of ecology. The provisions of this chapter do not apply in counties regulated by a local air agency.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-030, filed 5/3/07, effective 6/3/07.]

WAC 173-455-035 Fee requirement. All programs and services in this chapter require a fee. Unless otherwise stated, no approval of a permit or service for any activity covered in this chapter will be valid until the required fee is paid in full.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-035, filed 5/3/07, effective 6/3/07.]

WAC 173-455-038 Fees not included. This chapter contains all fees required by the air quality program except the following:

(1) Air operating permit program - fees can be found in chapter 173-401 WAC.

(2) Ag burning - fees can be found in chapter 173-430 WAC.

(3) Motor vehicle emission inspection - fees can be found in chapter 173-422 WAC.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-038, filed 5/3/07, effective 6/3/07.]

WAC 173-455-040 Air contaminant source registration fees. (1) Registration fee determination. In counties without an active local air pollution control authority, ecology shall establish registration fees based on workload using the process outlined below. The fees collected shall be sufficient to cover the direct and indirect costs of administering the registration program within ecology's jurisdiction.

(2) Budget preparation. Ecology shall conduct a workload analysis projecting resource requirements for administering the registration program. Workload estimates shall be prepared on a biennial basis and shall estimate the resources required to perform registration program activities listed in WAC 173-400-099(2). Ecology shall prepare a budget for administering the registration program using workload estimates identified in the workload analysis for the biennium.

(3) Registration fee schedule. Ecology's registration program budget shall be distributed to sources located in its jurisdiction according to the following:

(a) Sources requiring periodic registration and inspections shall pay an annual registration fee of four hundred dollars.

(b) Sources requiring annual registration and inspections shall pay a registration fee comprised of the following three components:

(i) Flat component. This portion of a source's fee shall be calculated by the equal division of thirty-five percent of the budget amount allocated to annual registration sources by the total number of sources requiring annual registration.

(ii) Complexity component. Each source is assigned a complexity rating of 1, 3, or 5 which is based on the estimated amount of time needed to review and inspect the source. This portion of the fee is calculated by dividing forty percent of the budget amount allocated to annually registered sources by

the total complexity of sources located in ecology's jurisdiction. The quotient is then multiplied by an individual source's complexity rating to determine that source's complexity portion of the fee.

(iii) Emissions component. This portion of a source's fee is calculated by dividing twenty-five percent of the budget amount allocated to annually registered sources by the total billable emissions from those sources. The quotient is then multiplied by an individual source's billable emissions to determine that source's emissions portion of the fee. Billable emissions include all air pollutants except carbon monoxide and total suspended particulate.

(4) Regulatory orders. Owners or operators registering a source as a synthetic minor must obtain a regulatory order which limits the source's emissions. The owner will be required to pay a fee based on the amount of time required to research and write the order multiplied by an hourly rate of sixty dollars.

(5) Fee reductions for pollution prevention initiatives. Ecology may reduce registration fees for an individual source if that source demonstrates the use of approved pollution prevention measures or best management practices beyond those required of the source.

(6) Fee reductions for economic hardships. If a small business owner believes the registration fee results in an extreme economic hardship, the small business owner may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. The factors which ecology may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the registration fee through to customers; average annual profits; and cumulative effects of multiple site ownership. In no case will a registration fee be reduced below two hundred dollars.

(7) Fee payments. Fees specified in this section shall be paid within thirty days of receipt of ecology's billing statement. All fees collected under this regulation shall be made payable to the Washington department of ecology. A late fee surcharge of fifty dollars or ten percent of the fee, whichever is more, may be assessed for any fee not received after the thirty-day period.

(8) Dedicated account. All registration fees collected by ecology shall be deposited in the air pollution control account.

(9) Tracking revenues, time, and expenditures. Ecology shall track revenues collected under this subsection on a source-specific basis. Ecology shall track time and expenditures on the basis of ecology budget functions.

(10) Additional registration fee for fossil-fueled electric generating facilities. A fossil-fueled electric generating facility subject to the provisions of chapter 80.70 RCW and RCW 70.94.892, is subject to additional fees pursuant to that chapter.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-040, filed 5/3/07, effective 6/3/07.]

WAC 173-455-050 Carbon dioxide mitigation program fees. (1) **Statutory authorization.** RCW 70.94.892 authorizes the department to determine, assess, and collect fees sufficient to cover costs to review and approve or deny the carbon dioxide mitigation plan components of an order of approval. The order of approval will specify costs to monitor conformance related to the carbon dioxide mitigation plan.

(2) **Fees.** The fees for the carbon dioxide mitigation program are described in this section and listed in the table below. The fees listed are added to the fees established in WAC 173-455-120, when the carbon dioxide mitigation plan requirements are triggered.

Activity	Fee
a. Application review	$65.00/hr.[1] not to exceed $500.00
b. Mitigation plan approval	
i. Payment to third party	$100.00[2]
ii. Purchase of CO_2 credits	$65.00/hr.[3]
iii. Direct investment	$65.00/hr.[4]
c. Routine compliance monitoring	
i. Payment to third party	$100.00[5] annually until full amountpaid
ii. Purchase of CO_2 credits	$65.00/hr.[6]
iii. Applicant controlled project	$65.00/hr.[6]

[1] Estimated using an EE3 per hour rate with a cap.

[2] Small fee primarily to check math and that the source is using an EFSEC approved qualified organization.

[3] Estimated EE3 per hour rate to check that the credits purchased will be verifiable and from a reputable trading or marketing organization.

[4] Estimated using an EE3 per hour rate.

[5] Same as rationale for [2] above.

[6] Verify and confirm credits with the trading or marketing organization.

(3) The department or authority may use RCW 70.94.-085 to structure a cost-reimbursement agreement with the applicant.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-050, filed 5/3/07, effective 6/3/07.]

WAC 173-455-060 Solid fuel retail sales fee. (1) A person selling a solid fuel burning device at retail shall collect a fee from the buyer, pursuant to RCW 70.94.483.

(2) The fee shall be:

(a) Set at a minimum of thirty dollars on January 1, 1992. Thereafter, ecology may annually adjust the fee to account for inflation as determined by the office of the state economic and revenue forecast council. Adjustments in the fee should be rounded down to the nearest dollar.

(b) Applicable to all new and used solid fuel burning devices.

(c) Procedures for masonry fireplaces. Generally, contractors will collect, pay, and report the fee to the department of revenue on the combined excise tax return for the tax reporting period during which the retail sales tax is billed to the customer for the construction of the masonry fireplace. (See WAC 458-20-170 for a detailed explanation.) Collection and payment of the fee by contractors shall be in accordance with the following:

(i) A masonry contractor or other subcontractor who builds a masonry fireplace. The retail sale occurs at the time the general or prime contractor or customer is billed for the work. The masonry contractor or other subcontractor must collect the fee and pay it to the department of revenue, unless the masonry contractor or other subcontractor has received a resale certificate from the general or prime contractor. The fee shall be reported on the combined excise tax return.

(ii) A general or prime contractor building a custom building. The retail sale occurs at the time the customer is billed for the construction. The fee is charged and reported with the first progress payment after the masonry fireplace has been substantially completed. If a general or prime contractor subcontracts the work on a custom building to a masonry or other contractor, the general or prime contractor may give the masonry or other subcontractor a resale certificate. The general or prime contractor is responsible to collect the fee and pay it to the department of revenue. The fee is reported on the combined excise tax return.

(iii) A general or prime contractor building a speculation building. The fee is required to be paid at the time the fireplace is complete. The fee must be reported to the department of revenue on a combined excise tax return and paid to the department of revenue. If the prime or general contractor subcontracts the building of the masonry fireplace to a masonry contractor or other subcontractor, the general or prime contractor may not give a resale certificate to the masonry or other subcontractor. The masonry or other subcontractor must collect and pay the fee to the department of revenue as provided in (c)(i) of this subsection.

(d) Procedures for all other solid fuel burning devices. Collected by the retailer at the time of sale and remitted to the department of revenue in conjunction with the retail sales tax under chapter 82.08 RCW.

(3) If the retailer or contractor fails to collect and remit the fee to the department of revenue as prescribed in chapter 82.08 RCW, the retailer or contractor shall be personally liable to the state for the amount of the fee, with subsequent actions taken in accordance with the collection provisions of chapter 82.32 RCW.

(4) Beginning July 1, 1990, and each calendar quarter thereafter, the funds collected under RCW 70.94.483 shall be used solely for the purposes of public education and enforcement of the solid fuel burning device program. The department shall distribute the funds from the woodstove education and enforcement account as follows:

(a) Sixty-six percent of the funds shall be distributed to those local air authorities with enforcement programs, based upon the fraction of the total state population residing in the counties within their respective jurisdictions. Population figures used to establish this fraction shall be determined by the office of financial management. Where an activated local air authority does not exist or does not implement an enforcement program, or elects not to receive the funds, ecology shall retain the funds that would otherwise be distributed under this subsection; and

(b) Thirty-four percent of the funds shall be distributed to ecology for the purposes of enforcement and educating the public about:

(i) The effects of solid fuel burning device emissions upon health and air quality; and

(ii) Methods of achieving better efficiency and emission performance from solid fuel burning devices.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-060, filed 5/3/07, effective 6/3/07.]

WAC 173-455-070 Weather modification fees. (1) Procedures for issuing license. In accordance with WAC 173-495-060, an applicant shall pay a fee of one hundred dollars to the state of Washington to obtain a license.

(2) Period of license. In accordance with WAC 173-495-060, an applicant shall pay a fee of one hundred dollars made payable to the state of Washington for a license renewal.

(3) Permit requirements. In accordance with WAC 173-495-070, the applicant shall pay a permit fee of one and one-half percent of the estimated cost of the operation. The estimated cost will be computed by ecology from available data.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-070, filed 5/3/07, effective 6/3/07.]

WAC 173-455-100 Control technology fees. (1) General. Ecology may assess and collect a fee as authorized in RCW 70.94.154 and described in subsections (2) through (5) of this section.

(2) Fee schedule for source-specific determinations where RACT analysis and determination are performed by ecology.

(a) Basic RACT analysis and determination fee:

(i) Low complexity (the analysis addresses one type of emission unit) - one thousand five hundred dollars;

(ii) Moderate complexity (the analysis addresses two to five types of emissions units) - seven thousand five hundred dollars;

(iii) High complexity (the analysis addresses more than five types of emission units) - fifteen thousand dollars.

(b) Additional charges based on criteria pollutant emissions: In addition to those fees required under (a) of this subsection, a fee will be required for a RACT analysis and determination for an emission unit or multiple emission units of uniform design that, individually or in the aggregate, emit one hundred tons per year or more of any criteria pollutant - two thousand dollars.

(c) Additional charges based on toxic air pollutant emissions: In addition to those fees required under (a) and (b) of this subsection, the following fees will be required as applicable:

(i) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than two tons per year but not more than ten tons per year of any toxic air pollutant - one thousand dollars; or

(ii) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than ten tons per year of any toxic air pollutant - two thousand dollars.

(3) Fee schedule for source-specific determinations where RACT analysis is performed by the source and review and determination conducted by ecology.

(a) Basic RACT review and determination fees:

(i) Low complexity (the analysis addresses one type of emission unit) - one thousand dollars;

(ii) Moderate complexity (the analysis addresses two to five types of emissions units) - five thousand dollars;

(iii) High complexity (the analysis addresses more than five types of emission units) - ten thousand dollars.

(b) Additional charges based on criteria pollutant emissions: In addition to those fees required under (a) of this subsection, a fee will be required for a RACT analysis and determination for an emission unit or multiple emissions units of uniform design that, individually or in the aggregate, emit one hundred tons per year or more of any criteria pollutant - one thousand dollars.

(c) Additional charges based on toxic air pollutant emissions: In addition to those fees required under (a) and (b) of this subsection, the following fees will be required as applicable:

(i) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than two tons per year but not more than ten tons per year of any toxic air pollutant - five hundred dollars; or

(ii) RACT analysis and determination for an emissions unit or multiple emissions units of uniform design that, individually or in the aggregate, emit more than ten tons per year of any toxic air pollutant - one thousand dollars.

(4) Fee schedule for reviews authorized under RCW 70.94.153 for the replacement or substantial alteration of control technology.

(a) Notice of construction application. Review and approval of notice of construction application (NOCA) for replacement or substantial alteration of control technology - three hundred fifty dollars.

(b) RACT analysis and determination. Review and approval of a RACT analysis and determination for affected emission unit - five hundred dollars.

(5) Fee schedule for categorical RACT determinations. Fees for categorical RACT determinations (for categories with more than three sources) shall be assessed as shown below. The fees described in (a) of this subsection shall be based on the most complex source within a category. Except as provided in (b) and (d) of this subsection, fees for individual sources in the category will be determined by dividing the total source category fee by the number of sources within the category.

(a) RACT analysis and determination (RACT analysis performed by ecology with assistance from sources):

(i) Low complexity source category (average source emissions of individual criteria pollutants are all less than twenty tons per year, average source emissions of individual toxic air pollutants are all less than two tons per year, or the analysis addresses one type of emission unit) - twenty-five thousand dollars;

(ii) Moderate complexity source category (average source emissions of one or more individual criteria pollutants are greater than twenty tons per year and less than one hundred tons per year, average source emissions of one or more individual toxic air pollutants are greater than two tons per year and less than ten tons per year, or the analysis addresses two to five types of emissions units) - fifty thousand dollars; or

(iii) High complexity source category (average source emissions of one or more individual criteria pollutants exceed one hundred tons per year, average source emissions of one or more individual toxic air pollutants exceed ten tons per year, or the analysis addresses more than five types of emission units) - one hundred thousand dollars.

(b) If an emission unit is being evaluated for more than one categorical RACT determination within a five-year period, ecology will charge the owner or operator of that emission unit one fee and the fee will reflect the higher complexity categorical RACT determination.

(c) Ecology may adjust the fee to reflect workload savings from source involvement in source category RACT determination.

(d) Ecology may approve alternate methods for allocating the fee among sources within the source category.

(6) Small business fee reduction. The RACT analysis and determination fee identified in subsections (2) through (5) of this section may be reduced for a small business.

(a) To qualify for the small business RACT fee reduction, a business must meet the requirements of "small business" as defined in RCW 43.31.025.

(b) To receive a fee reduction, the owner or operator of a small business must include information in an application demonstrating that the conditions of (a) of this subsection have been met. The application must be signed:

(i) By an authorized corporate officer in the case of a corporation;

(ii) By an authorized partner in the case of a limited or general partnership; or

(iii) By the proprietor in the case of a sole proprietorship.

(c) Ecology may verify the application information and if the owner or operator has made false statements, deny the fee reduction request and revoke previously granted fee reductions.

(d) For small businesses determined to be eligible under (a) of this subsection, the RACT analysis and determination fee shall be reduced to the greater of:

(i) Fifty percent of the RACT analysis and determination fee; or

(ii) Two hundred fifty dollars.

(e) If due to special economic circumstances, the fee reduction determined under (d) of this subsection imposes an extreme hardship on a small business, the small business may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. The factors which ecology may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the RACT analysis and determination fees through to customers; and average annual profits. In no case will a RACT analysis and determination fee be reduced below one hundred dollars.

(7) Fee reductions for pollution prevention initiatives. Ecology may reduce RACT analysis and determination fees for an individual source if that source is using approved pollution prevention measures.

(8) Fee payments. Fees specified in subsection (4)(a) of this section shall be paid at the time a notice of construction

applications is submitted to the department. Other fees specified in subsections (2) through (7) of this section shall be paid no later than thirty days after receipt of an ecology billing statement. For fees specified in subsection (5) of this section, a billing for one-half of the payment from each source will be mailed when the source category rule-making effort is commenced as noted by publication of the CR-101 form in the *Washington State Register*. A billing for the second half of the payment will be mailed when the proposed rule is published in the *Washington State Register*. No order of approval or other action approving or identifying a source to be at RACT will be issued by the department until all fees have been paid by the source. All fees collected under this regulation shall be made payable to the Washington department of ecology.

(9) Dedicated account. All control technology fees collected by the department from permit program sources shall be deposited in the air operating permit account created under RCW 70.94.015. All control technology fees collected by the department from nonpermit program sources shall be deposited in the air pollution control account.

(10) Tracking revenues, time, and expenditures. Ecology shall track revenues on a source-specific basis. For purposes of source-specific determinations under subsections (2) through (4) of this section, ecology shall track time and expenditures on the basis of source complexity categories. For purposes of categorical determinations under subsection (5) of this section, ecology shall track time and expenditures on a source-category basis.

(11) Periodic review. Ecology shall review and, as appropriate, update this section at least once every two years.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-100, filed 5/3/07, effective 6/3/07.]

WAC 173-455-110 Registration fees for sources emitting gas vapors. Registration fees shall accompany the registration form outlined in WAC 173-491-030 and are as follows: Gasoline loading terminals: Five hundred dollars; bulk gasoline plants: Two hundred dollars; gasoline dispensing facilities: One hundred dollars, or a greater amount duly adopted by a local air pollution authority. The amount of the fees collected shall only be used to administer the registration program for facilities subject to this chapter.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-110, filed 5/3/07, effective 6/3/07.]

WAC 173-455-120 New source review fees. (1) Applicability. Every person required to submit a notice of construction application to the department of ecology as authorized in RCW 70.94.152 for establishment of any proposed new source or emissions unit(s) shall pay fees as set forth in subsections (2) and (3) of this section. Persons required to submit a notice of construction application to a local air authority may be required to pay a fee as required by the local permitting authority. Persons required to submit a notice of construction application to a local air authority may be required to pay a fee to ecology to cover the costs of review pursuant to WAC 173-400-720, second tier analysis pursuant to WAC 173-460-090, and risk management decisions pursuant to WAC 173-460-100 as set forth in subsection (3) of this section. Fees assessed under this section shall apply without regard to whether an order of approval is issued or denied.

(2) Basic review fees. All owners or operators of proposed new sources are required to pay a basic review fee. The basic review fee covers the costs associated with preapplication assistance, completeness determination, BACT determination, technical review, public involvement and approval/denial orders. Complexity determination shall be based on the project described in the notice of construction application. The basic review fees are either (a) or (b) of this subsection:

(a) Basic new source review fees.

Source type	Clarifying criteria	Fee
Basic Review Fees		
Low complexity source	Emissions increase of individual pollutants are all less than one-half of the levels established in the definition of "emission threshold" in WAC 173-400-030, or emissions increase of individual toxic air pollutants are all less than 2.0 tons/year	$1250
Moderate complexity	Emissions increase of one or more individual pollutants are greater than one-half of, and less than, the levels established in the definition of "emission threshold" in WAC 173-400-030, or emissions increase of one or more toxic air pollutants are greater than 2.0 tons/year and less than 10.0 tons/year	$8000
High complexity	Emissions increase of one or more pollutants are greater than the levels established in the definition of "emission threshold" in WAC 173-400-030, or emissions increase of one or more toxic air pollutants are greater than 10.0 tons/year	$18,000

(b) New source review fees for specific source categories.

Source type		Clarifying criteria	Fee
Dry cleaners			$250
Gasoline stations			$250
Storage tanks			
	< 20,000 gallons		$250
	20,000 - 100,000 gallons		$650

Source type		Clarifying criteria	Fee
	> 100,000 gallons		$900
Chromic acid plating and anodizing identified in WAC 173-460-060			$250
Solvent metal cleaners identified in WAC 173-460-060			$250
Abrasive blasting identified in WAC 173-460-060			$250
New emission units or activities that qualify as insignificant emission units under WAC 173-401-530 whether located at a chapter 173-401 WAC source or nonchapter 173-401 WAC source			$250
Application for coverage under a general order of approval		WAC 173-400-560 and criteria included in a specific general order of approval	$500
Nonroad engines			
Less than a total of 500 installed horsepower			$500
More than 500 horsepower and less than a total of 2000 installed horsepower			$900
More than 2000 horsepower and less than a total of 5000 installed horsepower			$2000
More than 5000 horsepower and less than a total of 10,000 installed horsepower			$4000
More than a total of 10,000 installed horsepower			$7500

(c) Additional units. An owner or operator proposing to build more than one identical emission unit shall be charged a fee for the additional units equal to one-third the basic review fee of the first unit.

(3) Additional charges. In addition to those fees required under subsection (2)(a) through (c) of this section, the following fees will be required as applicable:

(a) Major NSR actions under WAC 173-400-720 and 173-400-112.

Activity	Clarifying criteria	Fee
Prevention of significant deterioration review or increase in a PAL limitation	WAC 173-400-720	$15,000
Establishing LAER and offset requirements	WAC 173-400-112	$10,000
Establishing or renewal of clean unit status	Per 40 CFR 52.21(y)	$1500
Pollution control project approval	Per 40 CFR 52.21(z)	$1500
Establishment of a PAL	Per 40 CFR 52.21(aa)	$4000
Renewal of a PAL	Per 40 CFR 52.21(aa)	$4000
Expiration of a PAL	Per 40 CFR 52.21(aa)	$12,000
PSD permit revisions		
All except administrative	WAC 173-400-750	$10,000
Administrative revisions	WAC 173-400-750	$1500

(b) Other actions.

Activity	Clarifying criteria	Fee
Tier II toxic air pollutant impact review		$10,000
Tier III toxic air pollutant impact review		$10,000
Case-by-case MACT determinations		$12,500
Fossil-fueled electric generating unit	Applicability criteria found in chapter 80.70 RCW	Fees listed in rule implementing RCW 70.94.892 and chapter 80.70 RCW
Changes to existing orders of approval, Tier I review, Tier II review, or other action identified above.		
Activity		Fee
Modification to order of approval		50% of the fee charged in WAC 173-455-120 (2)(a)
Modification of Tier II approval		50% of the fee charged in WAC 173-455-120 (2)(b)

(4) Small business fee reduction. The new source review fee identified in subsections (2) and (3) of this section may be reduced for a small business.

(a) To qualify for the small business new source review fee reduction, a business must meet the requirements of "small business" as defined in RCW 19.85.020. In RCW 19.85.020, "small business" means any business entity, including a sole proprietorship, corporation, partnership, or other legal entity, that is owned and operated independently from all other businesses, that has the purpose of making a profit, and that has fifty or fewer employees.

(b) To receive a fee reduction, the owner or operator of a small business must include information in the application demonstrating that the conditions of (a) of this subsection have been met. The application must be signed:

(i) By an authorized corporate officer in the case of a corporation;

(ii) By an authorized partner in the case of a limited or general partnership; or

(iii) By the proprietor in the case of a sole proprietorship.

(c) Ecology may verify the application information and, if the owner or operator has made false statements, deny the fee reduction request and revoke previously granted fee reductions.

(d) For small businesses determined to be eligible under (a) of this subsection, the new source review fee shall be reduced to the greater of:

(i) Fifty percent of the new source review fee; or

(ii) Two hundred fifty dollars.

(e) If, due to special economic circumstances, the fee reduction determined under (d) of this subsection imposes an extreme hardship on a small business, the small business may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. The factors which ecology may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the new source review fees through to customers; and average annual profits. In no case will a new source review fee be reduced below one hundred dollars.

(5) Fee reductions for pollution prevention initiatives. Ecology may reduce the fees defined in subsections (2) and (3) of this section where the owner or operator of the proposed source demonstrates that approved pollution prevention measures will be used.

(6) Fee payments. Fees specified in subsections (2) through (5) of this section shall be paid at the time a notice of construction application is submitted to the department. A notice of construction application is considered incomplete until ecology has received the appropriate new source review payment. Additional charges assessed pursuant to subsection (3) of this section shall be due thirty days after receipt of an ecology billing statement. All fees collected under this regulation shall be made payable to the Washington department of ecology.

(7) Dedicated account. All new source review fees collected by the department shall be deposited in the air pollution control account.

(8) Tracking revenues, time, and expenditures. Ecology shall track revenues collected under this subsection on a source-specific basis. Ecology shall track time and expenditures on the basis of complexity categories.

(9) Periodic review. Ecology shall review and, as appropriate, update this section at least once every two years.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-120, filed 5/3/07, effective 6/3/07.]

WAC 173-455-130 Air pollution standards variance fee. The department shall charge a fee of sixty-five dollars per hour to process a variance request in accordance with WAC 173-400-180.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-130, filed 5/3/07, effective 6/3/07.]

WAC 173-455-140 Portable and temporary source permit fee. The department shall charge a fee of sixty-five dollars per hour to process and write a portable or temporary source permit issued under WAC 173-400-035.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892. 07-11-018 (Order 06-14), § 173-455-140, filed 5/3/07, effective 6/3/07.]

Chapter 173-460 WAC

CONTROLS FOR NEW SOURCES OF TOXIC AIR POLLUTANTS

WAC

173-460-010	Purpose.
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173-460-130	Fees.
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173-460-150	Class A toxic air pollutants: Known, probable and potential human carcinogens and acceptable source impact levels.
173-460-160	Class B toxic air pollutants and acceptable source impact levels.

WAC 173-460-010 Purpose. (1) Pursuant to chapter 70.94 RCW, Washington Clean Air Act, the purpose of this chapter is to establish the systematic control of new sources emitting toxic air pollutants (TAPs) in order to prevent air pollution, reduce emissions to the extent reasonably possible, and maintain such levels of air quality as will protect human health and safety. Toxic air pollutants include carcinogens and noncarcinogens listed in WAC 173-460-150 and 173-460-160.

(2) This chapter establishes three major requirements:

(a) Best available control technology for toxics;

(b) Toxic air pollutant emission quantification;

(c) Human health and safety protection demonstration.

(3) Policy. It is the policy of ecology to reduce, avoid, or eliminate toxic air pollutants prior to their generation whenever economically and technically practicable.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-010, filed 6/18/91, effective 9/18/91.]

WAC 173-460-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. In the event of a conflict between the definitions provided in chapter 173-400 WAC and the definitions provided in this section, the definitions in this section shall govern. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter shall have the following meanings. Note: For copies of the above mentioned rule and any other rule cited in this chapter, contact the Department of Ecology, Records Section, P.O. Box 47600, Olympia, WA 98504-7600.

(1) "Acceptable source impact analysis" means a procedure for demonstrating compliance with WAC 173-460-070 and 173-460-080, that compares maximum incremental ambient air impacts with applicable acceptable source impact levels (ASIL).

(2) "Acceptable source impact level (ASIL)" means a concentration of a toxic air pollutant in the outdoor atmosphere in any area which does not have restricted or controlled public access that is used to evaluate the air quality impacts of a single source. There are three types of acceptable source impact levels: Risk-based, threshold-based, and special. Concentrations for these three types of ASILs are determined as provided in WAC 173-460-110. ASILs are listed in WAC 173-460-150 and 173-460-160.

(3) "Authority" means an air pollution control authority activated pursuant to chapter 70.94 RCW that has jurisdiction over the subject source. Ecology is the authority if an air pollution control authority has not been activated or if ecology has jurisdiction over the source pursuant to RCW 70.94.395.

(4) "Best available control technology for toxics (T-BACT)" applies to each toxic air pollutant (TAP) discharged or mixture of TAPs, taking in account the potency quantity and toxicity of each toxic air pollutant or mixture of TAPs discharged in addition to the meaning given in WAC 173-400-030(10).

(5) "Carcinogenic potency factor" means the upper 95th percentile confidence limit of the slope of the dose-response curve and is expressed in units of (mg/kg-day)-1.

(6) "Class A toxic air pollutant (Class A TAP)" means a substance or group of substances listed in WAC 173-460-150.

(7) "Class B toxic air pollutant (Class B TAP)" means any substance that is not a simple asphyxiant or nuisance particulate and that is listed in WAC 173-460-160.

(8) "EPA's Dispersion Modeling Guidelines" means the United States Environmental Protection Agency Guideline on Air Quality Models, EPA (Revised) 40 CFR Part 51 Appendix W, and is hereby incorporated by reference.

(9) "EPA's Risk Assessment Guidelines" means the United States Environmental Protection Agency's Guidelines for Carcinogenic Risk Assessment, 51 FR 33992 (September 24, 1986) and is hereby incorporated by reference.

(10) "Increased cancer risk of one in one hundred thousand" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one hundred thousand individuals continuously exposed to a Class A toxic air pollutant at a given average dose for a specified time.

(11) "Increased cancer risk of one in one million" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one million individuals continually exposed to a Class A toxic air pollutant at a given average dose for a specified time.

(12) "Inhalation Reference Concentration (Inhalation RfC)" means a reference concentration published in the United States Environmental Protection Agency Integrated Risk Information System (IRIS).

(13) "Mixture" means a combination of two or more substances mixed in arbitrary proportions.

(14) "Modification" means any physical change in, or change in the method of operation of, a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted. The term modification shall be construed consistent with the definition of modification in Section 7411, Title 42, United States Code, and with rules implementing that section. For purposes of this chapter, the term "air contaminant" shall mean "toxic air contaminant" or "toxic air pollutant" as defined in subsection (20) of this section.

(15) "New toxic air pollutant source" means:

(a) The construction or modification of a stationary source that increases the amount of any toxic air pollutant emitted by such source or that results in the emission of any toxic air pollutant not previously emitted; and

(b) Any other project that constitutes a new source under section 112 of the Federal Clean Air Act.

(16) "Second Tier Analysis" means an optional procedure used after T-BACT and acceptable source impact analysis for demonstrating compliance with WAC 173-460-070. The second tier analysis uses a health impact assessment as provided in WAC 173-460-090, instead of an acceptable source impact level.

(17) "Simple asphyxiant" means a physiologically inert gas or vapor that acts primarily by diluting atmospheric oxygen below the level required to maintain proper levels of oxygen in the blood. Examples of simple asphyxiants are given in Appendix X of the TLV Booklet referred to in subsection (19) of this section and incorporated by reference.

(18) "Threshold limit value-time weighted average (TLV-TWA)" means a concentration limit recommended by the American Conference of Governmental Industrial Hygienists (ACGIH) for a normal eight-hour workday and forty-hour workweek.

(19) "TLV Booklet" means "TLVs, Threshold Limit Values and Biological Exposure Indices for 1991-92," published by the American Conference of Governmental Industrial Hygienists and is hereby incorporated by reference.

(20) "Toxic air pollutant (TAP)" or "toxic air contaminant" means any Class A or Class B toxic air pollutant listed in WAC 173-460-150 and 173-460-160. The term toxic air pollutant may include particulate matter and volatile organic compounds if an individual substance or a group of substances within either of these classes is listed in WAC 173-460-150 and/or 173-460-160. The term toxic air pollutant does not include particulate matter and volatile organic compounds as generic classes of compounds.

(21) "Upper bound unit risk factor" means the 95 percent upper confidence limit of an estimate of the extra risk of cancer associated with a continuous 70 year exposure to 1 ug/m3 of a Class A toxic air pollutant.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-020, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-020, filed 6/18/91, effective 9/18/91.]

WAC 173-460-030 Requirements, applicability and exemptions. (1) Applicability.

(a) The provisions of this chapter shall apply statewide. The authority shall enforce WAC 173-460-010, 173-460-020, 173-460-030, 173-460-040, 173-460-050, 173-460-060,

173-460-070, 173-460-080, 173-460-130, 173-460-140, 173-460-150, and 173-460-160.

(b) Except as provided in this chapter, any new toxic air pollutant source listed in (b)(i), (ii), or (iii) of this subsection that may emit a Class A or Class B TAP into the ambient air is subject to these regulations:

(i) Standard industrial classifications:

(A) Major group 10-Metal mining.

(B) Major group 12-Bituminous coal and lignite mining.

(C) Major group 13-Oil and gas extraction.

(D) Manufacturing industries major groups 20-39.

(E) Major group 49-Electric, gas, and sanitary services except 4971 irrigation systems.

(F) Dry cleaning plants, 7216.

(G) General medical surgical hospitals, 8062.

(H) Specialty hospitals, 8069.

(I) National security, 9711.

(ii) Any source or source category listed in WAC 173-400-100, 173-400-115(2), or 173-490-030(1) except WAC 173-490-030 (1)(e) gasoline dispensing facilities.

(iii) Any of the following sources:

(A) Landfills.

(B) Sites subject to chapter 173-340 WAC Model Toxics Control Act—Cleanup regulation.

(2) Exempt sources.

(a) Containers such as tanks, barrels, drums, cans, and buckets are exempt from the requirements of this chapter unless equipped with a vent other than those required solely as safety pressure release devices.

(b) Nonprocess fugitive emissions of toxic air pollutants from stationary sources, such as construction sites, unpaved roads, coal piles, waste piles, and fuel and ash handling operations are exempt from WAC 173-460-060.

(c) The following sources are generally exempt from the requirements of WAC 173-460-050, 173-460-070, 173-460-080, and 173-460-090. However, the authority may on a case-by-case basis, require compliance with these sections if the authority determines that the amount of emissions, nature of pollutant, or source location indicate that the ambient impact should be evaluated.

(i) Perchloroethylene dry cleaners

(ii) Petroleum solvent dry cleaning systems

(iii) Solvent metal cleaners

(iv) Chromic acid plating and anodizing

(v) Abrasive blasting

(d) Demolition and renovation projects involving asbestos removal and disposal are exempt from the requirements of this chapter.

(e) Process vents subject to 40 C.F.R. Parts 264 and 265, Subpart AA are exempt from the requirements of this chapter.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-030, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.-331. 91-13-079 (Order 90-62), § 173-460-030, filed 6/18/91, effective 9/18/91.]

WAC 173-460-040 New source review. (1) Applicability. This chapter supplements the new source review requirements of WAC 173-400-110 by adding additional new source review requirements for toxic air pollutant sources. If a notice of construction is required under both chapter 173-400 WAC and this chapter, the written applications shall be combined. A notice of construction is a written application to permit construction of a new source.

(a) The owner or operator of a new toxic air pollutant source listed in WAC 173-460-030(1) shall notify the authority prior to the construction, installation, or establishment of a new toxic air pollutant source and shall file a notice of construction application with the authority for the proposed emission unit(s). Notification and notice of construction are not required if the source is an exempt source listed in WAC 173-460-030(2) or subsection (2) of this section.

(b) The notice of construction and new source review applies only to the affected emission unit(s) and the contaminants emitted from the emission unit(s).

(c) New source review of a modification shall be limited to the emission unit or units proposed to be modified and the toxic air contaminants whose emissions would increase as a result of the modification.

(2) The owner or operator of a new toxic air pollutant source listed in WAC 173-460-030(1) is not required to notify or file a notice of construction with the authority if any of the following conditions are met:

(a) Routine maintenance or repair requires equivalent replacement of air pollution control equipment; or

(b) The new source is a minor process change that does not increase capacity and total toxic air pollutant emissions do not exceed the emission rates specified in small quantity emission rate tables in WAC 173-460-080; or

(c) The new source is the result of minor changes in raw material composition and the total toxic air pollutant emissions do not exceed the emission rates specified in the small quantity emission rate tables in WAC 173-460-080.

(3) Additional information. Within thirty days of receipt of a notice of construction, the authority may require the submission of additional plans, specifications, and other information necessary for the review of the proposed new or modified source.

(4) Requirements for new toxic air pollutant sources. The authority shall review notice(s) of construction, plans, specifications, and other associated information to determine that:

(a) The source will be in accord with applicable federal, state, and authority air pollution control rules and regulations;

(b) The source will use T-BACT for emissions control for the toxic air pollutants which are likely to increase; and

(c) Sources required to use T-BACT for emission control demonstrate compliance with WAC 173-460-070 by using the procedures established in WAC 173-460-080 or, failing that, demonstrates compliance, by using the additional procedures in WAC 173-460-090 and/or 173-460-100.

(5) Preliminary determination. Within thirty days after receipt of all information required, the authority shall:

(a) Make preliminary determinations on the matters set forth in this section; and

(b) Initiate compliance with the provisions of WAC 173-400-171 relating to public notice and public comment, as applicable.

(6) Final determination. If, after review of all information received including public comment, the authority finds that all the conditions in this section are satisfied, the authority shall issue a regulatory order to approve the notice of con-

struction for the proposed new source or modification. If the authority finds that the conditions in this section are not satisfied, the authority shall issue an order for the prevention of construction, installation, or establishment of the toxic air pollution source(s). Where ecology has jurisdiction, it will endeavor to make final determinations as promptly as possible.

(7) Appeal of decision. A final notice of construction decision may be appealed to the pollution control hearings board pursuant to chapter 43.21B RCW.

(8) Commencement of construction. The owner(s) or operator(s) of the new source shall not commence construction until the applicable notice of construction has been approved.

(9) Operation and maintenance plan. As a condition of notice of construction approval, prior to start up, the authority may require a plan for the operation and maintenance of all equipment and procedures to assure continuous compliance with this chapter.

(a) A copy of the plan shall be filed with the authority upon request.

(b) The plan shall reflect good industrial practice and may include operating parameters and maintenance procedures, and shall be updated to reflect any changes in good industrial practice.

(c) Submittal of all plans should coincide with the authorities reporting requirements where applicable.

(10) Jurisdiction. Emission of toxic air pollutants that exceed the acceptable source impact levels listed in WAC 173-460-150 and 173-460-160 requires ecology and, if applicable, authority approval as specified in WAC 173-460-090 and 173-460-100.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-040, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.-331. 91-13-079 (Order 90-62), § 173-460-040, filed 6/18/91, effective 9/18/91.]

WAC 173-460-050 Requirement to quantify emissions. (1) New sources.

(a) When applying for a notice of construction, an owner or operator of a new toxic air pollution source shall quantify those emissions of each TAP or combination of TAPs that:

(i) Will be used for the modeling procedures in WAC 173-460-080; and

(ii) That may be discharged after applying required control technology. The information shall be submitted to the authority.

(b) Emissions shall be quantified in sufficient detail to determine whether the source complies with the requirements of this chapter.

(2) Small quantity sources.

Sources that choose to use small quantity emission rate tables instead of using dispersion modeling shall quantify emissions as required under WAC 173-460-080, in sufficient detail to demonstrate to the satisfaction of the authority that the emissions are less than the applicable emission rates listed in WAC 173-460-080.

(3) Level of detail.

An acceptable source impact level analysis under WAC 173-460-080, may be based on a conservative estimate of emissions that represents good engineering judgment. If compliance with WAC 173-460-070 and 173-460-080 cannot be demonstrated, more precise emission estimates shall be used to demonstrate compliance with WAC 173-460-090.

(4) Mixtures of toxic air pollutants.

(a) An owner or operator of a source that may discharge more than one toxic air pollutant may demonstrate compliance with WAC 173-460-070 and 173-460-080 by:

(i) Quantifying emissions and performing modeling for each TAP individually; or

(ii) Calculating the sum of all TAP emissions and performing modeling for the total TAP emissions and comparing maximum ambient levels to the smallest ASIL; or

(iii) Equivalent procedures may be used if approved by ecology.

(b) Dioxin and furan emissions shall be considered together as one TAP and expressed as an equivalent emission of 2,3,7,8 TCDD based on the relative potency of the isomers in accordance with United States Environmental Protection Agency (EPA) guidelines.

Note: Copies of EPA "*Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs). 1989 Update*" are available by requesting EPA /625/3-89/016, March 1989 from ORD Publications (513) 684-7562.

(c) Polyaromatic hydrocarbon (PAH) emissions. The owner or operator of a source that may emit a mixture of polyaromatic hydrocarbon emissions shall quantify the following PAHs and shall consider them together as one TAP equivalent in potency to benzo(a)pyrene: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indenol(1,2,3-cd)pyrene, benzo(a) pyrene. The acceptable source impact analysis shall be conducted using the polyaromatic hydrocarbon emission ASIL contained in WAC 173-460-150(3).

(d) Uncontrolled roof vent emissions from primary aluminum smelters. The owner or operator of a primary aluminum smelter that may emit a mixture of polyaromatic hydrocarbons from uncontrolled roof vents shall quantify PAH emissions using either of the following methods:

(i) Quantify PAH emissions using the procedures in (c) of this subsection; or

(ii) Multiply the total particulate emission mass from the uncontrolled roof vents by the percent of the particulate that is extractable organic matter. The percent extractable organic matter shall be considered one percent of total particulate matter unless ecology determines that there is compelling scientific data which demonstrates that the use of this value is inappropriate. The acceptable source impact analysis shall be conducted using the primary aluminum smelter uncontrolled roof vent PAH emission ASIL contained in WAC 173-460-150(3). Note: For example, 100 grams of particulate air emission mass times one percent yields one gram of PAH emissions.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-050, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.-331. 91-13-079 (Order 90-62), § 173-460-050, filed 6/18/91, effective 9/18/91.]

WAC 173-460-060 Control technology requirements. Except as provided for in WAC 173-460-040, a person shall

not establish, operate, or cause to be established or operated any new toxic air pollutant source which is likely to increase TAP emissions without installing and operating T-BACT. Satisfaction of the performance requirements listed below fulfill the T-BACT requirement for those particular sources. Local air pollution authorities may develop and require performance requirements in lieu of T-BACT provided that ecology approves the performance requirements as equivalent to T-BACT.

(1) Perchloroethylene dry cleaners. The requirements for perchloroethylene dry cleaners found in WAC 173-400-075 are considered T-BACT.

(2) Petroleum solvent dry cleaning systems. A petroleum solvent dry cleaning system shall include the following:

(a) All cleaned articles are dried in a solvent recovery dryer or the entire dryer exhaust is vented through a properly functioning control device which will reduce emissions to no more than 3.5 kg of VOC per 100 kg dry weight of cleaned articles; and

(b) All cartridge filtration systems are drained in their sealed housing or other enclosed container before discarding the cartridges; and

(c) All leaking components shall be repaired immediately.

(3) Chromic acid plating and anodizing. The facility-wide uncontrolled hexavalent chromium emissions from plating or anodizing tanks shall be reduced by at least ninety-five percent using either of the following control techniques:

(a) An antimist additive or other equally effective control method approved by ecology or authority; or

(b) The tank is equipped with:

(i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and

(ii) An emission control system which limits hexavalent chromium emissions to no more than 0.15 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions shall be reduced by ninety-five percent.

(4) Chromic acid plating and anodizing (greater than 1 kilogram). If the facility-wide hexavalent chromium emissions from chromic acid plating and anodizing are greater than 1 kilogram per year after the application of control techniques required by subsection (3) of this section, the facility-wide hexavalent chromium emissions shall be reduced by at least ninety-nine percent using either of the following control techniques:

(a) An antimist additive or other equally effective control method approved by ecology or authority; or

(b) The tank is equipped with:

(i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and

(ii) An emissions control system which limits hexavalent chromium emissions to no more than 0.03 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions shall be reduced by ninety-nine percent.

(5) Solvent metal cleaners.

(a) Any solvent metal cleaner shall include all of the following equipment:

(i) A cover for the solvent tank which shall be closed at all times except when processing work in the degreaser. However, the cover shall be closed to the maximum extent possible when parts are being degreased;

(ii) A facility for draining cleaned parts such that the drained solvent is returned to the solvent tank;

(iii) For cold solvent cleaners, a freeboard ratio greater than or equal to 0.75;

(iv) Vapor degreasers shall have:

(A) A high vapor cutoff thermostat with manual reset; and

(B) For degreasers with spray devices, a vapor-up thermostat which will allow spray operation only after the vapor zone has risen to the design level; and

(C) Either a freeboard ratio greater than or equal to 1.00 or a refrigerated freeboard chiller; and

(v) Conveyorized vapor degreasers shall have:

(A) A drying tunnel or a rotating basket sufficient to prevent cleaned parts from carrying liquid solvent out of the degreaser; and

(B) A high vapor cutoff thermostat with manual reset; and

(C) A vapor-up thermostat which will allow conveyor movement only after the vapor zone has risen to the design vapor level.

(b) The operation of any solvent metal cleaner shall meet the following requirements:

(i) Solvent shall not leak from any portion of the degreasing equipment;

(ii) Solvent, including waste solvent, shall be stored in closed containers and shall be disposed of in such a manner as to prevent its evaporation into the atmosphere;

(iii) For cold cleaners, cleaned parts shall be drained until dripping ceases; and

(iv) Degreasers shall be constructed to allow liquid solvent from cleaned parts to drain into a trough or equivalent device and return to the solvent tank.

(c) For open-top vapor degreasers, solvent drag-out shall be minimized by the following measures:

(i) Racked parts shall be allowed to drain fully;

(ii) The work load shall be degreased in the vapor zone until condensation ceases;

(iii) Spraying operations shall be done within the vapor layer;

(iv) When using a powered hoist, the vertical speed of parts in and out of the vapor zone shall be less than three meters per minute (ten feet per minute);

(v) When the cover is open, the lip of the degreaser shall not be exposed to steady drafts greater than 15.3 meters per minute (fifty feet per minute); and

(vi) When equipped with a lip exhaust, the fan shall be turned off when the cover is closed.

(d) For conveyorized vapor degreasers, solvent drag-out shall be minimized by the following measures:

(i) Racked parts shall be allowed to drain fully; and

(ii) Vertical conveyor speed shall be maintained at less than three meters per minute (ten feet per minute).

(6) Abrasive blasting.

(a) Abrasive blasting shall be performed inside a booth or hangar designed to capture the blast grit or overspray.

(b) Outdoor blasting of structures or items too large to be reasonably handled indoors shall employ control measures

such as curtailment during windy periods and enclosure of the area being blasted with tarps.

(c) Outdoor blasting shall be performed with either steel shot or an abrasive containing less than one percent (by mass) which would pass through a No. 200 sieve.

(d) All abrasive blasting with sand shall be performed inside a blasting booth or cabinet.

[Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-460-060, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.98 RCW. 98-04-062 (Order 97-38), § 173-460-060, filed 2/2/98, effective 3/5/98. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-060, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-060, filed 6/18/91, effective 9/18/91.]

WAC 173-460-070 Ambient impact requirement. When applying for a notice of construction under WAC 173-460-040, the owner or operator of a new toxic air pollutant source which is likely to increase TAP emissions shall demonstrate that emissions from the source are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. Compliance shall be demonstrated in any area which does not have restricted or controlled public access. The source shall demonstrate compliance by using procedures established in this chapter after complying with the control technology requirements in WAC 173-460-060.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-070, filed 6/18/91, effective 9/18/91.]

WAC 173-460-080 Demonstrating ambient impact compliance. (1) When applying for a notice of construction under WAC 173-460-040, the owner or operator of a new toxic air pollutant source which is likely to increase TAP emissions shall complete an acceptable source impact level analysis for Class A and Class B TAPs. The authority may complete this analysis.

(2) Acceptable source impact analysis.

(a) Carcinogenic effects. The owner or operator shall use dispersion modeling to estimate the maximum incremental ambient impact of each Class A TAP from the source and compare the estimated incremental ambient values to the Class A acceptable source impact levels in WAC 173-460-150. If applicable, the source may use the small quantity emission rate tables in (e) of this subsection.

(b) Other toxic effects. The owner or operator shall use dispersion modeling to estimate the maximum incremental ambient impact of each Class B TAP from the source and compare the estimated ambient values to the Class B acceptable source impact levels in WAC 173-460-160. If applicable, the source may use the small quantity emission rate tables in (e) of this subsection.

(c) Dispersion modeling. The owner or operator shall use dispersion modeling techniques in accordance with EPA guidelines. If concentrations predicted by dispersion screening models exceed applicable acceptable source impact levels, more refined modeling and/or emission estimation techniques shall be used. Refined modeling techniques shall be approved by ecology and the authority. (Note: EPA's Guideline on Air Quality Models, EPA 450/2-78-027R, can be obtained through NTIS (703) 487-4650 or can be downloaded from the OAQPS Technology Transfer Network electronic bulletin board system).

(d) Averaging times. The owner or operator shall use the averaging times in (d)(i), (ii), (iii) of this subsection unless alternate averaging times are approved by ecology. Ecology may allow the use of an alternate averaging time if it determines that the operating procedures of the source may cause a high concentration of a TAP for a short period and that consideration of potential health effects due to peak exposures may be warranted for the TAP.

(i) An annual average shall be used for Class A TAPs listed in WAC 173-460-150(2).

(ii) The averaging times specified in WAC 173-460-150(3) shall be used for Class A TAPs listed in WAC 173-460-150(3).

(iii) A twenty-four-hour averaging time shall be used for Class B TAPs listed in WAC 173-460-160.

(e) Small quantity emission rates. Instead of using dispersion modeling to show compliance with ambient impact demonstration requirements in WAC 173-460-080 and 173-460-090, a source may use the small quantity emission rate tables for all toxic air pollutants with acceptable source impact levels equal to or greater than 0.001 ug/m3. A source must first meet control technology and emission quantification requirements of WAC 173-460-050 and 173-460-060, then demonstrate that the source emission rate does not exceed the rates specified in the appropriate table below.

SMALL QUANTITY EMISSION RATES
CLASS A TOXIC AIR POLLUTANTS

Acceptable Source Impact Level (Annual ug/m3)	TAP Emissions Pounds per Year (10 meter stack and downwash)
0.001 to 0.0099	0.5
0.01 to 0.06	10
0.07 to 0.12	20
0.13 to 0.99	50
1.0 to 10	500

SMALL QUANTITY EMISSION RATES
CLASS B TOXIC AIR POLLUTANTS

Acceptable Source Impact Level (24 hour ug/m3)	TAP Emissions Pounds per Year	Pounds per Hour
Less than 1	175	0.02
1 to 9.9	175	0.02
10 to 29.9	1,750	0.20
30 to 59.9	5,250	0.60
60 to 99.9	10,500	1.20
100 to 129.9	17,500	2.0
130 to 250	22,750	2.6
Greater than 250	43,748	5.0

(3) Criteria for compliance. Compliance with WAC 173-460-070 is demonstrated if the authority determines that, on the basis of the acceptable source impact analysis, the source's maximum incremental ambient air impact levels do not exceed the Class A or Class B acceptable source impact levels in WAC 173-460-150 and 173-460-160; or, if applicable, the source TAP emission rates do not exceed the rates specified in subsection (2)(e) of this section.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-080, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-080, filed 6/18/91, effective 9/18/91.]

WAC 173-460-090 Second tier analysis. (1) Applicability.

(a) The owner or operator who cannot demonstrate class A or class B TAP source compliance with WAC 173-460-070 and 173-460-080 using an acceptable source impact level analysis as provided in WAC 173-460-080(2), may submit a petition requesting ecology perform a second tier analysis evaluation to determine a means of compliance with WAC 173-460-070 and 173-460-080 by establishing allowable emissions for the source. Petitions for second tier analysis evaluation shall be submitted to the local authority or ecology if ecology has jurisdiction over the source. Petitions received by local authorities shall be submitted to ecology within ten days of receipt. A second tier analysis evaluation may be requested when a source wishes to more accurately characterize risks, to justify risks greater than acceptable source impact levels, or to otherwise modify assumptions to more accurately represent risks. Risks may be more accurately characterized by utilizing updated EPA unit risk factors, inhalation reference concentrations, or other EPA recognized or approved methods. Ecology shall specify the maximum allowable emissions of any class A or class B TAP source based on ecology's second tier analysis evaluation.

(b) Ecology shall evaluate a source's second tier analysis only if:

(i) The authority has advised ecology that other conditions for processing the notice of construction have been met; and

(ii) Emission controls contained in the conditional notice of construction represent at least T-BACT; and

(iii) Ambient concentrations exceed acceptable source impact levels after using more refined emission quantification and air dispersion modeling techniques.

(c) Ecology shall determine whether the conditions in (b)(i), (ii), and (iii) of this subsection for a second tier analysis have been satisfied within ten working days of receipt of all information needed to make the determination. The matter shall be returned to the authority if ecology finds the conditions for a second tier analysis evaluation have not been met.

(2) Jurisdiction.

(a) Any second tier analysis application submitted by a source wishing to emit toxic air pollutants at levels greater than the acceptable source impact level contained in WAC 173-460-150 or 173-460-160 shall be approved or rejected by ecology.

(b) Any new emission limits approved by ecology as a result of the second tier analysis evaluation shall be enforced by the authority provided the authority approves the new emission limits.

(3) Approval criteria.

(a) Based on the second tier analysis, ecology may approve the emissions of TAPs from a source where ambient concentrations exceed acceptable source impact levels only if it determines that emission controls represent at least T-BACT and the source demonstrates that emissions of Class A TAPs are not likely to result in an increased cancer risk of more than one in one hundred thousand. The emission of Class A TAPs at levels likely to result in an increased cancer risk of more than one in one hundred thousand requires the approval of the director after complying with WAC 173-460-100.

(b) Ecology shall consider the second tier analysis and other information submitted by the applicant as well as department of health comments.

(i) Comments from other agencies and universities with appropriate expertise may also be considered in the decision to approve emissions that exceed acceptable source impact levels.

(ii) Public comments shall be considered if the source applies for a risk management decision under WAC 173-460-100.

(4) Contents of the second tier analysis.

(a) The second tier analysis consists of a health impact assessment. The applicant shall complete and submit a health impact assessment to ecology which includes the following information. Ecology may approve the submittal of less information if it determines that such information is sufficient to perform the second tier analysis evaluation. The health impact assessment shall be prepared in accordance with EPA's risk assessment guidelines as defined in WAC 173-460-020(9).

(i) Demographics such as population size, growth, and sensitive subgroups;

(ii) Toxicological profiles of all toxic air pollutants that exceed the ASIL;

(iii) Characterization of existing pathways and total daily intake for toxic air pollutants that exceed the ASIL;

(iv) Contribution of the proposed source toward total daily intake for toxic air pollutants that exceed the ASIL;

(v) Using existing data, characterization of risk from current exposure to the toxic air pollutants that exceed the ASIL. This includes existing TAP sources in the area, and anticipated risk from the new source;

(vi) Additive cancer risk for all Class A toxic air pollutants which may be emitted by the source;

(vii) Other information requested by ecology and pertinent to ecology's decision to approve the second tier application;

(viii) Uncertainty in the data; and

(ix) Length of exposure and persistence in the environment.

(b) The health assessment shall utilize current scientific information. New scientific information on the toxicological characteristics of toxic air pollutants may be used to justify modifications of upper bound unit risk factors used to calculate ASILs in WAC 173-460-150 and/or absorption rates of individual toxic air pollutants if ecology determines there is compelling scientific data which demonstrates that the use of EPA recognized or approved methods are inappropriate.

(5) Additional information.

(a) If approved by ecology, newly discovered scientific information which was unavailable at the time of the original submission of the health assessment may be used to justify modifications of the original health assessment. Ecology may approve the additional information if the source exercised due diligence at the time of original submission.

(b) Within thirty days after receipt of the second tier analysis and all supporting data and documentation, ecology may require the submission of additional information needed to evaluate the second tier analysis.

(6) Determination.

(a) If the second tier analysis is approved by ecology, ecology will return the petition to the authority and the authority may approve the notice of construction.

(b) The authority shall specify allowable emissions consistent with ecology's second tier analysis evaluation determination expressed in weight of pollutant per unit time for each emissions unit involved in the application. The notice of construction shall also include all requirements necessary to assure that conditions of this chapter and chapter 173-400 WAC are satisfied.

(7) Public notification requirements.

Ecology decisions regarding second tier analysis or decisions under WAC 173-460-100 shall comply with public notification requirements contained in WAC 173-400-171.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-090, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-090, filed 6/18/91, effective 9/18/91.]

WAC 173-460-100 Request for risk management decision. (1) Applicability. The owner or operator of a source that emits Class A TAPs that are likely to result in an increased cancer risk of more than one in one hundred thousand may request that ecology establish allowable emissions for the source.

(2) Contents of the application.

The applicant shall meet the submittal requirements of WAC 173-460-090(1) and submit all materials required under WAC 173-460-090 (4) and (5). The applicant may submit the request for a risk management decision concurrently with the second tier analysis application. Prior denial of the second tier analysis application under WAC 173-460-090(6) is not required.

(3) Criteria for approval. Ecology may approve the emissions of TAPs from a source where ambient concentrations are likely to result in an increased cancer risk of more than one in one hundred thousand only if the source first demonstrates the following:

(a) Proposed emission controls represent all known available and reasonable technology; and

(b) Application of all known available toxic air pollution prevention methods to reduce, avoid, or eliminate toxic air pollutants prior to their generation including recycling, chemical substitution, and efforts to redesign processes; and

(c) The proposed changes will result in a greater benefit to the environment as a whole.

(4) Additional methods to reduce toxic air pollutants. In addition to the requirements in subsection (3) of this section, the owner or operator may propose and ecology may consider measures that would reduce community exposure, especially exposure of that portion of the community subject to the greatest additional risk, to comparable toxic air pollutants provided that such measures are not already required.

(5) Public involvement. Ecology will initiate public notice and comment within thirty days of receipt of a completed risk management decision application. In addition to the public notice and comment requirements of WAC 173-400-171, the owner or operator shall hold a public hearing to:

(a) Present the results of the second tier analysis, the proposed emission controls, pollution prevention methods, additional proposed measures, and remaining risks; and

(b) Participate in discussions and answer questions.

(6) Time limitation. The owner or operator shall commence construction within eighteen months of the director's approval.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-100, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-100, filed 6/18/91, effective 9/18/91.]

WAC 173-460-110 Acceptable source impact levels. There are three types of acceptable source impact levels: Risk-based, threshold-based, and special acceptable source impact levels. They are computed as follows:

(1) Risk-based acceptable source impact levels for Class A TAPs. Risk-based acceptable source impact levels means the annual average concentration, in micrograms per cubic meter, that may cause an increased cancer risk of one in one million. Ecology shall calculate the risk-based acceptable source impact levels for Class A TAPs in WAC 173-460-150(2) using the following equation:

$$\text{Risk based ASIL (ug/m3)} = \frac{\text{RISK}}{\text{URF}}$$

*Where:

RISK = Cancer risk level (1 in 1,000,000)

URF = Upper bound unit risk factor as published in IRIS data base or other appropriate sources (ug/m3)-1.

(2) Threshold-based acceptable source impact levels for Class B TAPs. Threshold-based acceptable source impact levels in WAC 173-460-160 shall be determined as follows:

(a) If a Class B TAP has an Environmental Protection Agency Inhalation Reference Concentration, the inhalation reference concentration and specified averaging time shall be used.

(b) Other Class B TAP acceptable source impact levels shall be determined by dividing the TLV-TWA by three hundred to calculate a twenty-four hour TWA acceptable source impact level.

(3) Special acceptable source impact levels.

(a) Ecology may establish special acceptable source impact levels for TAPs for which upper bound risk factors or TLVs have not been established, or for mixtures of compounds if it determines that the above acceptable source impact level methods are not appropriate, do not adequately protect human health or are overly stringent.

(b) The averaging times for special ASILs are listed in WAC 173-460-150(3).

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-110, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-110, filed 6/18/91, effective 9/18/91.]

WAC 173-460-120 Scientific review and amendment of acceptable source impact levels and lists. (1) Ongoing scientific review.

(a) To use the best available scientific information, ecology shall conduct an ongoing review of information concerning whether to add or delete toxic air pollutants to WAC 173-

460-150 or 173-460-160, what acceptable source impact levels should be used to review emissions of TAPs, source applicability and exemptions.

(b) A complete review shall be made at least once every three years at which time ecology shall consider scientific information developed by the E.P.A., Washington department of health, other states or other scientific organizations, scientific information provided by any person, and results of second tier analyses evaluations.

(2) Criteria for listing as Class A or Class B TAP.

(a) Ecology shall list a substance or group of substances as Class A or Class B TAPs if the department has reason to believe that the compound or group of compounds are likely to be emitted to the air from an air pollution source and the air emission of such compound or compounds could impact public health. The compounds shall be removed from the list if ecology determines that these conditions no longer exist.

(b) Ecology may list mixtures of compounds as Class A and/or Class B TAPs if ecology determines that the health impact of the emission mixture is likely to be different from the known individual chemical impacts.

(3) Acceptable source impact level (ASIL).

Ecology may adopt an ASIL only if ecology determines that concentrations at that level will not unreasonably endanger human health.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-120, filed 6/18/91, effective 9/18/91.]

WAC 173-460-130 Fees. (1) Pursuant to RCW 70.94.-152, ecology or the authority may charge a fee for the review of notices of construction.

(2) The fee imposed under this section may not exceed the cost of reviewing plans, specifications, and other information and administering such notice.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-130, filed 6/18/91, effective 9/18/91.]

WAC 173-460-140 Remedies. Violations of this chapter are subject to the penalty provisions and/or other remedies provided in chapter 70.94 RCW.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-140, filed 6/18/91, effective 9/18/91.]

WAC 173-460-150 Class A toxic air pollutants: Known, probable and potential human carcinogens and acceptable source impact levels.

(1) TABLE I
CLASS A TOXIC AIR POLLUTANTS
Known and Probable Carcinogens

CAS #	SUBSTANCE
75-07-0	Acetaldehyde
53-96-3	2-Acetylaminofluorene
79-06-1	Acrylamide
107-13-1	Acrylonitrile
309-00-2	Aldrin
—	Aluminum smelter polyaromatic hydrocarbon emissions
117-79-3	2-Aminoanthraquinone
97-56-3	o-Aminoazotoluene
92-67-1	4-Aminobiphenyl
61-82-5	Amitrole
62-53-3	Aniline
90-04-0	o-Anisidine
C7440-38-2	Arsenic and inorganic arsenic compounds
1332-21-4	Asbestos
2465-27-2	Auramine (technical grade)
71-43-2	Benzene
92-87-5	Benzidine and its salts
56-55-3	Benzo(a)anthracene
50-32-8	Benzo(a)pyrene
205-99-2	Benzo(b)fluoranthene
205-82-3	Benzo(j)fluoranthene
207-08-9	Benzo(k)fluoranthene
1694-09-3	Benzyl violet 4b
7440-41-7	Beryllium and compounds
111-44-4	Bis(2-chloroethyl)ether
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)
542-88-1	Bis(chloromethyl)ether
75-25-2	Bromoform
106-99-0	1,3-Butadiene
3068-88-0	B-Butyrolactone
7440-43-9	Cadmium and compounds
56-23-5	Carbon tetrachloride
57-74-9	Chlordane
510-15-6	Chlorobenzilate
67-66-3	Chloroform
107-30-2	Chloromethyl methyl ether (technical-grade)
108-43-0	Chlorophenols
126-99-8	Chloroprene
C7440-47-3	Chromium, hexavalent metal and compounds
—	Coke oven emissions
8001-58-9	Creosote
135-20-6	Cupferron
94-75-7	2,4-D and esters
3547-04-4	DDE (p,p'-Dichlorodiphenyldichloroethylene)
50-29-3	DDT (1,1,1 Trichloro-2,2-Bis(p-chlorophenyl)-ethane)
613-35-4	N,N-Diacetylbenzidine
101-80-4	4,4'-Diaminodiphenyl ether
226-36-8	Dibenz(a,h)acridine
53-70-3	Dibenz(a,h)anthracene
224-42-0	Dibenz(a,j)acridine
132-64-9	Dibenzofurans
189-64-0	Dibenzo(a,h)pyrene
191-30-0	Dibenzo(a,l)pyrene
189-55-9	1,2,7,8-Dibenzopyrene (dibenzo(a,i)pyrene)
192-65-4	Dibenzo(a,e)pyrene
764-41-0	1,4-Dichloro-2-butene
28434-86-8	3,3'-Dichloro-4,4'-diaminodiphenyl ether
106-46-7	1,4-Dichlorobenzene
91-94-1	3,3'-Dichlorobenzidine
107-06-2	1,2-Dichloroethane (ethylene chloride)
75-09-2	Dichloromethane (methylene chloride)
696-28-6	Dichlorophenylarsine (arsenic group)
78-87-5	1,2-Dichloropropane
60-57-1	Dieldrin
1615-80-1	1,2-Diethylhydrazine
101-90-6	Diglycidyl resorcinol ether
119-90-4	3,3'-Dimethoxybenzidine (ortol-dianisidine)
119-93-7	3,3-Dimethyl benzidine
77-78-1	Dimethyl sulfate
540-73-8	1,2-Dimethylhydrazine
123-91-1	1,4-Dioxane
—	Dioxins and furans
122-66-7	1,2-Diphenylhydrazine
106-89-8	Epichlorohydrin
106-93-4	Ethylene dibromide (dibromethane)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
50-00-0	Formaldehyde
67-45-8	Furazolidone
	Furium (nitrofuran group)
765-34-4	Glyciadaldehyde
76-44-8	Heptachlor
118-74-1	Hexachlorobenzene
319-84-6	Hexachlorocyclohexane (Lindane) Alpha BHC
319-85-7	Hexachlorocyclohexane (Lindane) Beta BHC
58-89-9	Hexachlorocyclohexane (Lindane) Gamma BHC
680-31-9	Hexamethylphosphoramide
302-01-2	Hydrazine

CAS #	SUBSTANCE
193-39-5	Indeno(1,2,3-cd)pyrene
——	Isopropyl oils
——	Lead compounds
301-04-2	Lead acetate
7446-27-7	Lead phosphate
129-15-7	2-Methyl-1-nitroanthraquinone
592-62-1	Methyl azoxymethyl acetate
3697-24-3	5-Methylchrysene
101-14-4	4,4'-Methylenebis(2-chloroaniline) (MBOCA)
838-88-0	4,4'-Methylenebis(2-methylaniline)
101-77-9	4,4-Methylene dianiline
13552-44-8	4,4-Methylenedianiline dihydrochloride
64091-91-4	4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone
2385-85-5	Mirex
139-91-3	5-(Morpholinomethyl)-3-amino)-2-oxazolidinone (furaltudone)
134-32-7	1-Napthylamine
C7440-02-0	Nickel and compounds (as nickel subsulfide or nickel refinery dust)
531-82-8	N-(4-(5-Nitro-2-furyl)-2-thiazolyl)acetamide
602-87-9	5-Nitroacenaphthene
1836-75-5	Nitrofen
	Nitrofurans
59-87-0	Nitrofurazone
555-84-9	1-(5-Nitrofurfurylidene)amino)-2-imidazolidinone
126-85-2	Nitrogen mustard N-oxide
302-70-5	Nitrogen mustard N-oxide hydrochloride
79-46-9	2-Nitropropane
924-16-3	N-Nitrosodi-n-butylamine
759-73-9	N-Nitroso-N-ethylurea (NEU)
615-53-2	N-Nitroso-N-methylurethane
621-64-1	N-Nitrosodi-n-propylamine
10595-95-6	N-Nitrosomethylethylamine
59-89-2	N-Nitrosomorpholine
86-30-6	N-Nitrosodiphenylamine
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine) (DEN)
62-75-9	N-Nitrosodimethylamine
2646-17-5	Oil orange SS
794-93-4	Panfuran S (dihydroxymethylfuratrizine)
87-86-5	Pentachlorophenol
127-18-4	Perchloroethylene (tetrachloroethylene)
63-92-3	Phenoxybenzamine hydrochloride
	N-Phenyl-2-napthylamine
——	Polyaromatic hydrocarbons (PAH)
1336-36-3	Polychlorinated biphenyls (PCBs)
3761-53-3	Ponceau MX
	P(p)(alpha, alpha, alpha)-Tetra-chlorotoluene
1120-71-4	1,3-Propane sultone
75-56-9	Propylene oxide
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)
139-65-1	4,4'-Thiodianiline
1314-20-1	Thorium dioxide
95-80-7	2,4-Toluene diamine
584-84-9	2,4-Toluene diisocyanate
95-53-4	o-Toluidine
636-21-5	o-Toluidine hydrochloride
8001-35-2	Toxaphene
55738-54-0	Trans-2((Dimethylamino)methylimino)-5-(2-(5-nitro-2-furyl) vinyl-1,3,4-oxadiazole
79-01-6	Trichloroethylene
88-06-2	2,4,6-Trichlorophenol
75-01-4	Vinyl chloride

(2) TABLE II
CLASS A TOXIC AIR POLLUTANTS
WITH ESTABLISHED
ACCEPTABLE SOURCE IMPACT LEVELS

CAS #	SUBSTANCE	10-6 RISK ASIL MICRO-GRAMS/M^3 ANNUAL AVERAGE
75-07-0	Acetaldehyde	0.4500000
79-06-1	Acrylamide	0.0007700
107-13-1	Acrylonitrile	0.0150000
309-00-2	Aldrin	0.0002000
62-53-3	Aniline	6.3000000
C7440-38-2	Arsenic and inorganic arsenic compounds	0.0002300
1332-21-4	Asbestos (Note: fibers/ml)	0.0000044
71-43-2	Benzene	0.1200000
92-87-5	Benzidine and its salts	0.0000150
50-32-8	Benzo(a)pyrene	0.0004800
7440-41-7	Beryllium and compounds	0.0004200
111-44-4	Bis(2-chloroethyl)ether	0.0030000
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	2.5000000
542-88-1	Bis(chloromethyl)ether	0.0000160
75-25-2	Bromoform	0.9100000
106-99-0	1,3-Butadiene	0.0036000
7440-43-9	Cadmium and compounds	0.0005600
56-23-5	Carbon tetrachloride	0.0670000
57-74-9	Chlordane	0.0027000
510-15-6	Chlorobenzilate	0.2000000
67-66-3	Chloroform	0.0430000
108-43-0	Chlorophenols	0.1800000
C7440-47-3	Chromium, hexavalent metal and compounds	0.0000830
——	Coke oven emissions	0.0016000
3547-04-4	DDE (p,p'-dichlorodiphenyldichloroethylene)	0.1000000
50-29-3	DDT (1,1,1 Trichloro-2,2-Bis-(p-chlorophenyl)-ethane)	0.0100000
764-41-0	1,4-Dichloro-2-butene	0.0003800
106-46-7	1,4-Dichlorobenzene	1.5000000
91-94-1	3,3'-Dichlorobenzidine	0.0770000
107-06-2	1,2-Dichloroethane (ethylene chloride)	0.0380000
75-09-2	Dichloromethane (methylene chloride)	0.5600000
60-57-1	Dieldrin	0.0002200
119-93-7	3,3-Dimethyl benzidine	0.0038000
123-91-1	1,4-Dioxane	0.0320000
122-66-7	1,2-Diphenylhydrazine	0.0045000
106-89-8	Epichlorohydrin	0.8300000
106-93-4	Ethylene dibromide (dibromethane)	0.0045000
75-21-8	Ethylene oxide	0.0100000
96-45-7	Ethylene thiourea	1.0000000
50-00-0	Formaldehyde	0.0770000
76-44-8	Heptachlor	0.0007700
118-74-1	Hexachlorobenzene	0.0022000
58-89-9	Hexachlorocyclohexane (Lindane) gamma BHC	0.0026000
302-01-2	Hydrazine	0.0002000
C7440-02-0	Nickel and compounds (as nickel subsulfide or nickel refinery dust)	0.0021000
924-16-3	N-Nitrosodi-n-butylamine	0.0006300
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine)(DEN)	0.0000230
62-75-9	N-Nitrosodimethylamine	0.0000710
79-46-9	2-Nitropropane	0.0003700
87-86-5	Pentachlorophenol	0.3300000
127-18-4	Perchloroethylene (tetrachloroethylene)	1.1000000
1336-36-3	Polychlorinated biphenyls (PCB)	0.0045000
75-56-9	Propylene oxide	0.2700000
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	0.00000003
95-80-7	2,4-Toluene diamine	0.0110000
95-53-4	o-Toluidine	0.1400000
636-21-5	o-Toluidine hydrochloride	0.1400000
8001-35-2	Toxaphene	0.0031000
79-01-6	Trichloroethylene	0.5900000
88-06-2	2,4,6-Trichlorophenol	0.3200000
75-01-4	Vinyl chloride	0.0120000

(3) TABLE III
CLASS A TOXIC AIR POLLUTANTS
WITH SPECIAL ACCEPTABLE SOURCE
IMPACT LEVELS

CAS #	SUBSTANCE	ASIL MICRO-GRAMS/M^3	AVERAGING TIME
——	Primary aluminum smelter uncontrolled roof vent polyaromatic hydrocarbon (PAH) emissions (Note: Quantify according to WAC 173-460-050 (4)(d))	0.0013	Annual
61-82-5	Amitrole	0.06	24 hour
90-04-0	o-Anisidine	1.7	24 hour
126-99-8	β-Chloroprene	120	24 hour
94-75-7	2,4-D and esters	33	24 hour
78-87-5	1,2-Dichloropropane	4.0	24 hour
77-78-1	Dimethyl sulfate	1.7	24 hour
540-73-8	1,2-Dimethylhydrazine	4.0	24 hour
319-84-6	Hexachlorocyclohexane (Lindane) alpha BHC	1.7	24 hour
319-85-7	Hexachlorocyclohexane (Lindane) beta BHC	1.7	24 hour
——	Lead compounds	0.5	24 hour
101-14-4	4,4'-Methylenebis (2-Chloroaniline) (MBOCA)	0.7	24 hour
101-77-9	4,4-Methylene dianiline	2.7	24 hour
——	Polyaromatic hydrocarbon (PAH) emissions (Note: Quantify according to WAC 173-460-050 (4)(d))	0.00048	Annual
584-84-9	2,4-Toluene diisocyanate	0.12	24 hour

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-150, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-150, filed 6/18/91, effective 9/18/91.]

WAC 173-460-160 Class B toxic air pollutants and acceptable source impact levels. The following table lists Class B toxic air pollutants and acceptable source impact levels:

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
86-88-4	ANTU	1.0
60-35-5	Acetamide	——
64-19-7	Acetic acid	83
108-24-7	Acetic anhydride	67
67-64-1	Acetone	5900
75-05-8	Acetonitrile	220
98-86-2	Acetophenone	——
79-27-6	Acetylene tetrabromide	47
107-02-8	Acrolein	0.02
79-10-7	Acrylic acid	0.30
107-18-6	Allyl alcohol	17
107-05-1	Allyl chloride	1.0
106-92-3	Allyl glycidyl ether (AGE)	77
2179-59-1	Allyl propyl disulfide	40.0
C7429-90-5	Aluminum, Al alkyls	6.7
7429-90-5	Aluminum, as AL metal dust	33
C7429-90-5	Aluminum, as AL pyro powders	17
C7429-90-5	Aluminum, as Al soluble salts	6.7
C7429-90-5	Aluminum, as Al welding fumes	17
504-29-0	2-Aminopyridine	6.3

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
7664-41-7	Ammonia	100
12125-02-9	Ammonium chloride fume	33
3825-26-1	Ammonium perfluorooctanoate	0.33
7773-06-0	Ammonium sulfamate	33
628-63-7	n-Amyl acetate	1800
626-38-0	sec-Amyl acetate	2200
62-53-3	Aniline & homologues	1.0
29191-52-4	Anisidine (o-,p- isomers)	1.7
C7440-36-0	Antimony & compounds as Sb	1.7
1309-64-4	Antimony trioxide, as Sb	l.7
7784-42-1	Arsine	0.53
8052-42-4	Asphalt (petroleum) fumes	17
1912-24-9	Atrazine	17
86-50-0	Azinphos-methyl	0.67
C7440-39-3	Barium, soluble compounds Ba	1.7
17804-35-2	Benomyl	33
98-07-7	Benzotrichloride	——
94-36-0	Benzoyl Peroxide	17
100-44-7	Benzyl chloride	17
92-52-4	Biphenyl	4.3
1304-82-1	Bismuth telluride	33
1304-82-1	Bismuth telluride Se doped	17
C1303-96-4	Borates, anhydrous	3.3
C1303-96-4	Borates, decahydrate	17
C1303-96-4	Borates, pentahydrate	3.3
1303-86-2	Boron oxide	33
10294-33-4	Boron tribromide	33
76737-07-2	Boron trifluoride	9.3
314-40-9	Bromacil	33
7726-95-6	Bromine	2.2
7789-30-2	Bromine pentafluoride	2.4
106-97-8	Butane	6300.0
111-76-2	2-Butoxyethanol	400
123-86-4	n-Butyl acetate	2400
105-46-4	sec-Butyl acetate	3200
540-88-5	tert-Butyl acetate	3200
141-32-2	Butyl acrylate	170
71-36-3	n-Butyl alcohol	500
78-92-2	sec-Butyl alcohol	1000
75-65-0	tert-Butyl alcohol	1000
1189-85-1	tert-Butyl chromate, as CrO3	0.33
2426-08-6	n-Butyl glycidyl ether (BGE)	440
138-22-7	n-Butyl lactate	83
109-79-5	n-Butyl mercaptan	6.0
109-73-9	n-Butylamine	50.0
89-72-5	o-sec-Butylphenol	100
98-51-1	p-tert-Butyltoluene	200
156-62-7	Calcium cyanamide	1.7
1305-62-0	Calcium hydroxide	17
1305-78-8	Calcium oxide	6.7
76-22-2	Camphor, synthetic	40
105-60-2	Caprolactam, dust	3.3
105-60-2	Caprolactam, vapor	67
2425-06-1	Captafol	0.33
133-06-2	Captan	17
63-25-2	Carbaryl	17
1563-66-2	Carbofuran	0.33
1333-86-4	Carbon black	12
75-15-0	Carbon disulfide	100
558-13-4	Carbon tetrabromide	4.7
353-50-4	Carbonyl fluoride	18
463-58-1	Carbonyl sulfide	——
120-80-9	Catechol	77
21351-79-1	Cesium hydroxide	6.7
133-90-4	Chloramben	——
55720-99-5	Chlorinated diphenyl oxide (hexachlorophenyl ether)	1.7
7782-50-5	Chlorine	5.0

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
10049-04-4	Chlorine dioxide	0.2
7790-91-2	Chlorine trifluoride	1.3
600-25-9	1-Chloro-1-nitropropane	33
107-20-0	Chloroacetaldehyde	11
79-11-8	Chloroacetic acid	——
532-27-4	a-Chloroacetophenone	1.1
79-04-9	Chloroacetyl chloride	0.67
2698-41-1	o-Chlorobenylidene malonitrile	1.3
108-90-7	Chlorobenzene	150
74-97-5	Chlorobromomethane	3500
75-45-6	Chlorodifluoromethane	12000
76-15-3	Chloropentafluoroethane	21000
76-06-2	Chloropicrin	2.2
2039-87-4	o-Chlorostyrene	940
95-49-8	o-Chlorotoluene	860
2921-88-2	Chlorpyrifos	0.67
C7440-47-3	Chromium (II) compounds, as Cr	1.7
C7440-47-3	Chromium (III) compounds, Cr	1.7
7440-47-3	Chromium (metal)	1.7
14977-61-8	Chromyl chloride	0.53
2971-90-6	Clopidol	33
7440-48-4	Cobalt as Co metal Dust and fume	0.17
10210-68-1	Cobalt carbonyl as Co	0.33
16842-03-8	Cobalt hydrocarbonyl	0.33
C7440-50-8	Copper, Dusts and mists, as Cu	3.3
7440-50-8	Copper, Fume	0.67
—	Cotton dust, raw	0.67
1319-77-3	Cresol, all isomers	73
4170-30-3	Crotonaldehyde	20
299-86-5	Crufomate	17
98-82-2	Cumene	820
420-04-2	Cyanamide	6.7
51-12-5	Cyanides, as CN	17
460-19-5	Cyanogen	67
506-77-4	Cyanogen chloride	2.5
110-82-7	Cyclohexane	3400
108-93-0	Cyclohexanol	690
108-94-1	Cyclohexanone	330
110-83-8	Cyclohexene	3400
108-91-8	Cyclohexylamine	140
121-82-4	Cyclonite	5.0
542-92-7	Cyclopentadiene	680
287-92-3	Cyclopentane	5700
13121-70-5	Cyhexatin	17
17702-41-9	Decaborane	0.83
8065-48-3	Demeton	0.37
123-42-2	Diacetone alcohol	790
333-41-5	Diazinon	0.33
334-88-3	Diazomethane	1.1
19287-45-7	Diborane	0.37
96-12-8	1,2-Dibromo-3-chloropropane	0.20
107-66-4	Dibutyl phosphate	29
84-74-2	Dibutyl phthalate	17
102-81-8	2-N-Dibutylaminoethanol	47
594-72-9	1,1-Dichloro-1-nitroethane	40
118-52-5	1,3-Dichloro-5,5-Dimethyl hydantoin	0.67
7572-29-4	Dichloroacetylene	1.3
95-50-1	o-Dichlorobenzene (1,2-Dichlorobenzene)	1000
75-71-8	Dichlorodifluoromethane	16000
75-34-3	1,1-Dichloroethane	2700
540-59-0	1,2-Dichloroethylene	2600
75-43-4	Dichlorofluoromethane	130
542-75-6	Dichloropropene	20
75-99-0	2,2-Dichloropropionic acid	19
76-14-2	Dichlorotetrafluoroethane	23000
62-73-7	Dichlorvas	3.3
141-66-2	Dicrotophos	0.83
77-73-6	Dicyclopentadiene	100

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
102-54-5	Dicyclopentadienyl iron	33
111-42-2	Diethanolamine	43
96-22-0	Diethyl ketone	2300
84-66-2	Diethyl phthalate	17
64-67-5	Diethyl sulfate	——
109-89-7	Diethylamine	100
100-37-8	Diethylaminoethanol	170
111-40-0	Diethylene triamine	14
75-61-6	Difluorodibromomethane	2900
2238-07-5	Diglycidyl ether	1.7
108-83-8	Diisobutyl ketone	480
108-18-9	Diisopropylamine	67
127-19-5	Dimethyl acetamide	120
60-11-7	Dimethyl aminoazobenzene	——
79-44-7	Dimethyl carbamoyl chloride	——
124-40-3	Dimethylamine	60
121-69-7	Dimethylaniline	83
68-12-2	Dimethylformamide	30
57-14-7	1,1-Dimethylhydrazine	4.0
131-11-3	Dimethylphthalate	17
148-01-6	Dinitolmide	17
534-52-1	Dinitro-o-cresol	0.67
528-29-0	Dinitrobenzene, all isomers	3.3
51-28-5	2,4-Dinitrophenol	——
121-14-2	2,4-Dinitrotoluene	5.0
78-34-2	Dioxathion	0.67
122-39-4	Diphenylamine	33
123-19-3	Dipropyl ketone	780
34590-94-8	Dipropylene glycol methyl ether	2000
85-00-7	Diquat	1.7
97-77-8	Disulfiram	6.7
298-04-4	Disulfuton	0.33
128-37-0	2,6-Ditert. butyl-p-cresol	33
330-54-1	Diuron	33
1321-74-0	Divinyl benzene	180
2104-64-5	EPN	1.7
115-29-7	Endosulfan	0.33
72-20-8	Endrin	0.33
13838-16-9	Enflurane	1900
106-88-7	1,2-Epoxybutane	20
141-43-5	Ethanolamine	25
563-12-2	Ethion	1.3
110-80-5	2-Ethoxyethanol	200
111-15-9	2-Ethoxyethyl acetate	90
141-78-6	Ethyl acetate	4800
140-88-5	Ethyl acrylate	66
64-17-5	Ethyl alcohol	6300
541-85-5	Ethyl amyl ketone	440
100-41-4	Ethyl benzene	1000
74-96-4	Ethyl bromide	3000
106-35-4	Ethyl butyl ketone	780
51-79-5	Ethyl carbamate	——
75-00-3	Ethyl chloride	10000
60-29-7	Ethyl ether	4000
109-94-4	Ethyl formate	1000
75-08-1	Ethyl mercaptan	4.3
78-10-4	Ethyl silicate	280
75-04-7	Ethylamine	60
107-07-3	Ethylene chlorohydrin	11
107-15-3	Ethylene diamine	83
107-21-1	Ethylene glycol	420
628-96-6	Ethylene glycol dinitrate	1.0
151-56-4	Ethylenimine	2.9
16219-75-3	Ethylidene norbornene	83
100-74-3	N-Ethylmorpholine	77
22224-92-6	Fenamiphos	0.33
115-90-2	Fensulfothion	0.33
55-38-9	Fenthion	0.67

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
14484-64-1	Ferbam	33
12604-58-9	Ferrovanadium dust	3.3
—	Fibrous glass dust	33
—	Fine mineral fibers	33
16984-48-8	Fluorides, as F	8.3
7782-41-4	Fluorine	5.3
944-22-9	Fonofos	0.33
75-12-7	Formamide	60
64-18-6	Formic acid	31
98-01-1	Furfural	26
98-00-1	Furfuryl alcohol	130
7782-65-2	Germanium tetrahydride	2.1
111-30-8	Glutaraldehyde	2.5
556-52-5	Glycidol	250
—	Glycol ethers	——
7440-58-6	Hafnium	1.7
151-67-7	Halothane	1300
142-82-5	Heptane (n-Heptane)	5500
87-68-3	Hexachlorobutadiene	0.70
77-47-4	Hexachlorocyclopentadiene	0.33
67-72-1	Hexachloroethane	32
1335-87-1	Hexachloronaphthalene	0.67
684-16-2	Hexafluoroacetone	2.3
822-06-0	Hexamethylene diisocyanate	0.11
100-54-3	Hexane (n-Hexane)	200
—	Hexane, other isomers	5900
591-78-6	2-Hexanone (MBK)	67
108-84-9	sec-Hexyl acetate	980
107-41-5	Hexylene glycol	400
10035-10-6	Hydrogen bromide	33
7647-01-0	Hydrogen chloride	7.0
74-90-8	Hydrogen cyanide	37
7664-39-3	Hydrogen fluoride, as F	8.7
7722-84-1	Hydrogen peroxide	4.7
7783-07-5	Hydrogen selenide, as Se	0.53
7783-06-4	Hydrogen sulfide	0.9
123-31-9	Hydroquinone	6.7
999-61-1	2-Hydroxypropyl acrylate	9.3
95-13-6	Indene	160
C7440-74-6	Indium, & compounds as In	0.33
7553-56-2	Iodine	3.3
75-47-8	Iodoform	33
1309-37-1	Iron oxide fume, Fe_2O_3 as Fe	17
13463-40-6	Iron pentacarbonyl, as Fe	0.83
—	Iron salts, soluble as Fe	3.3
123-92-2	Isoamyl acetate	1700
123-51-3	Isoamyl alcohol	1200
110-19-0	Isobutyl acetate	2400
78-83-1	Isobutyl alcohol	510
26952-21-6	Isocytl alcohol	890
78-59-1	Isophorone	93
4098-71-9	Isophorone diisocyanate	0.15
109-59-1	Isopropoxyethanol	350
108-21-4	Isopropyl acetate	3500
67-63-0	Isopropyl alcohol	3300
108-20-3	Isopropyl ether	3500
4016-14-2	Isopropyl glycidyl ether (IGE)	790
75-31-0	Isopropylamine	40
768-52-5	N-Isopropylaniline	37
463-51-4	Ketene	2.9
3687-31-8	Lead arsenate, as $Pb_3 (A_2O_4)_2$	0.50
7758-97-6	Lead chromate, as Cr	0.040
68476-85-7	Liquified petroleum gas	6000
7580-67-8	Lithium hydride	0.080
1309-48-4	Magnesium oxide fume	33
121-75-5	Malathion	33
108-31-6	Maleic anhydride	3.3
C7439-96-5	Manganese dust & compounds	0.40

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
C7439-96-5	Manganese fume	3.3
12079-65-1	Manganese cyclopentadienyl tricarbonyl	0.33
C7439-97-6	Mercury, Aryl & inorganic cmpd	0.33
C7439-97-6	Mercury, as Hg Alkyl compounds	0.33
C7439-97-6	Mercury, vapors except alkyl	0.17
141-79-7	Mesityl oxide	200
79-41-4	Methacrylic acid	230
16752-77-5	Methomyl	8.3
72-43-5	Methoxychlor	33
109-86-4	2-Methoxyethanol	20
110-49-6	2-Methoxyethyl acetate	80
150-76-5	4-Methoxyphenol	17
137-05-3	Methyl 2-cyanoacrylate	30
79-20-9	Methyl acetate	2000
74-99-7	Methyl acetylene	5500
59355-75-8	Methyl acetylene-propadiene mixture (MAPP)	5500
96-33-3	Methyl acrylate	120
67-56-1	Methyl alcohol	870
100-61-8	N-Methyl aniline	7.3
74-83-9	Methyl bromide	5.0
74-87-3	Methyl chloride	340
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)	6400
8022-00-2	Methyl demeton	1.7
78-93-3	Methyl ethyl ketone (MEK)	1000
1338-23-4	Methyl ethyl ketone peroxide	5.0
107-31-3	Methyl formate	820
60-34-4	Methyl hydrazine	1.2
74-88-4	Methyl iodide	40
110-12-3	Methyl isoamyl ketone	780
108-11-2	Methyl isobutyl carbinol	350
108-10-1	Methyl isobutyl ketone (MIBK)	680
624-83-9	Methyl isocyanate	0.16
563-80-4	Methyl isopropyl ketone	2300
74-93-1	Methyl mercaptan	3.3
80-62-6	Methyl methacrylate	1400
110-43-0	Methyl n-amyl ketone	780
591-78-6	Methyl n-butyl ketone	67
298-00-0	Methyl parathion	0.67
107-87-9	Methyl propyl ketone	2300
681-84-5	Methyl silicate	20
1634-04-4	Methyl tert-butyl ether	500
98-83-9	a-Methyl styrene	810
126-98-7	Methylacrylonitrile	9.0
109-87-5	Methylal	10000
74-89-5	Methylamine	43
108-87-2	Methylcyclohexane	5400
25639-42-3	Methylcyclohexanol	780
583-60-8	o-Methylcyclohexanone	760
12108-13-3	Methylcyclopentadienyl manganese tricarbonyl	0.67
5124-30-1	Methylene bis (4-cyclo-hexylisocyanate)	0.18
101-68-8	Methylene bis(phenyl isocyanate)	0.2
21087-64-9	Metribuzin	17
7786-34-7	Mevinphos	0.33
C7439-98-7	Molybdenum, as Mo soluble cpds	17
C7439-98-7	Molybdenum, insoluble cpds	33
6923-22-4	Monocrotophos	0.83
110-91-8	Morpholine	240
300-76-5	Naled	10
91-20-3	Napthalene	170
54-11-5	Nicotine	1.7
1929-82-4	Nitrapyrin	33
7697-37-2	Nitric acid	17
10102-43-9	Nitric oxide	100
100-01-6	p-Nitroaniline	10
98-95-3	Nitrobenzene	1.7
100-00-5	p-Nitrochlorobenzene	2.0

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
79-24-3	Nitroethane	1000
7783-54-2	Nitrogen trifluoride	97
92-93-3	4-Nitrobiphenyl	——
55-63-0	Nitroglycerin	1.5
75-52-5	Nitromethane	830
100-02-7	4-Nitrophenol	——
108-03-2	1-Nitropropane	20
684-93-5	N-Nitroso-N-methylurea	——
88-72-2	Nitrotoluene	37
111-84-2	Nonane	3500
2234-13-1	Octachloronaphthalene	0.33
111-65-9	Octane	4700
8012-95-1	Oil mist, mineral	17
20816-12-0	Osmium tetroxide, as Os	0.0053
144-62-7	Oxalic acid	3.3
7783-41-7	Oxygen difluoride	0.37
8002-74-2	Parafin wax fume	6.7
4685-14-7	Paraquat	4.5
56-38-2	Parathion	0.33
19624-22-7	Pentaborane	0.043
1321-64-8	Pentachloronaphthalene	1.7
82-68-8	Pentachloronitrobenzene (quintobenzene)	1.7
109-66-0	Pentane	6000
594-42-3	Perchloromethyl mercaptan	2.5
7616-94-6	Perchloryl fluoride	43
108-95-2	Phenol	63
92-84-2	Phenothiazine	1.7
101-84-8	Phenyl ether	23
122-60-1	Phenyl glycidyl ether	2000
108-98-5	Phenyl mercaptan	7.7
106-50-3	p-Phenylenediamine	0.33
100-63-0	Phenylhydrazine	1.5
638-21-1	Phenylphosphine	0.77
298-02-2	Phorate	0.17
75-44-5	Phosgene	1.3
7803-51-2	Phosphine	1.3
7664-38-2	Phosphoric acid	3.3
7723-14-0	Phosphorus	0.33
10025-87-3	Phosphorus oxychloride	2.1
10026-13-8	Phosphorus pentachloride	2.8
1314-80-3	Phosphorus pentasulfide	3.3
7719-12-2	Phosphorus trichloride	3.7
85-44-9	Phthalic anhydride	20
626-17-5	m-Phthalodinitrile	17
1918-02-1	Picloram	33
88-89-1	Picric acid	0.33
83-26-1	Pindone	0.033
142-64-3	Piperazine dihydrochloride	17
7440-06-4	Platinum, Metal	3.3
C7440-06-4	Platinum, Soluble salts as Pt	0.0067
1310-58-3	Potassium hydroxide	6.7
107-19-7	Propargyl alcohol	7.7
57-57-8	B-Propiolactone	5.0
123-38-6	Propionaldehyde	——
114-26-1	Propoxur	1.7
79-09-4	Propionic acid	100
109-60-4	n-Propyl acetate	2800
71-23-8	n-Propyl alcohol	1600
627-13-4	n-Propyl nitrate	360
6423-43-4	Propylene glycol dinitrate	1.1
107-98-2	Propylene glycol monomethyl ether	2000
75-55-8	Propylene imine	16
8003-34-7	Pyrethrum	1.7
110-86-1	Pyridine	53
91-22-5	Quinoline	——
106-51-4	Quinone	1.5
108-46-3	Resorcinol	150
7440-16-6	Rhodium Metal	3.3

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
C7440-16-6	Rhodium, Insoluble compounds	3.3
C7440-16-6	Rhodium, Soluble compounds	0.033
299-84-3	Ronnel	33
83-79-4	Rotenone	17
—	Rubber solvent (Naphtha)	5300
C7782-49-2	Selenium compounds, as Se	0.67
7783-79-1	Selenium hexafluoride, as Se	0.53
136-78-7	Sesone	33
7803-62-5	Silicon tetrahydride	22
7440-22-4	Silver, Metal	0.33
C7440-22-4	Silver, soluble compounds as Ag	0.033
26628-22-8	Sodium azide	1.0
7631-90-5	Sodium bisulfite	17
62-74-8	Sodium fluoroacetate	0.17
1310-73-2	Sodium hydroxide	6.7
7681-57-4	Sodium metabisulfite	17
7803-52-3	Stibine	1.7
57-24-9	Strychnine	0.5
100-42-5	Styrene	1000
96-9-3	Styrene oxide	——
1395-21-7	Subtilisins	0.0002
3689-24-5	Sulfotep	0.67
2551-62-4	Sulfur hexafluoride	20000
10025-67-9	Sulfur monochloride	18
5714-22-7	Sulfur pentafluoride	0.33
7783-60-0	Sulfur tetrafluoride	1.5
7664-93-9	Sulfuric acid	3.3
2699-79-8	Sulfuryl fluoride	67
35400-43-2	Sulprofos	3.3
93-76-5	2,4,5-T	33
107-49-3	TEPP	0.16
C7440-25-7	Tantalum, metal & oxide dusts	17
C13494-80-9	Tellurium & compounds as Te	0.33
7783-80-4	Tellurium hexafluoride, as Te	0.33
3383-96-8	Temephos	33
26140-60-3	Terphenyls	16
76-12-0	1,1,2,2-Tetrachloro-1,2-difluoroethane	14000
76-11-9	1,1,1,2-Tetrachloro-2,2-difluoroethane	14000
79-34-5	1,1,2,2-Tetrachloroethane	23
1335-88-2	Tetrachloronaphthalene	6.7
78-00-2	Tetraethyl lead, as Pb	0.33
109-99-9	Tetrahydrofuran	2000
75-74-1	Tetramethyl lead, as Pb	0.5
3333-52-6	Tetramethyl succinonitrile	9.3
509-14-8	Tetranitromethane	27
7722-88-5	Tetrasodium pyrophosphate	17
479-45-8	Tetryl	5.0
C7440-28-0	Thallium, soluble compounds, Tl	0.33
96-69-5	4,4-Thiobis(6-tert, butyl-m-cresol)	33
68-11-1	Thioglycolic acid	13
7719-09-7	Thionyl chloride	16
137-26-8	Thiram	3.3
7440-31-5	Tin, Metal	6.7
C7440-31-5	Tin, Organic compounds, as Sn	0.33
7440-31-5	Tin, oxide & inorganic except SnH_4	6.7
7550-45-0	Titanium tetrachloride	——
108-88-3	Toluene	400
108-44-1	m-Toluidine	29
106-49-0	p-Toluidine	29
126-73-8	Tributyl phosphate	7.3
76-13-1	1,1,2-Trichloro-1,2,2-trifluorethane	27000
76-03-9	Trichloroacetic acid	22
120-82-1	1,2,4-Trichlorobenzene	120
79-00-5	1,1,2-Trichloroethane	180
75-69-4	Trichlorofluoromethane	19000
1321-65-9	Trichloronaphthalene	17
95-95-4	2,4,5-Trichlorophenol	——
96-18-4	1,2,3-Trichloropropane	200

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
121-44-8	Triethylamine	7.0
75-63-8	Trifluorobromomethane	20000
1582-09-8	Trifluralin	——
552-30-7	Trimellitic anhydride	0.13
2551-13-7	Trimethyl benzene	420
540-84-1	2,2,4-Trimethylpentane	——
121-45-9	Trimethyl phosphite	33
75-50-3	Trimethylamine	80
118-96-7	2,4,6-Trinitrotoluene	1.7
78-30-8	Triorthocresyl phosphate	0.33
603-34-9	Triphenyl amine	17
115-86-6	Triphenyl phosphate	10
C7440-33-7	Tungsten, Insoluble compounds	17
C7440-33-7	Tungsten, Soluble compounds	3.3
8006-64-2	Turpentine	1900
C7440-61-1	Uranium, insoluble & soluble	0.67
8032-32-4	VM & P Naphtha	4600
110-62-3	n-Valeraldehyde	590
1314-62-1	Vanadium, as V_2O_5	0.17
108-05-4	Vinyl acetate	200
593-60-2	Vinyl bromide	73
106-87-6	Vinyl cyclohexene dioxide	200
75-35-4	Vinylidene chloride	67
25013-15-4	Vinyl toluene	800
81-81-2	Warfarin	0.33
—	Welding fumes	17
1477-55-0	m-Xylene a,a'-diamine	0.33
1330-20-7	Xylenes (m-,o-,p-isomers)	1500
1300-73-8	Xylidine	8.3
C7440-65-5	Yttrium, metal and cpds as Y	3.3
7646-85-7	Zinc chloride fume	3.3
13530-65-9	Zinc chromates	0.033
1314-13-2	Zinc oxide, fume	17
C7440-67-7	Zirconium compounds, as Zr	17

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-160, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.-331. 91-13-079 (Order 90-62), § 173-460-160, filed 6/18/91, effective 9/18/91.]

Chapter 173-470 WAC

AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER

(Formerly chapter 18-40 WAC)

WAC

173-470-010 Purpose.
173-470-020 Applicability.
173-470-030 Definitions.
173-470-100 Ambient air quality standards.
173-470-110 Particle fallout standards.
173-470-150 Method of measurement.
173-470-160 Reporting of data.

WAC 173-470-010 Purpose. This chapter promulgated under RCW 70.94.305 and 70.94.331 establishes maximum acceptable levels for particulate matter in the ambient air. Particulate matter is characterized in criteria developed by the United States Environmental Protection Agency.

[Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-010, filed 9/16/87.]

WAC 173-470-020 Applicability. The provisions of this chapter apply to all areas of the state of Washington.

[Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-020, filed 9/16/87.]

WAC 173-470-030 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings; general terms common with other chapters of Title 173 WAC as defined in chapter 173-403 WAC.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-470-030, filed 1/3/89. Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-030, filed 9/16/87.]

WAC 173-470-100 Ambient air quality standards. (1) The level of the 24-hour ambient air quality standard for total suspended particulate is 150 micrograms per cubic meter ($\mu g/m^3$), 24-hour average concentration. The standard is attained when the number of days per calendar year is less than or equal to one for measured 24-hour concentrations above 150 $\mu g/m^3$.

(2) The level of the annual standard for total suspended particulate is sixty micrograms per cubic meter ($\mu g/m^3$), annual geometric mean. The standard is attained when the annual geometric mean concentration is less than or equal to 60 $\mu g/m^3$.

(3) The level of the 24-hour ambient air quality standard for PM-10 is 150 micrograms per cubic meter ($\mu g/m^3$), 24-hour average concentration. The standard is attained when:

(a) The expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$, as determined in accordance with 40 CFR 50 Appendix K as in effect on July 1, 1988, is equal to or less than one; and

(b) The number of days per calendar year the measured 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one.

(4) The level of the annual standard for PM-10 is 50 micrograms per cubic meter ($\mu g/m^3$), annual arithmetic mean. The standard is attained when the expected annual arithmetic mean concentration, as determined in accordance with 40 CFR 50 Appendix K as in effect on July 1, 1988, is less than or equal to 50 $\mu g/m^3$.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 89-02-055 (Order 88-39), § 173-470-100, filed 1/3/89. Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-100, filed 9/16/87.]

WAC 173-470-110 Particle fallout standards. Particle fallout shall not exceed the standards enumerated below at the conditions stated.

(1) The particle fallout rate measured at a primary air mass station, ground level monitoring station or special station shall not exceed:

(a) Ten grams per square meter (10 g/m^2) per month in an industrial area; or

(b) Five grams per square meter (5 g/m^2) per month in an industrial area if visual observations show a presence of wood waste and the volatile fraction of the sample exceeds seventy percent.

(c) Five grams per square meter (5 g/m^2) per month in residential and commercial areas.

(d) Three and one-half grams per square meter (3.5 g/m^2) per month in residential and commercial areas if visual obser-

vations show the presence of wood waste and the volatile fraction of the sample exceeds seventy percent.

(2) In recognition of natural dust in areas of the state, the following exceptions apply to areas east of the Cascade range crest. When concentrations measured at approved background locations exceed three and one-half grams per square meter (3.5 g/m^2) per month, the particle fallout rate measured at a primary air mass station, ground level monitoring station or special station, shall not exceed:

(a) Six and one-half grams per square meter (6.5 g/m^2) per month plus background in an industrial area; or

(b) One and one-half grams per square meter (1.5 g/m^2) per month plus background in residential and commercial areas.

The provisions of WAC 173-470-110 (1)(b) and (d) pertaining to wood waste shall continue to apply regardless of background.

[Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-110, filed 9/16/87.]

WAC 173-470-150 Method of measurement. Sampling and analysis for particulate matter shall be conducted according to methods approved by and on file with the department. Methods equivalent in sensitivity, accuracy, reproducibility, and selectivity to the approved standard method may be used after approval by the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-150, filed 9/16/87.]

WAC 173-470-160 Reporting of data. (1) Air authorities sampling for particulate matter shall notify the department of all infractions of these standards. Notification shall be made quarterly. A quarterly summary of all samples greater than the standards shall be submitted within sixty days of the end of each calendar quarter. Quarterly data shall include:

(a) Location of sampler.

(b) Time period (day and year).

(c) Individual concentrations recorded at each air monitoring station.

(d) The applicable geometric or arithmetic mean for each monitoring station (first quarter report only for previous calendar year).

(2) If particulate matter values greater than the standards are measured by the department, the air authority shall be notified quarterly. This notification shall include:

(a) Location.

(b) Time or time period.

(c) Concentrations recorded.

(d) The applicable geometric or arithmetic mean (first quarter report only for previous calendar year).

[Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-160, filed 9/16/87.]

Chapter 173-474 WAC

AMBIENT AIR QUALITY STANDARDS FOR SULFUR OXIDES

(Formerly chapter 18-56 WAC)

WAC

173-474-010 Purpose.
173-474-015 Objective.
173-474-020 Applicability.
173-474-030 Definitions.
173-474-100 Air quality standards.
173-474-150 Measurement method.
173-474-160 Data reporting.

WAC 173-474-010 Purpose. This chapter promulgated under RCW 70.94.305 and 70.94.331 establishes maximum acceptable levels for sulfur dioxide as a measure of the sulfur oxide concentration in the ambient air.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-010, filed 9/30/87.]

WAC 173-474-015 Objective. In recognition of the need to continue improvement of the quality of the air resource, the department intends to work toward the achievement of the following objective: The sulfur oxide concentration measured as sulfur dioxide at a primary air mass station, primary ground level monitoring station, or special station shall not be greater than three-tenths per million (0.3 ppm) average for five minutes.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-015, filed 9/30/87.]

WAC 173-474-020 Applicability. The provisions of this chapter apply to all areas of the state of Washington.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-020, filed 9/30/87.]

WAC 173-474-030 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings; general terms common with other chapters of Title 173 WAC as defined in chapter 173-403 WAC, and terms specific to standards for sulfur oxide as follows:

"Period" means any interval of the specified time.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-030, filed 9/30/87.]

WAC 173-474-100 Air quality standards. Sulfur oxide in the ambient air, measured as sulfur dioxide shall not exceed the following values:

(1) Four-tenths parts per million (0.4 PPM) by volume average for a one-hour period more than once per one-year period.

(2) Twenty-five one-hundredths parts per million (0.25 PPM) by volume average for a one-hour period more than twice in a consecutive seven-day period.

(3) One-tenth parts per million (0.1 PPM) by volume average for a one-day period more than once per one-year period.

(4) Two one-hundredths parts per million (0.02 PPM) by volume average for a one-year period.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-100, filed 9/30/87.]

WAC 173-474-150 Measurement method. For determining compliance with this regulation, sulfur oxides shall be measured by methods approved by, and on file with, the department. Other methods equivalent in sensitivity, accuracy, reproducibility, and selectivity to the approved methods may be used after approval by the department.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-150, filed 9/30/87.]

WAC 173-474-160 Data reporting. (1) Air authorities sampling for sulfur oxides shall notify the department of all violations of these standards. The notification shall be submitted quarterly. Summaries shall provide the following information:

(a) Location of sampler.

(b) Time period (hours, days, and year).

(c) Actual concentrations recorded that exceeded the standard.

(2) The department will give quarterly notice to an air authority of infractions of the standards within its jurisdiction. This notice will include:

(a) Location.

(b) Time period and dates.

(c) Concentrations recorded.

[Statutory Authority: Chapter 70.94 RCW. 87-20-020 (Order 87-22), § 173-474-160, filed 9/30/87.]

Chapter 173-475 WAC

AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE, OZONE, AND NITROGEN DIOXIDE

WAC

173-475-010	Purpose.
173-475-020	Definitions.
173-475-030	Air quality standards.
173-475-040	Measurement methods.
173-475-050	Reporting of data.

WAC 173-475-010 Purpose. These rules implement chapter 70.94 RCW, the Washington State Clean Air Act, and chapter 163, Laws of 1979 ex. sess. The purpose of this chapter is to set statewide air quality standards for carbon monoxide, ozone, and nitrogen dioxide.

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-010, filed 2/29/80.]

WAC 173-475-020 Definitions. (1) "Air quality standard" means an established concentration, exposure time, or frequency of occurrence of a contaminant or multiple contaminants in the ambient air which shall not be exceeded.

(2) "Ambient air" means the surrounding outside air.

(3) "Department" means the state department of ecology.

(4) "National air monitoring stations (NAMS)" means fixed monitoring stations operated by the state and local air pollution control agencies to meet national monitoring objectives. The stations are a subset of the SLAMS network and are sited with emphasis on urban and multisource areas.

(5) "State and local air monitoring stations (SLAMS)" means stations designed to meet any of four basic monitoring objectives:

(a) To determine highest concentrations expected to occur;

(b) To determine representative concentrations in areas of high population density;

(c) To determine the impact on ambient air pollution levels of significant sources or source categories; and

(d) To determine general background concentration levels.

(6) "Special purpose monitoring stations (SPMS)" means monitoring stations operated by state and local air pollution control agencies to supplement the SLAMS network in order to increase the overall effectiveness of the state's monitoring efforts.

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-020, filed 2/29/80. Formerly chapters 18-32 and 18-46 WAC (part).]

WAC 173-475-030 Air quality standards. (1) Carbon monoxide in the ambient air as measured at a SPMS designated by the department for the purpose of determining compliance with air quality standards, or at any NAMS or SLAMS, shall not exceed the following values:

(a) Nine parts per million (ten milligrams per cubic meter) eight-hour average concentration not to be exceeded more than once per year at any location where people would be exposed to such concentrations for eight consecutive hours or more. Compliance shall be based on data that begins and ends on a clock hour. There shall be no overlapping of hours in any violation period. A maximum of three violations can occur in any one day.

(b) Thirty-five parts per million (forty milligrams per cubic meter) one-hour average concentration not to be exceeded more than once per year at any location where people would be exposed to such concentrations for one hour or more. Compliance shall be determined from data that begins on a clock hour.

(2) Ozone in the ambient air as measured at a SPMS designated by the department for the purpose of determining compliance with this air quality standard, or at any NAMS or SLAMS, shall not exceed 0.12 parts per million (two hundred and thirty-five milligrams per cubic meter) hourly concentration on more than 1.0 days per calendar year as determined under the following conditions:

(a) Three calendar years of data shall be used in determining compliance with this standard. If three years of data are not available, a minimum of one calendar year must be used;

(b) All hourly measurements must start on the clock hour; and

(c) All daily maximum hourly averages not available for a year shall be accounted for by use of the following equation:

$$e = v + v/n\ (N-n-z)$$

e	=	the estimated number of potential times the allowed concentrations are exceeded for the year.
N	=	the number of required monitoring days in the year.
n	=	the number of days that valid data was available.

v	=	the number of days that readings have exceeded compliance level.
z	=	the number of days that readings are assumed to be less than the level of the standard. If a day should be included is based on whether the daily maximum one-hour reading on both the preceding day and the following day do not exceed 0.09 ppm ozone.

(3) Nitrogen dioxide. The annual arithmetic mean of nitrogen dioxide readings in the ambient air measured at a SPMS designated by the department for the purpose of determining compliance with this air quality standard, or at any NAMS or SLAMS, shall not exceed 0.05 parts per million (one hundred micrograms per cubic meter).

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-030, filed 2/29/80. Formerly WAC 18-32-020 and 18-46-030.]

WAC 173-475-040 Measurement methods. Measurements for determining compliance with WAC 173-475-030 shall be made by equipment and procedures approved by and on file with the department. All methods and procedures shall be available to the public upon request.

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-040, filed 2/29/80. Formerly WAC 18-32-040 and 18-46-040.]

WAC 173-475-050 Reporting of data. Local and regional air pollution control agencies shall notify the department of all occurrences which exceed the applicable standards for carbon monoxide, ozone, or nitrogen dioxide. Notification shall be made quarterly and shall include:

(a) Location of monitoring sites by address and UTM coordinates;

(b) Date and time of each violation;

(c) Concentrations recorded; and

(d) Method of sampling used.

[Statutory Authority: RCW 43.21A.080, 70.94.331, 70.120.030, and 70.120.120. 80-03-071 (Order DE 79-36), § 173-475-050, filed 2/29/80. Formerly WAC 18-32-050 and 18-46-050.]

Chapter 173-480 WAC

AMBIENT AIR QUALITY STANDARDS AND EMISSION LIMITS FOR RADIONUCLIDES

WAC

173-480-010	Purpose.
173-480-020	Applicability.
173-480-030	Definitions.
173-480-040	Ambient standard.
173-480-050	General standards for maximum permissible emissions.
173-480-060	Emission standards for new and modified emission units.
173-480-070	Emission monitoring and compliance procedures.
173-480-080	Regulatory actions and penalties.

WAC 173-480-010 Purpose. The purpose of this chapter is to define maximum allowable levels for radionuclides in the ambient air and control emissions from specific sources.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-010, filed 5/7/86.]

WAC 173-480-020 Applicability. (1) The ambient air standards shall apply to the entire state. Measurements may be made at all points up to property lines of point, area and fugitive emission sources.

(2) The emission limits of this chapter shall apply to all radionuclide emission units.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-020, filed 5/7/86.]

WAC 173-480-030 Definitions. Unless a different meaning is clearly required by context words and phrases used in this chapter shall have the following meanings: General terms common with other chapters as defined in chapter 173-400 WAC, and terms specific to the standards and limits of radionuclides as defined in this section.

(1) "ALARA" means as low as reasonably achievable making every reasonable effort to maintain exposures to radiation as far below the dose standards in this chapter as is practical, consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to the state of technology, the economics of improvements in relation to benefits to the public health and safety, and other socioeconomic considerations, and in relation to the utilization of nuclear energy, ionizing radiation, and radioactive materials in the public interest.

(2) "As low as reasonably achievable control technology" (ALARACT) means the use of radionuclide emission control technology that achieves emission levels that are consistent with the philosophy of ALARA.

(3) Best available radionuclide control technology "BARCT" means technology which will result in a radionuclide emission limitation based on the maximum degree of reduction for radionuclides which would be emitted from any proposed new or modified emission units which the permitting authority on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such emission unit or modification through application of production processes or available methods, systems, and techniques. In no event shall application of best available radionuclide technology result in emissions of radionuclides which would exceed the ambient annual standard limitation specified in this chapter.

(4) "Effective dose equivalent" means the sum of the products of absorbed dose and appropriate factors to account for differences in biological effectiveness due to the quality of radiation and its distribution in the body of reference man.

(5) "Radionuclide" means any nuclide that emits radiation.

(6) "Rem" means a unit of dose equivalent radiation.

[Statutory Authority: RCW 70.94.331 and 70.94.422. 07-12-003 (Order 06-15), § 173-480-030, filed 5/23/07, effective 6/23/07. Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-030, filed 5/7/86.]

WAC 173-480-040 Ambient standard. Emissions of radionuclides in the air shall not cause a maximum effective dose equivalent of more than 10 mrem/y to the whole body to any member of the public. Compliance with the standard shall be determined by procedures in WAC 173-480-070.

[Statutory Authority: RCW 70.94.331 and 70.94.422. 07-12-003 (Order 06-15), § 173-480-040, filed 5/23/07, effective 6/23/07. Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-040, filed 5/7/86.]

WAC 173-480-050 General standards for maximum permissible emissions. (1) All radionuclide emission units are required to meet the emission standards in this chapter. At a minimum all emission units shall meet chapter 246-247 or 246-248 WAC (as applicable) requiring every reasonable effort to maintain radioactive materials in effluents to unrestricted areas, as low as reasonably achievable (ALARA). For the purposes of this chapter, control equipment of facilities operating under ALARA shall be defined as reasonably achievable control technology (RACT).

(2) Whenever another federal or state regulation or limitation in effect controls the emission of radionuclides to the ambient air, the more stringent control of emissions shall govern.

[Statutory Authority: RCW 70.94.331 and 70.94.422. 07-12-003 (Order 06-15), § 173-480-050, filed 5/23/07, effective 6/23/07. Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-050, filed 5/7/86.]

WAC 173-480-060 Emission standards for new and modified emission units. (1) Whenever the construction, installation or establishment of a new emission unit subject to this chapter is contemplated, the project shall utilize best available radionuclide control technology (BARCT).

(2) Addition to, enlargement, modification, replacement, alteration of any process or emission unit or replacement of air pollution control equipment which will significantly change potential radionuclide emissions or significantly change the dose equivalent will require the proposed project to utilize best available radionuclide control technology (BARCT) for emission control.

[Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-060, filed 5/7/86.]

WAC 173-480-070 Emission monitoring and compliance procedures. (1) The procedures specified in chapter 246-247 or 246-248 WAC (as applicable) shall be used to determine compliance with the standard. Radionuclide emissions shall be determined and dose equivalents to members of the public shall be calculated using department of health approved sampling procedures, department of health approved models, or other procedures, including those based on environmental measurements that department of health has determined to be suitable.

(2) Compliance with this standard shall be determined by calculating the dose to members of the public at the point of maximum annual air concentration in an unrestricted area where any member of the public may be.

[Statutory Authority: RCW 70.94.331 and 70.94.422. 07-12-003 (Order 06-15), § 173-480-070, filed 5/23/07, effective 6/23/07. Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-070, filed 5/7/86.]

WAC 173-480-080 Regulatory actions and penalties. (1) The department or any activated local air pollution control authority may enforce this chapter with the provisions of WAC 173-400-230, Regulatory actions; and 173-400-240, Criminal penalties.

(2) The responsible person may also be subject to the provisions of RCW 34.05.350, Emergency rules and amendments; RCW 70.98.130, Administrative procedure; RCW 70.98.140, Injunction proceedings; and RCW 70.98.200, Penalties as cited by the department of health.

[Statutory Authority: RCW 70.94.331 and 70.94.422. 07-12-003 (Order 06-15), § 173-480-080, filed 5/23/07, effective 6/23/07. Statutory Authority: RCW 70.94.331. 86-10-053 (Order 86-04), § 173-480-080, filed 5/7/86.]

Chapter 173-481 WAC

AMBIENT AIR QUALITY AND ENVIRONMENTAL STANDARDS FOR FLUORIDES

(Formerly chapter 18-48 WAC)

WAC

173-481-010	Purpose.
173-481-020	Applicability.
173-481-030	Definitions.
173-481-100	Forage standards.
173-481-110	Ambient action levels.
173-481-150	Corrective action.
173-481-160	Sampling and analysis.

WAC 173-481-010 Purpose. This chapter promulgated under RCW 70.94.305 and 70.94.331 establishes fluoride standards for the protection of livestock and vegetation. Standards address the fluoride content of forage and gaseous fluorides in the ambient air.

[Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-010, filed 9/16/87.]

WAC 173-481-020 Applicability. The forage provisions of this chapter apply to all areas where livestock are grazed, and where forage is grown for livestock feed. The ambient action levels apply to areas where fluoride sensitive vegetation is grown for commercial purposes and in public land use areas, such as parks, where fluoride damage to vegetation would adversely impact the use and enjoyment of the area. The ambient action levels are independent of the forage standards and are not designed to relate to potential concentrations in forage.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 05-17-169 (Order 05-07), § 173-481-020, filed 8/23/05, effective 9/23/05. Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-020, filed 9/16/87.]

WAC 173-481-030 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter, shall have the following meanings:

(1) "Fluorides" means compounds of the element of fluorine.

(2) "Forage" means grasses, pasture and other vegetation that is consumed or is intended to be consumed by livestock.

(3) "Growing season" means April 1 to September 30 unless a different period is specified by the department by an order.

(4) "Injury" means any fluoride induced measurable change in a plant that is metabolic, visual, or physiological such as alterations in the assimilation rate of plant constituents, leaf necrosis, leaf or fruit abscission, or reduced or altered growth.

(5) "Damage" means any fluoride induced injury to a plant that causes economic loss, or would adversely impact the use and enjoyment of public land use areas.

(6) "Public land use area" means land belonging to the community as a whole and administered through its represen-

tatives in government, and within which fluoride sensitive vegetation is important to the purpose of the land use such as parks, national forests, etc.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 05-17-169 (Order 05-07), § 173-481-030, filed 8/23/05, effective 9/23/05. Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-030, filed 9/16/87.]

WAC 173-481-100 Forage standards. (1) All sampling to determine compliance with these standards shall be conducted in locations and during time periods consistent with protecting livestock.

(2) The fluoride content of forage calculated by dry weight shall not exceed:

(a) Forty parts per million fluoride ion (40 ppm F^-) average for the growing season.

(b) Sixty parts per million fluoride ion (60 ppm F^-) each month for more than two consecutive months during the growing season.

(c) Eighty parts per million fluoride ion (80 ppm F^-) more than once in any two consecutive months during the growing season.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 05-17-169 (Order 05-07), § 173-481-100, filed 8/23/05, effective 9/23/05. Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-100, filed 9/16/87.]

WAC 173-481-110 Ambient action levels. (1) All sampling to determine compliance with these action levels shall be conducted in locations and during time periods consistent with protecting vegetation of the type and in areas covered by this chapter.

(2) Gaseous fluorides in the ambient air calculated as HF at standard conditions shall not exceed:

(a) Two and nine-tenths micrograms per cubic meter (2.9 $\mu g/m^3$) average for any nonoverlapping twenty-four consecutive hours;

(b) One and seven-tenths micrograms per cubic meter (1.7 $\mu g/m^3$) average for any seven consecutive days;

(c) Eighty-four one-hundredths micrograms per cubic meter (0.84 $\mu g/m^3$) average for any thirty consecutive days;

(d) Five-tenths micrograms per cubic meter (0.5 $\mu g/m^3$) average for the growing season.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 05-17-169 (Order 05-07), § 173-481-110, filed 8/23/05, effective 9/23/05. Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-110, filed 9/16/87.]

WAC 173-481-150 Corrective action. (1) When requested by the department, persons emitting fluorides to the ambient air shall demonstrate their compliance with WAC 173-481-100 and 173-481-110 by conducting a monitoring program approved in writing by the department. Monitoring shall be required only in areas with forage or vegetation to be protected by this chapter. Monitored exceedances of the ambient action level shall not require corrective action or be considered violations of this chapter unless there is demonstrated related fluoride induced damage to vegetation protected by this chapter. If an ambient action level is exceeded, the persons emitting fluorides shall provide a plan for ecology approval for determining if damage has occurred. If damage is found the facility shall determine the cause of the damage and take corrective action approved by ecology to prevent further damage. When evaluating corrective action, work practices shall be considered before considering additional controls.

(2) Concurrent violations of the action levels found in WAC 173-481-100 and 173-481-110 shall not contain overlapping time periods for any one standard or action level.

[Statutory Authority: RCW 70.94.395 and 70.94.331. 05-17-169 (Order 05-07), § 173-481-150, filed 8/23/05, effective 9/23/05. Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-150, filed 9/16/87.]

WAC 173-481-160 Sampling and analysis. Sampling and analysis shall be in accordance with techniques approved by and on file with the department. Other sampling and methods of analysis which are equivalent in accuracy, sensitivity, reproducibility and applicability under similar conditions may be used after approval by the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-160, filed 9/16/87.]

Chapter 173-490 WAC

EMISSION STANDARDS AND CONTROLS FOR SOURCES EMITTING VOLATILE ORGANIC COMPOUNDS (VOC)

WAC

173-490-010 Policy and purpose.
173-490-020 Definitions.
173-490-025 General applicability.
173-490-030 Registration and reporting.
173-490-040 Requirements.
173-490-080 Exceptions and alternative methods.
173-490-090 New source review.
173-490-200 Petroleum refinery equipment leaks.
173-490-201 Petroleum liquid storage in external floating roof tanks.
173-490-202 Leaks from gasoline transport tanks and vapor collection systems.
173-490-204 Graphic arts systems.
173-490-205 Surface coating of miscellaneous metal parts and products.
173-490-207 Surface coating of flatwood paneling.
173-490-208 Aerospace assembly and component coating operations.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-490-070 Schedule of control dates. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-070, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-070, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.

173-490-071 Alternative schedule of control dates. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-071, filed 8/20/80.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.

173-490-120 Compliance schedules. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-120, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.

173-490-130 Regulatory actions. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-130, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.

173-490-135 Criminal penalties. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-

	23), § 173-490-135, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-140	Appeals. [Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-140, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-150	Variance. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-150, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-150, filed 5/8/79.] Repealed by 91-05-064 (Order 90-06), filed 2/19/91, effective 3/22/91. Statutory Authority: Chapter 70.94 RCW.
173-490-203	Perchloroethylene dry cleaning systems. [Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-203, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-203, filed 7/27/82. Statutory Authority: RCW 70.94.331, 70.94.510, and 70.94.785. 81-03-003 (Order DE 80-54), § 173-490-203, filed 1/8/81. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-203, filed 8/20/80.] Repealed by 98-04-061 (Order 97-37), filed 2/2/98, effective 3/5/98. Statutory Authority: Chapter 70.98 RCW.
173-490-206	Synthesized pharmaceutical products. [Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-206, filed 8/20/80.] Repealed by 82-16-021 (Order DE 82-22), filed 7/27/82. Statutory Authority: Chapters 70.94 and 43.21A RCW.

WAC 173-490-010 Policy and purpose. (1) It is the policy of the department of ecology (ecology) under the authority vested in it by chapter 43.21A RCW to provide for the systematic control of air pollution from air contaminant sources and for the proper development of the state's natural resources.

(2) It is the purpose of this chapter to establish technically feasible and reasonably attainable standards for sources emitting volatile organic compounds (VOCs) and revise such standards as new information and better technology are developed and become available.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-010, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-010, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-010, filed 5/8/79.]

WAC 173-490-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are by this reference incorporated into this chapter. Unless a different meaning is clearly required by context, the following words and phrases, as used in this chapter, shall have the following meanings:

(1) "Bottom loading" means the filling of a tank through a line entering the bottom of the tank.

(2) "Bulk gasoline plant" means a gasoline storage and transfer facility that receives more than ninety percent of its annual gasoline throughput by transport tank, and reloads gasoline into transport tanks.

(3) "Class II hardboard paneling finish" means finishes which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

(4) "Closed refinery system" means a system that will process or dispose of those VOCs collected from another system. The mass quantity of collected VOCs emitted to the ambient air from the closed refinery system shall not exceed that required for a disposal system.

(5) "Condensate" means hydrocarbon liquid separated from a gas stream which condenses due to changes in the temperature or pressure and remains liquid at standard conditions.

(6) "Condenser" means a device for cooling a gas stream to a temperature where specific VOCs become liquid and are removed.

(7) "Control system" means one or more control devices, including condensers, that are designed and operated to reduce the quantity of VOCs emitted to the atmosphere.

(8) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and sulfur, nitrogen or oxygen derivatives of hydrocarbons which is a liquid at standard conditions.

(9) "Cutback asphalt" means an asphalt that has been blended with petroleum distillates to reduce the viscosity for ease of handling and lower application temperature. An inverted emulsified asphalt shall be considered a cutback asphalt when the continuous phase of the emulsion is a cutback asphalt.

(10) "Disposal system" means a process or device that reduces the mass quantity of the VOC that would have been emitted to the ambient air by at least ninety percent prior to their actual emission.

(11) "Dry cleaning facility" means a facility engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one or more washes in solvent, extraction of excess solvent by spinning, and drying by tumbling in an airstream. The facility includes, but is not limited to, any washer, dryer, filter and purification system(s), waste disposal system(s), holding tank(s), pump(s) and attendant piping and valve(s).

(12) "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

(13) "Flexographic printing" means the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

(14) "Gasoline" means a petroleum distillate which is a liquid at standard conditions and has a true vapor pressure greater than 200 mm of Hg (4 psia) at 20°C, and is used as a fuel for internal combustion engines.

(15) "Gasoline dispensing facility" means any site dispensing gasoline into motor vehicle fuel tanks from stationary storage tanks.

(16) "Gasoline loading terminal" means a gasoline transfer facility that receives more than ten percent of its annual gasoline throughput solely or in combination by pipeline, ship or barge, and loads gasoline into transport tanks.

(17) "Hardboard" means a panel manufactured primarily from interfelted lignocellulosic fibers which are consolidated under heat and pressure in a hot press.

(18) "Hardwood plywood" means plywood whose surface layer is a veneer of hardwood.

(19) "Lease custody transfer" means the transfer of produced crude oil or condensate, after processing or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(20) "Liquid-mounted seal" means a primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof.

(21) "Liquid service" means equipment that processes, transfers or contains a VOC or VOCs in the liquid phase.

(22) "Low organic solvent coating" refers to coatings which contain less organic solvent than the conventional coatings used by the industry. Low organic solvent coatings include water-borne, higher solids, electrodeposition and powder coatings.

(23) "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

(24) "Packaging rotogravure printing" means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into packaging products and labels for articles to be sold.

(25) "Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

(26) "Petroleum refinery" means a facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products by distilling crude oils or redistilling, cracking, extracting or reforming unfinished petroleum derivatives. Not included are facilities re-refining used motor oils or waste chemicals, processing finished petroleum products, separating blended products, or air blowing asphalt.

(27) "Prime coat" means the first of two or more films of coating applied in an operation.

(28) "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

(29) "Proper attachment fittings" means hardware for the attachment of gasoline transfer or vapor collection lines that meet or exceed industrial standards or specifications and the standards of other agencies or institutions responsible for safety and health.

(30) "Publication rotogravure printing" means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

(31) "Refinery unit" means a set of components that are a part of a basic process operation, such as distillation, hydrotreating, cracking or reforming of hydrocarbons.

(32) "Roll printing" means the application of words, designs, and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.

(33) "Rotogravure printing" means the application of words, designs, and pictures to a substrate by means of a roll printing technique which involves intaglio or recessed image areas in the form of cells.

(34) "Single coat" means only one film of coating is applied to the metal substrate.

(35) "Submerged fill line" means a pipe, tube, fitting or other hardware for loading liquids into a tank with either a discharge opening flush with the tank bottom; or with a discharge opening below the lowest normal operating drawoff level or that level determined by a liquid depth two and one half times the fill line diameter when measured in the main portion of the tank, but not in sumps or similar protrusions.

(36) "Submerged loading" means the filling of a tank with a submerged fill line descending nearly to the bottom.

(37) "Suitable closure or cover" means a door, hatch, cover, lid, pipe cap, pipe blind, valve or similar device that prevents the accidental spilling or emitting of VOC. Pressure relief valves, aspirator vents or other devices specifically required for safety and fire protection are not included.

(38) "Thin particleboard" means a manufactured board one-quarter inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.

(39) "Tileboard" means paneling that has a colored waterproof surface coating.

(40) "Topcoat" means the final film or series of films of coating applied in a two-coat (or more) operation.

(41) "Transport tank" means a container used for shipping gasoline on land.

(42) "True vapor pressure" means the equilibrium partial pressure of a petroleum liquid as determined with methods described in American Petroleum Institute Bulletin 2517, 1980.

(43) "Unit turnaround" means the procedure of shutting down, repairing, inspecting, and restarting a unit.

(44) "Valves not externally regulated" means valves that have no external controls, such as in-line check valves.

(45) "Vapor collection system" means a closed system to conduct vapors displaced from a tank being filled into the tank being emptied, a vapor holding tank, or a vapor control system.

(46) "Vapor control system" means a system designed and operated to reduce or limit the emission of VOCs, or to recover the VOCs to prevent their emission into the ambient air.

(47) "Vapor-mounted seal" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

(48) "Volatile organic compound (VOC)" means any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator designates as having negligible photochemical reactivity. VOC may be measured by a reference method, an equivalent method, an alternative method or by procedures specified under 40 CFR Part 60. A reference method, an equivalent method, or an alternative method, however, may also measure nonreactive organic compounds. In such cases, an owner or operator may exclude the nonreactive organic compounds when determining compliance with a standard.

(49) "Waxy, heavy pour crude oil" means a crude oil with a pour point of 50°F or higher as determined by the

American Society for Testing and Materials Standard D97-66, "Test for Pour Point of Petroleum Oils."

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-020, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-020, filed 7/27/82. Statutory Authority: RCW 70.94.331, 70.94.510, and 70.94.785. 81-03-003 (Order DE 80-54), § 173-490-020, filed 1/8/81. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-020, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-020, filed 5/8/79.]

WAC 173-490-025 General applicability. In addition to the general applicability of chapter 173-400 WAC to all emission sources, specific emission standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.

(1) This chapter shall apply to the specified emission sources of VOCs located in or operating within designated ozone nonattainment areas of the state of Washington.

(2) This chapter does not apply to those sources under the jurisdiction of the energy facility site evaluation council (EFSEC).

(3) A source of VOC emissions not belonging to any of the categories listed in WAC 173-490-030 nor specifically identified in any section, but which is located on the same or adjacent property and owned or operated by the same person as a regulated emission source, shall not be required to comply with the regulations of this chapter.

(4) Sources of VOC emissions may be exempted, by the director, from any or all requirements to control or reduce the emissions of VOCs when:

(a) The source is a development operation and the equipment is used exclusively for research, laboratory analysis or determination of product quality and commercial acceptance, provided emissions of VOCs from such operations do not exceed 300 kg (660 lbs) per month; or

(b) The source has emissions of VOCs which do not exceed 18 kg (40 lbs) per month and registration is not required under WAC 173-490-030; or

(c) The source is a spray booth which is used solely for maintenance and utility activities and whose emissions do not exceed 18 kg (40 lbs) per month.

(5) Sources of VOCs may be granted exemptions from emissions standards for a period not to exceed thirty days if the source is a newly permitted source which is to replace a similar permitted source and the new source is intended to utilize the existing emission control system. This provision is intended to apply to a break-in period prior to the shutdown and removal of the existing source.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-025, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-025, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-025, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-025, filed 5/8/79.]

WAC 173-490-030 Registration and reporting. (1) The owner or operator of a stationary emission source of VOCs in the following source categories and located in a designated ozone nonattainment area shall register the source with ecology unless registration is required by an authority or the energy facility site evaluation council (EFSEC).

(a) Petroleum refineries.

(b) Petroleum liquid storage tanks.

(c) Gasoline loading terminals.

(d) Bulk gasoline plants.

(e) Gasoline dispensing facilities.

(f) Surface coaters.

(g) Open top vapor degreasers.

(h) Conveyorized degreasers.

(i) Gasoline transport tanks.

(j) Vapor collection systems.

(k) Perchloroethylene dry cleaning systems.

(l) Graphic arts systems.

(m) Surface coaters of miscellaneous metal parts and products.

(n) Synthesized pharmaceutical manufacturing facilities.

(o) Flatwood panel manufacturers and surface finishing facilities.

(2) A new emission source of VOCs that must comply with any requirements in WAC 173-490-040, 173-490-200, 173-490-201, 173-490-202, 173-490-203, 173-490-204, 173-490-205, 173-490-206 and 173-490-207, shall comply with the requirements of WAC 173-400-100 and shall register with ecology or an authority prior to operation of the new source, and shall submit sufficient information to demonstrate that the new source is capable of complying with the requirements in this chapter. An opportunity shall be provided for an inspection of the new source by ecology or local authority inspectors prior to its operation.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-030, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-030, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-030, filed 5/8/79.]

WAC 173-490-040 Requirements. To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(1) Petroleum refineries.

This chapter shall apply to all petroleum refineries with a crude oil or feed stock capacity greater than one million four hundred thirty thousand liters (9,000 bbl) per day.

(a) Vacuum producing system.

(i) Noncondensable VOC from vacuum producing systems shall be piped to an appropriate firebox, incinerator or to a closed refinery system.

(ii) Hot wells associated with contact condensers shall be tightly covered and the collected VOC introduced into a closed refinery system.

(b) Wastewater separator.

(i) Wastewater separator forebays shall incorporate a floating pontoon or fixed solid cover with all openings sealed, totally enclosing the compartmented liquid contents, or a floating pontoon or a double deck-type cover equipped with closure seals between the cover edge and compartment wall.

(ii) Accesses for gauging and sampling shall be designed to minimize VOC emissions during actual use. All access points shall be closed with suitable covers when not in use.

(c) Process unit turnaround.

(i) The VOC contained in a process unit to be depressurized for turnaround shall be introduced to a closed refinery system, combusted by a flare, or vented to a disposal system.

(ii) The pressure in a process unit following depressurization for turnaround shall be less than five psig before venting to the ambient air.

(iii) Venting or depressurization to the ambient air of a process unit for turnaround at a pressure greater than five psig shall be allowed if the owner demonstrates the actual emission of VOC to the ambient air is less than permitted by WAC 173-490-040 (1)(c)(ii).

(d) Maintenance and operation of emission control equipment. Equipment for the reduction, collection or disposal of VOC shall be maintained and operated in a manner consistent with the level of maintenance and housekeeping of the overall plant.

(2) Petroleum liquid storage tanks.

(a) All fixed-roof tanks (except as noted in subparagraph (d) of this subsection) storing volatile organic petroleum liquids with a true vapor pressure as stored greater than 78 mm of Hg (1.5 psi) at actual monthly average storage temperatures and having a capacity greater than one hundred fifty thousand liters (40,000 gallons) shall comply with one of the following:

(i) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources - Storage Vessels for Petroleum Liquids (40 CFR 60, subpart K); or

(ii) Be retrofitted with a floating roof or internal floating cover using a metallic seal or a nonmetallic resilient seal at least meeting the equipment specifications of the federal standards referred to in WAC 173-490-040 (2)(a)(i) or its equivalent; or

(iii) Be fitted with a floating roof or internal floating cover meeting the manufacturer's specifications in effect when installed.

(b) All seals used in WAC 173-490-040 (2)(a)(ii) and (iii) are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears or other openings.

(c) All openings not related to safety are to be sealed with suitable closures.

(d) Tanks used for the storage of gasoline in bulk gasoline plants and equipped with vapor balance systems as required in WAC 173-490-040 (4)(b) shall be exempt from the requirements of WAC 173-490-040(2).

(3) Gasoline loading terminals.

(a) This chapter shall apply to all gasoline loading terminals with an average annual daily gasoline throughput greater than seventy-five thousand liters (20,000 gallons).

(b) Loading facilities. Facilities for the purpose of loading gasoline into any transport tank shall be equipped with a vapor recovery system (VRS) as described in WAC 173-490-040 (3)(c) and comply with the following conditions:

(i) The loading facility shall employ submerged or bottom loading for all transport tanks.

(ii) The VRS shall be connected to the transport tank being loaded and shall operate during the entire loading of every transport tank loaded at the facility.

(iii) The loading of all transport tanks shall be performed such that ninety percent by weight of the gasoline vapors displaced during filling are prevented from being released to the ambient air. Emissions from pressure relief valves shall not be included in the controlled emissions when the back pressure in the VRS collection lines is lower than the relief pressure setting of the transport tank's relief valves.

(iv) All loading lines and vapor lines shall be equipped to close automatically upon disconnect. The point of closure shall be on the tank side of any hose or intermediate connecting line.

(c) Vapor recovery system (VRS). The VRS shall be designed and built according to accepted industrial practices and meet the following conditions:

(i) The VRS shall prevent at least ninety percent by weight of the gasoline vapors displaced during loading of each transport tank from entering the ambient air and in no case shall the gasoline vapors emitted to the ambient air exceed eighty milligrams per liter of gasoline loaded.

(ii) The VRS shall be equipped with a signal device to alert personnel when the system is not operating or unintentionally shuts down.

(iii) The back pressure in the VRS collection lines shall not exceed the transport tank's pressure relief settings.

(d) Alternative loading facility. The loading of transport tanks by other means and using other vapor control systems shall require the facility owner to demonstrate that the emission of gasoline vapors to the ambient air is less than eighty milligrams per liter of gasoline loaded.

(4) Bulk gasoline plants.

(a) This chapter shall apply to all bulk gasoline plants with an annual average daily gasoline throughput greater than fifteen thousand liters (4,000 gallons).

(b) Storage tanks. All storage tanks with a capacity greater than two thousand one hundred liters (550 gallons) and used for the storage of gasoline shall comply with the following conditions:

(i) Each storage tank shall be equipped with a submerged fill line.

(ii) Each storage tank shall be equipped for vapor balancing of gasoline vapors with transport tanks during gasoline transfer operations.

(iii) The vapor line fittings on the storage tank side of break points with the transport tank vapor connection pipe or hose shall be equipped to close automatically upon planned or unintentional disconnect.

(iv) The pressure relief valves on storage tanks shall be set at the highest possible pressure consistent with local and state codes for fire and safety.

(c) Transport tanks. All transport tanks, except those meeting the conditions in WAC 173-490-040 (4)(d), transferring gasoline with storage tanks in a bulk gasoline plant shall comply with the following conditions:

(i) The transport tank shall be equipped with the proper attachment fittings to make vapor tight connections for vapor balancing with storage tanks.

(ii) The vapor line fittings on the transport tank side of break points with the storage tank connection pipe or hose shall be equipped to close automatically upon planned or unintentional disconnect.

(iii) The pressure relief valves on transport tanks shall be set at the highest possible pressure consistent with local and state codes for fire and safety.

(d) Transport tanks used for gasoline and meeting all of the following conditions shall be exempt from the require-

ment to be equipped with any attachment fitting for vapor balance lines:

(i) The transport tank is used exclusively for the delivery of gasoline into storage tanks of a facility exempt from the vapor balance requirements of WAC 173-490-040(5); and

(ii) The transport tank has a total capacity less than fifteen thousand liters (4,000 gallons) and is of a compartmented design and construction requiring the installation of four or more separate vapor balance fittings.

(e) Gasoline transfer operations. No owner or operator of a bulk gasoline plant or transport tank shall allow the transfer of gasoline between a transport tank and a storage tank except under the following conditions:

(i) All tanks shall be submerged filled or bottom loaded.

(ii) The loading of all tanks, except those exempted under WAC 173-490-040 (4)(d) shall be performed such that ninety percent by weight of the gasoline vapors displaced during filling are prevented from being released into the ambient air. Emissions from pressure relief valves shall not be included in the controlled emissions.

(f) Equipment or system failures. Failures or leaks in the vapor balance system shall be limited by the following conditions:

(i) During the months of April, May, June, July, August, September and October, failures of the vapor balance system to comply with this chapter shall require that gasoline transfer operations stop for the failed part of the system. Other transfer points that can operate in compliance may be used.

(ii) Loading or unloading of the transport tank connected to the failed part of the vapor balance system may be completed.

(iii) Breakdowns and upset conditions during all months of the year shall also comply with the provisions of WAC 173-400-105(5).

(g) The owner or operator of a bulk gasoline plant or transport tank shall take all reasonable necessary measures to prevent the spilling, discarding in sewers, storing in open containers or handling of gasoline in a manner on the plant site that will result in evaporation to the ambient air.

(5) Gasoline dispensing facilities (Stage I).

(a) This chapter shall apply to all gasoline dispensing facilities with a total annual gasoline output greater than seven hundred fifty-seven thousand liters (200,000 gallons) or sixty-three thousand one hundred liters (16,670 gallons) per month and total gasoline storage capacity greater than thirty-eight thousand liters (10,000 gallons).

(b) All gasoline storage tanks of the facilities defined in WAC 173-490-040 (5)(a) shall be equipped with submerged or bottom fill lines and fittings for vapor balancing gasoline vapors with the delivery transport tank.

(c) Gasoline storage tanks with offset fill lines shall be exempt from the requirement of WAC 173-490-040 (5)(b) if installed prior to January 1, 1979.

(d) The vapor balance system (for the purpose of measuring compliance with the emission control efficiency) shall consist of the transport tank, gasoline vapor transfer lines, storage tank and all tank vents. The vapor balance system shall prevent at least ninety percent of the displaced gasoline vapors from entering the ambient air. A vapor balance system that is designed, built and operated according to accepted industrial practices will satisfy this requirement.

(e) The owner or operator of a gasoline dispensing facility shall not permit the loading of gasoline into a storage tank equipped with vapor balance fittings unless the vapor balance system is attached to the transport tank and operated satisfactorily.

(6) Surface coaters.

The operation of a coater and dryer, that may serve one or more process lines, shall comply with the following emission limits if the potential uncontrolled emissions of VOC from the coater, flashoff areas, and dryer would be greater than 18 kg (40 pounds) in any given twenty-four hour period. The emission limits and uncontrolled emission quantity shall include the additional quantity of emissions from the dryer during the twelve hour period after application of the coating.

Process	Limitation Grams/Liter of Coating (Excluding Water)	lb/Gal.of Coating (Excluding Water)
Can Coating		
Sheet basecoat and over-varnish; two-piece can exterior	340	2.8
Two and three piece can interior body spray, two piece can exterior end	510	4.2
Side-seam spray	660	5.5
End sealing compound	440	3.7
Coil coating	310	2.6
Fabric coating	350	2.9
Vinyl coating	450	3.8
Paper coating	350	2.9
Auto and light duty truck coating		
Prime	230	1.9
Topcoat	340	2.8
Repair	580	4.8
Metal furniture coating	360	3.0
Magnet wire coating	200	1.7
Large appliance coating	340	2.8

(7) Open top vapor degreasers.

(a) All open top vapor degreasers shall:

(i) Have a cover that may be readily opened and closed. When a degreaser is equipped with a lip exhaust, the cover shall be located below the lip exhaust. When a degreaser has a freeboard ratio equal to or greater than 0.75 and the opening is greater than one square meter (10 square feet) the cover shall be power operated.

(ii) Have one of the following:

(A) A freeboard ratio equal to or greater than 0.75; or

(B) A freeboard chiller; or

(C) A closed design such that the cover opens only when the part enters or exits the degreaser.

(iii) Be equipped with at least the following three safety switches:

(A) Condenser-flow switch and thermostat (shuts off sump heat if coolant is either not circulating or too warm); and

(B) Spray safety switch (shuts off spray pump if the vapor level drops excessively; and

(C) Vapor level control thermostat (shuts off sump heat when vapor level rises too high).

(iv) Post a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:

(A) Do not degrease porous or absorbent materials such as cloth, leather, wood or rope.

(B) The cover of the degreaser should be closed at all times except when processing workloads.

(C) When the cover is open the lip of the degreaser should not be exposed to steady drafts greater than 15.3 meters per minute (50 feet per minute).

(D) Rack parts so as to facilitate solvent drainage from the parts.

(E) Workloads should not occupy more than one-half of the vapor-air interface area.

(F) When using a powered hoist, the vertical speed of parts in and out of the vapor zone should be less than 3.35 meters per minute (11 feet per minute).

(G) Degrease the workload in the vapor zone until condensation ceases.

(H) Spraying operations should be done within the vapor layer.

(I) Hold parts in the degreaser until visually dry.

(J) When equipped with a lip exhaust, the fan should be turned off when the cover is closed.

(K) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.

(L) Water shall not be visible in the solvent stream from the water separator.

(b) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses. For example, leaks from drain taps, cracked gaskets, and malfunctioning equipment must be repaired immediately.

(c) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.

(d) Still and sump bottoms shall be kept in closed containers.

(e) Waste solvent shall be stored in covered containers and returned to the supplier or to a firm which processes solvents for disposal.

(8) Conveyorized degreasers.

(a) The owner or operator of conveyorized cold cleaners and conveyorized vapor degreasers shall comply with the following operating requirements:

(i) Exhaust ventilation shall not exceed twenty cubic meters per minute per square meter (65 cfm per $ft.^2$) of degreaser opening, unless necessary to meet OSHA requirements.

(ii) Post in the immediate work area a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:

(A) Rack parts for best drainage.

(B) Maintain vertical speed of conveyed parts to less than 3.35 meters per minute (11 feet per minute).

(C) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.

(D) Water shall not be visible in the solvent stream from the water separator.

(iii) Vapor degreasers shall be equipped with at least the following three safety switches:

(A) Condenser flow switch and thermostat (shuts off sump heat if coolant is either not circulating or too warm); and

(B) Spray safety switch (shuts off spray pump if the vapor level drops excessively); and

(C) Vapor level control thermostat (shuts off sump heat when vapor level rises too high).

(b) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses. For example, leaks from drain taps, cracked gaskets, and malfunctioning equipment must be repaired immediately.

(c) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.

(d) Still and sump bottoms shall be kept in closed containers.

(e) Waste solvent shall be stored in covered containers and returned to the supplier or to a firm which processes solvents for disposal.

(f) All conveyorized cold cleaners and conveyorized vapor degreasers with air/vapor interfaces of 2.0 m^2 or greater shall have a carbon adsorption system, exhausting less than 25 ppm of solvent averaged over a complete adsorption cycle (based on exhaust ventilation of 15 m^3 per min per m^2 of air/vapor area, when downtime covers are open), or a system with control effectiveness equal to or better than a carbon adsorption system.

(9) Cutback asphalt paving.

(a) All paving applications of cutback asphalts are prohibited during the months of April, May, June, July, August, September and October, except as provided for in WAC 173-490-040 (9)(b).

(b) The following paving uses and applications of cutback asphalts are permitted during all months of the year.

(i) As a penetrating prime coat on aggregate bases prior to paving.

(ii) The manufacture of patching mixes used exclusively for pavement maintenance and needed to be stockpiled for times longer than one month.

(iii) All paving uses when the temperature during application is below 10°C (50°F). Any person using cutback asphalt for paving shall demonstrate that the ambient air temperature at 8 a.m. (PST) is below 50°F. The paving application of cutback asphalt when the ambient air temperature is 50°F or higher is in violation of this chapter.

(10) Cold cleaners.

(a) The owners or operators of all cold cleaners shall comply with the following equipment specifications:

(i) Be equipped with a cover that is readily opened and closed.

(ii) Be equipped with a drain rack that returns the drained solvent to the solvent bath.

(iii) Have a freeboard ratio of at least 0.5.

(iv) Have a visible fill line.

(b) An owner or operator of a cold cleaner shall be responsible for following the required operating parameters and work practices. The owner shall post and maintain in the work area of each cold cleaner a pictograph or instructions clearly explaining the following work practices:

(i) The solvent level shall not be above the fill line.

(ii) The spraying of parts to be cleaned shall be performed only within the confines of the cold cleaner.

(iii) The cover of the cold cleaner shall be closed when not in use or when parts are being soaked or cleaned by solvent agitation.

(iv) Solvent-cleaned parts shall be rotated to drain cavities or blind holes and then set to drain until dripping has stopped.

(v) Waste solvent shall be stored in covered containers and returned to the supplier or to a firm which processes solvents for disposal.

(c) The owner or operator shall maintain cold cleaners in good working condition and free of solvent leaks.

(d) If the solvent has a vapor pressure greater than 2.0 kPa (0.3 psi) measured at 38°C (100°F), or if the solvent is agitated or heated, then the cover must be designed so that it can be easily operated with one hand.

(e) If the solvent has a vapor pressure greater than 4.3 kPa (0.6 psi) measured at 38°C (100°F), then the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(f) If the solvent has a vapor pressure greater than 4.3 kPa (0.6 psi) measured at 38°C (100°F), or if the solvent is heated above 50°C (120°F), one of the following solvent vapor control systems must be used:

(i) The freeboard ratio must be equal to or greater than 0.70; or

(ii) Water must be kept over the solvent. The solvent must be more dense and insoluble in water.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-040, filed 7/27/82. Statutory Authority: RCW 70.94.331, 70.94.510, and 70.94.785. 81-03-003 (Order DE 80-54), § 173-490-040, filed 1/8/81. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-040, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.-331. 79-06-011 (Order DE 78-23), § 173-490-040, filed 5/8/79.]

WAC 173-490-080 Exceptions and alternative methods. (1) Other emission reduction methods may be used if the source operator demonstrates to ecology that they are at least as effective as the required methods; and

(2) The operation of a natural gas-fired incinerator and associated capture system installed for the purpose of complying with this chapter shall be required only during the months of April, May, June, July, August, September and October, unless the operation of such devices is required for purposes of occupational health or safety, or for the control of toxic substances, malodors, or other regulated pollutants.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-080, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-080, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-080, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-080, filed 5/8/79.]

WAC 173-490-090 New source review. The provisions of WAC 173-400-110 shall apply to all new sources and emissions units to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-090, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 43.21A.080 and 70.94.331. 79-06-011 (Order DE 78-23), § 173-490-090, filed 5/8/79.]

WAC 173-490-200 Petroleum refinery equipment leaks. (1) Specific applicability. This section shall apply to all petroleum refineries as qualified in WAC 173-490-025.

(2) Provisions for specific processes.

(a) The owner(s) or operator(s) of a petroleum refinery shall:

(i) Develop and conduct a monitoring program consistent with the provisions in WAC 173-490-200(3), 173-490-200(4), 173-490-200(5), and 173-400-105;

(ii) Record all leaking components which have a VOC concentration greater than 10,000 ppm when tested according to the provisions in WAC 173-490-200(3) and place an identification tag on each component consistent with the provisions of WAC 173-490-200 (4)(c);

(iii) Correct and retest the leaking component, as defined in WAC 173-490-200 (2)(a)(ii), as soon as practicable, but not later than fifteen days after the leak is recorded. If a leak continues after all reasonable corrective actions have been taken, then the component shall be repaired or replaced on the next scheduled turnaround.

(iv) Identify all leaking components, as defined in WAC 173-490-200 (2)(a)(ii), that cannot be corrected until the refinery unit is shut down for turnaround.

(b) The owner or operator of a petroleum refinery shall not install or operate a valve at the end of a pipe or line containing VOC unless the pipe or line is sealed with a second suitable closure. Exceptions to this requirement are the ends of a pipe or line connected to pressure relief valves, aspirator vents or other devices specifically required to be open for safety protection. The sealing device may be removed only when a sample is being taken or during maintenance operations.

(3) Testing procedures. To demonstrate compliance with this chapter, refer to WAC 173-400-105(5).

(4) Monitoring.

(a) The owner or operator of a petroleum refinery shall conduct a monitoring program consistent with the following provisions:

(i) Monitor yearly by the methods referenced in WAC 173-490-200(3) all pump seals, pipeline valves in liquid service and process drains;

(ii) Monitor quarterly by the methods referenced in WAC 173-490-200(3) all compressor seals, pipeline valves in gaseous service and pressure relief valves in gaseous service;

(iii) Monitor weekly by visual methods all pump seals;

(iv) Monitor immediately any pump seal from which liquids are observed leaking;

(v) Monitor any relief valve within twenty-four hours after it has vented to the atmosphere; and

(vi) After a leaking component is repaired, monitor for leaks prior to return to service.

(b) Pressure relief devices that are connected to an operating flare header, vapor recovery device, inaccessible valves, storage tank valves, and valves that are not externally regulated are exempt from the monitoring requirements in WAC 173-490-200 (4)(a).

(c) The owner or operator of a petroleum refinery, upon the detection of a leaking component, as defined in WAC 173-490-200 (2)(a)(ii), shall affix a weatherproof and readily visible tag, bearing an identification number and the date the leak is located, to the leaking component. This tag shall remain in place until the leak is corrected.

(5) Recordkeeping.

(a) The owner or operator of a petroleum refinery shall maintain a leaking component's monitoring log as specified in WAC 173-490-200 (2)(a)(ii) that shall contain, at a minimum, the following data:

(i) The name of the process unit where the component is located.

(ii) The type of component (e.g., valve, seal).

(iii) The tag number of the component.

(iv) The date on which a leaking component is discovered.

(v) The date on which a leaking component is repaired.

(vi) The date and instrument reading of the recheck procedure after a leaking component is repaired.

(vii) A record of the calibration of the monitoring instrument.

(viii) Those leaks that cannot be repaired until turnaround.

(ix) The total number of components checked and the total number of components found leaking.

(b) Copies of the monitoring log shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report prepared.

(c) Copies of the monitoring log shall immediately be made available to ecology, upon verbal or written request, at any reasonable time.

(6) Reporting. The owner or operator of a petroleum refinery shall notify ecology in writing within forty-five days following each quarterly or annual inspection for component leaks when:

(a) The number of discovered leaks has increased by more than ten percent above the number recorded during the last inspection of the same components;

(b) The number of leaking components has increased for two consecutive quarterly or annual inspections;

(c) The number of leaks not corrected within fifteen days exceeds five percent of the leaks detected;

(d) The next scheduled process unit turnaround needed to repair an uncorrectable leak is more than twelve months away.

(7) Petition for alternative monitoring.

(a) After two complete liquid service inspections and five complete gaseous service inspections, the owner or operator of a petroleum refinery may petition the director for alternative monitoring procedures or a reduction in monitoring frequency.

(b) A petition for alternative monitoring procedures shall contain:

(i) The name and address of the company and the name and telephone number of the responsible person over whose signature the petition is submitted;

(ii) A detailed description of the problems encountered under WAC 173-490-200(4); and

(iii) A detailed description of the alternative monitoring procedures and how this alternative procedure will solve or reduce the problems encountered under WAC 173-490-200(4).

(c) A petition for a reduction in monitoring frequency shall contain:

(i) The information requested in WAC 173-490-200 (7)(b)(i);

(ii) A detailed description of the proposed component-monitoring schedule;

(iii) A demonstration by the owner or operator that the facility is currently operating with a low level of component leaks and is committed to a maintenance program that will assure a frequency and severity of component leaks as good as that attainable under WAC 173-490-200(2).

(d) An approved petition for a reduction in monitoring frequency shall begin with the next quarterly inspection and shall be valid for a period of twelve quarters (three years). At the time of the last inspection in the twelve quarters, a new submittal of the information required in WAC 173-490-200 (7)(c) shall be made if the reduced frequency of monitoring is to continue.

(e) Ecology may approve a part or all of a petition for alternative monitoring requested under WAC 173-490-200 (7)(b) or (c). Approval or disapproval will be in writing and within forty-five calendar days of receipt of the petition by ecology. A failure to approve or disapprove a new petition or petition for renewal within the stated time limit shall be taken as an approval.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-200, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-200, filed 8/20/80.]

WAC 173-490-201 Petroleum liquid storage in external floating roof tanks. (1) Specific applicability.

(a) This section shall apply to all petroleum liquid storage vessels equipped with external floating roofs, having capacities greater than 150,000 liters (40,000 gallons), and as qualified in WAC 173-490-025.

(b) This section does not apply to petroleum liquid storage vessels that:

(i) Are used to store waxy, heavy pour crude oil; or

(ii) Have capacities less than 1,600,000 liters (420,000 gallons) and are used to store produced crude oil and condensate prior to lease custody transfer; or

(iii) Contain a petroleum liquid with a true vapor pressure of less than 10.5 kPa (1.5 psia); or

(iv) Contain a petroleum liquid with a true vapor pressure less than 27.6 kPa (4.0 psia); are of welded construction; and presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or other closure device of demonstrated equivalence approved by ecology; or

(v) Are of welded construction, equipped with a metallic-type shoe primary seal and have secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal).

(2) Provisions for specific processes.

(a) No owner(s) or operator(s) of a petroleum liquid storage vessel shall store a petroleum liquid in that vessel unless:

(i) The vessel has been fitted with:

(A) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or

(B) A closure or other device which controls VOC emissions with an effectiveness equal to or greater than a seal required under WAC 173-490-201 (2)(a)(i)(A) and approved by ecology.

(ii) All seal closure devices meet the following requirements:

(A) There are no visible holes, tears, or other openings in the seal or seal fabric;

(B) The seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and

(C) For vapor mounted primary seals, the accumulated area of gaps exceeding 0.32 cm (1/8 inch) in width between the secondary seal and the tank wall shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 $in.^2$ per foot of tank diameter), as determined by the method in WAC 173-490-201(3).

(iii) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:

(A) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

(B) Equipped with projections into the tank which remain below the liquid surface at all times.

(iv) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(v) Rim vents are set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and

(vi) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least ninety percent of the area of the opening.

(b) The owner(s) or operator(s) of a petroleum liquid storage vessel with an external floating roof subject to this chapter shall:

(i) Perform routine inspections annually in order to insure compliance with WAC 173-490-201 (2)(a) and the inspection shall include a visual inspection of the secondary seal gap;

(ii) Measure the secondary seal gap annually in accordance with WAC 173-490-201(3) when the floating roof is equipped with a vapor-mounted primary seal; and

(iii) Maintain records of the types of volatile petroleum liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed in WAC 173-490-201 (2)(b)(i) and (ii).

(c) The owner(s) or operator(s) of a petroleum liquid storage vessel with an external floating roof exempted from this chapter by WAC 173-490-201 (1)(b)(iii), but containing a petroleum liquid with a true vapor pressure greater than 7.0 kPa (1.0 psi), shall maintain records of the average monthly storage temperature, the type of liquid, and the maximum true vapor pressure for all petroleum liquids with a true vapor pressure greater than 7.0 kPa.

(d) Copies of all records under WAC 173-490-201 (2)(b) and (c) shall be retained by the owner(s) or operator(s) for a minimum of two years after the date on which the record was made.

(e) Copies of all records required under WAC 173-490-201 shall immediately be made available to the director, upon verbal or written request, at any reasonable time.

(3) Testing and monitoring.

(a) The owner or operator of a storage vessel covered under WAC 173-490-201 shall demonstrate compliance by the methods of this subsection or an alternative method approved by ecology.

(b) A person proposing to measure the seal fit of a storage vessel in order to comply with this section shall notify ecology of the intent to measure not less than five working days before the measurement so the director or a representative may observe the measurement if desired.

(c) Compliance with WAC 173-490-201 (2)(a)(ii)(C) shall be determined by physically measuring the length and width of all gaps around the circumference of the secondary seal in each place where a 0.32 cm (1/8 in.) diameter probe passes freely (without forcing or binding against the seal) between the seal and the tank wall and summing the area of the individual gaps.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-201, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-201, filed 8/20/80.]

WAC 173-490-202 Leaks from gasoline transport tanks and vapor collection systems. (1) Specific applicability.

This section shall apply to all gasoline transport tanks equipped for gasoline vapor collection and all vapor collection systems at gasoline loading terminals, bulk gasoline plants and gasoline dispensing facilities as qualified in WAC 173-490-025 and 173-490-040.

(2) Provisions for specific processes.

(a) The owner(s) or operator(s) of a gasoline loading or unloading facility shall only allow the transfer of gasoline between the facility and a transport tank when a current leak test certification for the transport tank is on file with the facility or a valid inspection sticker is displayed on the vehicle.

(b) The owner(s) or operator(s) of a transport tank shall not make any connection to the tank for the purpose of loading or unloading gasoline, except in the case of an emergency, unless the gasoline transport tank:

(i) Is tested annually according to the test procedure referenced in WAC 173-490-202 (3)(c);

(ii) Sustains a pressure change of no more than 0.75 kilopascals (3 inches of water) in five minutes when pressurized to a gauge pressure of 4.5 kilopascals (18 inches of water) or evacuated to a gauge pressure of 1.5 kilopascals (6 inches of water) during the testing required in WAC 173-490-202 (2)(b)(i);

(iii) Is repaired by the owner(s) or operator(s) and retested within fifteen days of testing if it does not meet the criteria of WAC 173-490-202 (2)(b)(ii);

(c) The owner(s) or operator(s) of a transport tank shall:

(i) Have a current leak test certification for the transport tank on file with each gasoline loading or unloading facility where gasoline is transferred; or

(ii) Display a sticker near the department of transportation certification plate required by 49 CFR 178.340-10b which:

(A) Shows the date that the gasoline tank truck last passed the test required in WAC 173-490-202 (2)(b)(i) and (ii);

(B) Shows the identification number of the gasoline tank truck tank; and

(C) Expires not more than one year from the date of the leak tight test.

(d) The owner(s) or operator(s) of a vapor collection system shall:

(i) Operate the vapor collection system and the gasoline loading equipment during all loadings and unloadings of transport tanks equipped for emission control such that:

(A) A gauge reading of tank pressure will not exceed 4.5 kilopascals (18 inches of water) or vacuum 1.5 kilopascals (6 inches of water);

(B) The concentration of gasoline vapors is below the lower explosive limit (LEL, measured as propane) at all points a distance of 2.5 cm (1 inch) from potential leak sources when measured by the method in WAC 173-490-202(3); and

(C) There are no visible liquid leaks.

(ii) Repair and retest a vapor collection system that exceeds the limits of WAC 173-490-202 (2)(d)(i) within fifteen days.

(e) Ecology may, at any time, monitor a gasoline transport tank and vapor collection system during loading or unloading operations by the procedure in WAC 173-490-202 (3)(d) to confirm continuing compliance with WAC 173-490-202 (2)(b) or (d).

(3) Testing and monitoring.

(a) The owner(s) or operator(s) of a gasoline transport tank or vapor collection system shall, at his own expense, demonstrate compliance with WAC 173-490-202 (2)(a) and (b), respectively. All tests shall be made by, or under the direction of, a person qualified to perform the tests.

(b) The owner(s) or operator(s) of a gasoline transport tank shall notify ecology in writing of the date and location of a certification test at least ten calendar days before the anticipated test date.

(c) To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(d) Monitoring to confirm the continuing existence of leak tight conditions shall be consistent with the procedures on file with and approved by ecology.

(4) Recordkeeping.

(a) The owner(s) or operator(s) of a gasoline transport tank or vapor collection system shall maintain records of all certification tests and repairs for at least two years after the test or repair is completed.

(b) The records of certification tests required by WAC 173-490-202 (4)(a) shall, as a minimum, contain:

(i) The transport tank identification number;

(ii) The initial test pressure and the time of the reading;

(iii) The final test pressure and the time of the reading;

(iv) The initial test vacuum and the time of the reading;

(v) The final test vacuum and the time of the reading;

(vi) At the top of each report page, the company name, date and location of the tests on that page; and

(vii) Name and title of the person conducting the test.

(c) The owner(s) or operator(s) of a gasoline transport tank shall annually certify that the transport tank passed the required tests.

(d) Copies of all records required under WAC 173-490-202 shall immediately be made available to ecology, upon written request, at any reasonable time.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-202, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.-331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-202, filed 8/20/80.]

WAC 173-490-204 Graphic arts systems. (1) Specific applicability.

(a) This section shall apply to all packaging rotogravure, publication rotogravure, specialty printing operations, and flexographic printing facilities that use more than 90 megagrams (100 tons) per year of VOCs as a component of ink, for the thinning of ink, cleaning of presses, press components and equipment; and are covered by WAC 173-490-025.

(b) Machines that have both coating units (apply a uniform layer of material across the entire width of a web) and printing units (forming words, designs, and pictures) shall be included under WAC 173-490-204 rather than WAC 173-490-040(6), Surface coaters.

(2) Provisions for specific processes.

(a) No owner(s) or operator(s) of a packaging rotogravure, publication rotogravure or flexographic printing subject to this regulation and employing solvent containing ink may operate, cause, allow or permit the operation of the facility unless:

(i) The volatile fraction of ink, as it is applied to the substrate, contains twenty-five percent by volume or less of organic solvent and seventy-five percent by volume or more of water;

(ii) The ink as it is applied to the substrate, less water, contains sixty percent by volume or more nonvolatile material; or

(iii) The owner(s) or operator(s) installs and operates a system that captures at least ninety percent by weight and;

(A) A carbon adsorption system which reduces the volatile organic emissions from the capture system by at least ninety percent by weight;

(B) An incineration system which oxidizes at least ninety percent of the nonmethane VOCs (VOC measured as total combustible carbon) to carbon dioxide and water; or

(C) An alternative VOC emission reduction system demonstrated to have at least a ninety percent reduction efficiency, measured across the control system, and has been approved by ecology.

(b) A collection system shall be used with the emission controls of WAC 173-490-204 (2)(a)(iii). The design and operation of the collection system shall be consistent with good engineering practice, and shall provide an overall reduction in the emission of VOCs of at least:

(i) Seventy-five percent where a publication rotogravure process is used; or

(ii) Sixty-five percent where a packaging rotogravure process is used; or

(iii) Sixty percent where a flexographic process is used.

(3) Testing and monitoring.

(a) To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(b) When add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:

(i) Exhaust gas temperature of all incinerators;

(ii) Temperature rise across a catalytic incinerator bed;

(iii) Breakthrough of VOC on a carbon adsorption unit; and

(iv) Any other continuous monitoring or recording device required by ecology.

(c) The owner or operator of a facility shall be responsible for all expenses of monitoring required by WAC 173-490-204 (3)(b).

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-204, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-204, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-204, filed 8/20/80.]

WAC 173-490-205 Surface coating of miscellaneous metal parts and products. (1) Specific applicability. This section shall apply to surface coating of miscellaneous metal parts and products in the following industries, if the potential uncontrolled emissions of VOC is greater than 10 tons per year and as qualified in WAC 173-490-205 (1)(b),(c), and (d), and 173-490-025.

(a) Miscellaneous metal parts and products shall include:

(i) Large farm machinery (harvesting, fertilizing and planting machines, tractors, combines, etc.);

(ii) Small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.);

(iii) Small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.);

(iv) Commercial machinery (office equipment, computers and auxiliary equipment, typewriters, calculators, vending machines, etc.);

(v) Industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.);

(vi) Fabricated metal products (metal covered doors, frames, etc.); and

(vii) Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (nonelectric machinery), Major Group 36 (electrical machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), Major Group 39 (miscellaneous manufacturing industries), Major Group 40 (railroad transportation), and Major Group 41 (transit passenger transportation).

(b) This section is not applicable to the surface coating of the following metal parts and products:

(i) Automobiles and light-duty trucks;

(ii) Metal cans;

(iii) Flat metal sheets and strips in the form of rolls or coils;

(iv) Magnet wire for use in electrical machinery;

(v) Metal furniture;

(vi) Large appliances;

(vii) Airplanes;

(viii) Automobile refinishing;

(ix) Customized top coating of automobiles and trucks, if production is less than thirty-five vehicles per day; and

(x) Exterior of marine vessels.

(c) This chapter applies to the application area, flashoff area, air and forced air drier, and oven used in the surface coating of the metal parts and products in WAC 173-490-205 (1)(a). This chapter also applies to prime coat, top coat, and single coat operations.

(d) The application of coatings whose formulations are controlled by federal specifications and the use of which is required by federal agencies shall be exempt from the emission limits in WAC 173-490-205 (2)(a).

(e) A case-by-case determination of the emission controls best representing RACT may be substituted for the requirements of WAC 173-490-205(2). Such a determination shall be approved by ecology.

(2) Provisions for specific processes.

(a) The owner or operator of a coating application system shall not emit a quantity of VOCs greater than those listed by specific coating, excluding water and as delivered to the application system:

(i)	Clear coatings	0.52 kg/liter	(4.3 lb/gallon)
(ii)	Extreme performance coatings	0.42 kg/liter	(3.5 lb/gallon)
(iii)	Air dried coatings	0.42 kg/liter	(3.5 lb/gallon)
(iv)	All others	0.36 kg/liter	(3.0 lb/gallon)
(v)	Powder coatings	0.05 kg/liter	(0.4 lb/gallon)

(b) When more than one emission limitation listed in WAC 173-490-205 (2)(a) applies to a specific coating, the least stringent will apply.

(c) All VOC emissions from solvent washings shall be considered in the emission limitations in WAC 173-490-205 (2)(a), unless the solvent is directed into containers that prevent evaporation into the atmosphere.

(d) The emission limits set forth in WAC 173-490-205 (2)(a) shall be achieved by:

(i) The application of low solvent coating technology; or

(ii) An incineration system that oxidizes at least ninety percent of the VOCs (VOC measured as total combustible carbon) to carbon dioxide and water; or

(iii) An equivalent means of VOC reduction certified by the owner(s) or operator(s) and approved by ecology.

(e) A collection system shall be used together with the incinerator of WAC 173-490-205 (2)(d)(ii). The design and operation of the collection system shall be consistent with good engineering practice and provide for an overall VOC emission reduction necessary to comply with the emission limits of WAC 173-490-205 (2)(a). The required VOC emission reduction shall be calculated on a unit volume of uncured solids basis.

(3) Testing and monitoring.

(a) Ecology may require the owner(s) or operator(s) of a source to demonstrate at his/her own expense, compliance by the methods of WAC 173-490-205 (3)(c).

(b) The owner(s) or operator(s) of a source shall notify ecology at least ten days before a proposed emission certification test so the director or a representative may observe the test.

(c) To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(d) Ecology may require monitoring of the following parameters:

(i) Exhaust gas temperature of all incinerators;

(ii) Temperature rise across a catalytic incinerator bed; and

(iii) Breakthrough of VOC on a carbon adsorption unit.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-205, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-205, filed 7/27/82. Statutory Authority: RCW 70.94.331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-205, filed 8/20/80.]

WAC 173-490-207 Surface coating of flatwood paneling. (1) Specific applicability.

(a) This section shall apply to all flatwood panel manufacturers and surface finishing facilities as qualified in WAC 173-490-207 (1)(b) and (c) and 173-490-025.

(b) These chapters shall apply to all operations and equipment that is used to apply, convey and dry (including flashoff areas) a surface pattern or coating on the following products:

(i) Printed interior panels made of hardwood plywood and thin particleboard;

(ii) Natural finish hardwood plywood panels; or

(iii) Hardboard paneling with Class II finishes.

(c) These chapters do not apply to the manufacture of exterior siding, tileboard, or particleboard used as a furniture component.

(2) Provisions for specific processes.

(a) The owner(s) or operator(s) of a facility shall not emit VOCs from a coating application system in excess of:

(i) 2.9 kg per 100 square meters of coated finished product (6.0 lb/1,000 square feet) from printed interior panels, regardless of the number of coats applied;

(ii) 5.9 kg per 100 square meters of coated finished product (12.0 lb/1,000 square feet) from natural finish hardwood plywood panels, regardless of the number of coats applied; and

(iii) 4.9 kg per 100 square meters of coated finished product (10.0 lb/1,000 square feet) from Class II finishes on hardboard panels, regardless of the number of coats applied.

(b) The emission limits in WAC 173-490-207 (2)(a) shall be achieved by:

(i) The application of low solvent content coating technology; or

(ii) An incineration system which oxidizes at least ninety percent of the nonmethane VOCs entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or

(iii) An equivalent means of VOC removal. The equivalent means must be certified by the owner(s) or operator(s) and approved by ecology.

(c) A capture system shall be used in conjunction with the emission control systems in WAC 173-490-207 (2)(b)(ii) and (iii). The design and operation of the capture system must be consistent with good engineering practice and shall be required to provide for an overall emission reduction sufficient to meet the emission limitation in WAC 173-490-207 (2)(a).

(3) Testing and monitoring.

(a) Ecology may require the owner or operator of a facility to demonstrate at his/her own expense compliance by the methods of WAC 173-490-207 (3)(c).

(b) The owner(s) or operator(s) of a facility shall notify ecology at least ten days before a proposed emission certification test so the director or a representative may observe the test.

(c) To demonstrate compliance with this chapter, refer to WAC 173-400-105.

(d) Ecology may require monitoring of the following parameters:

(i) Exhaust gas temperature of all incinerators;

(ii) Temperature rise across a catalytic incinerator bed; and

(iii) Breakthrough of VOC on a carbon adsorption unit.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-207, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.-331 and 70.94.395. 80-11-062 (Order DE 80-18), § 173-490-207, filed 8/20/80.]

WAC 173-490-208 Aerospace assembly and component coating operations. (1) Specific applicability. This section shall apply to all aerospace component coating facilities that emit an annual average of eighteen kilograms (forty pounds) or more of VOCs per operating day and as qualified in WAC 173-490-025.

(2) It shall be unlawful for any person to cause or allow:

(a) The application of any primer or topcoat to aerospace components which contains in excess of:

(i) 650 grams of VOC per liter of primer, less water, as applied.

(ii) 600 grams of VOC per liter of topcoat, less water, as applied.

(b) The application of any temporary protective coating to aerospace components that contains more than 250 grams of VOC per liter of material, less water, as applied.

(c) The use of VOCs of composite vapor pressure of 10.4 kPa (1.5 psia) or greater at a temperature of 21.1°C (70°F) for surface preparation or cleanup, excluding paint removal.

(d) The use of VOCs for the cleanup of spray equipment used in aerospace component coating operations unless 85 percent of the VOCs by weight, are collected and disposed so that they are not emitted to the atmosphere.

(e) The use of a stripper which contains more than 400 grams of VOC per liter or has a composite vapor pressure of VOCs more than 1.3 kPa (0.19 psia) at 21.1°C (70°F).

(3) The emission limits of paragraph (2) shall be achieved by:

(a) The application of reasonably available low solvent coating technology;

(b) A vapor collection and disposal system; or

(c) An equivalent method of VOC reduction certified by the owner(s) or operator(s) and approved by ecology.

(4) The provisions of WAC 173-490-208 (2)(a) and (2)(b) shall not apply to the following materials:

(a) Coatings for masking in chemical etching operations,

(b) Adhesive bonding primer,

(c) Flight test coatings,

(d) Space vehicle coatings, or

(e) Fuel tank coatings.

(5) Upon the submission of an alternative coating evaluation, ecology may determine that a reasonably available low solvent coating does exist for a given application and may exempt the coating from requirements of WAC 173-490-208. All alternative coating evaluations shall contain, as a minimum:

(a) Types of products to be coated,

(b) Types of coatings evaluated,

(c) Results of performance tests,

(d) Status of research into development of low VOC coatings for the application,

(e) Feasibility of installing control equipment,

(f) Mitigating measures that could be implemented to reduce VOC emissions.

[Statutory Authority: Chapter 70.94 RCW. 91-05-064 (Order 90-06), § 173-490-208, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 70.94 and 43.21A RCW. 82-16-021 (Order DE 82-22), § 173-490-208, filed 7/27/82.]

Chapter 173-491 WAC

EMISSION STANDARDS AND CONTROLS FOR SOURCES EMITTING GASOLINE VAPORS

WAC

173-491-010	Policy and purpose.
173-491-015	Applicability.
173-491-020	Definitions.
173-491-030	Registration.
173-491-040	Gasoline vapor control requirements.
173-491-050	Reserved.

WAC 173-491-010 Policy and purpose. (1) It is the policy of the department of ecology (ecology) under the authority vested in it by chapters 43.21A and 70.94 RCW to provide for the systematic control of air pollution from air contaminant sources and for the proper development of the state's natural resources.

(2) It is the purpose of this chapter to establish standards for the control of air contaminants emitted from gasoline marketing sources.

[Statutory Authority: RCW 70.94.331. 91-14-101 (Order 90-63), § 173-491-010, filed 7/2/91, effective 8/2/91.]

WAC 173-491-015 Applicability. This chapter shall apply to gasoline marketing operations, including the storage, transport, and transfer of gasoline, including the transfer from storage tanks into transport tanks, and from storage tanks into motor vehicles.

[Statutory Authority: RCW 70.94.165. 98-01-184 (Order 97-07), § 173-491-015, filed 12/23/97, effective 1/23/98. Statutory Authority: RCW 70.94.331. 91-14-101 (Order 90-63), § 173-491-015, filed 7/2/91, effective 8/2/91.]

WAC 173-491-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are by this reference incorporated into this chapter. Unless a different meaning is clearly required by context, the following words and phrases, as used in this chapter, shall have the following meanings:

(1) "Bottom loading" means the filling of a tank through a line entering the bottom of the tank.

(2) "Bulk gasoline plant" means a gasoline storage and transfer facility that receives more than ninety percent of its annual gasoline throughput by transport tank, and reloads gasoline into transport tanks.

(3) "Canister capture rate" means canister effectiveness times the percent of light duty vehicles that have onboard vapor recovery systems.

(4) "Canister effectiveness" means the percent of refueling vapors recovered by a representative onboard vapor recovery system.

(5) "Centroid" means the geometric center of a gas pump or a bank of gas pumps or, if a station has more than one bank of pumps, the geometric center of each bank of pumps.

(6) "Certified vapor recovery system" means a vapor recovery system which has been certified by the department of ecology. Only Stage II vapor recovery systems with a single coaxial hose can be certified. The department may certify vapor recovery systems certified by the California Air Resources Board as of the effective date of the regulation.

(7) "Eastern Washington county" means the following counties: Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman, and Yakima.

(8) "Gasoline" means a petroleum distillate which is a liquid at standard conditions and has a true vapor pressure greater than four pounds per square inch absolute at twenty degrees C, and is used as a fuel for internal combustion engines. Also any liquid sold as a vehicle fuel with a true vapor pressure greater than four pounds per square inch absolute at twenty degrees C shall be considered "gasoline" for purpose of this regulation.

(9) "Gasoline dispensing facility" means any site dispensing gasoline into motor vehicle fuel tanks from stationary storage tanks.

(10) "Gasoline loading terminal" means a gasoline transfer facility that receives more than ten percent of its annual gasoline throughput solely or in combination by pipeline, ship or barge, and loads gasoline into transport tanks.

(11) "Leak free" means a liquid leak of less than four drops per minute.

(12) "Modified" means any physical change in, or change in the method of operation of, a gasoline dispensing facility that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted. The term modified shall be construed consistent with the definitions of modification in Section 7411, Title 42, United States Code, and with rules implementing that section. Section 7411 exempts changes in gasoline throughput not resulting directly from a physical change.

(13) "NAAQS" means the National Ambient Air Quality Standard.

(14) "Ozone-contributing county" means a county in which the emissions have contributed to the formation of ozone in any county or area where violations of federal ozone standards have been measured, and includes: Cowlitz, Island, Kitsap, Lewis, Skagit, Thurston, Wahkiakum, and Whatcom counties.

(15) "Permanent residence" means a single-family or multifamily dwelling, or any other facility designed for use as permanent housing.

(16) "Stage I" means gasoline vapor recovery during all gasoline marketing transfer operations except motor vehicle refueling.

(17) "Stage II" means gasoline vapor recovery during motor vehicle refueling operations from stationary tanks.

(18) "Submerged fill line" means any discharge pipe or nozzle which meets either of the following conditions:

- Where the tank is filled from the top, the end of the discharge pipe or nozzle must be totally submerged when the liquid level is six inches from the bottom of the tank, or;
- Where the tank is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is eighteen inches from the bottom of the tank.

(19) "Submerged loading" means the filling of a tank with a submerged fill line.

(20) "Throughput" means the amount of material passing through a facility.

(21) "Top off" means to attempt to dispense gasoline to a motor vehicle fuel tank after a vapor recovery dispensing nozzle has shut off automatically.

(22) "Transport tank" means a container used for shipping gasoline over roadways.

(23) "True vapor pressure" means the equilibrium partial pressure of a petroleum liquid as determined by methods described in American Petroleum Institute Bulletin 2517, 1980.

(24) "Vapor balance system" means a system consisting of the transport tank, gasoline vapor transfer lines, storage tank, and all tank vents designed to route displaced gasoline vapors from a tank being filled with liquid gasoline.

(25) "Vapor collection system" means a closed system to conduct vapors displaced from a tank being filled into the tank being emptied, a vapor holding tank, or a vapor control system.

(26) "Vapor control system" means a system designed and operated to reduce or limit the emission of gasoline vapors emission into the ambient air.

(27) "Vapor tight" means a leak of less than one hundred percent of the lower explosive limit on a combustible gas detector measured at a distance of one inch from the source or no visible evidence of air entrainment in the sight glasses of liquid delivery hoses.

[Statutory Authority: RCW 70.94.165. 98-01-184 (Order 97-07), § 173-491-020, filed 12/23/97, effective 1/23/98. Statutory Authority: 1996 c 294. 97-04-012 (Order 95-15), § 173-491-020, filed 1/27/97, effective 2/27/97. Statutory Authority: RCW 70.94.331. 93-13-011 (Order 92-47), § 173-491-020, filed 6/7/93, effective 7/8/93; 91-14-101 (Order 90-63), § 173-491-020, filed 7/2/91, effective 8/2/91.]

WAC 173-491-030 Registration. (1) The owner or operator of a gasoline loading terminal, bulk gasoline plant, or gasoline dispensing facility subject to the provisions of WAC 173-491-040 (2) through (5) shall register annually the facility with ecology or local air authority. Annual registration shall be made by the owner or operator on a form provided by ecology or local air authority within sixty days of receipt of the form. Such registration form shall require information relevant to determining whether the facility is in compliance with the requirements of this chapter and be accompanied by fees outlined in chapter 173-455 WAC.

(2) Administration of the registration program shall include:

(a) Initial registration and annual or other periodic reports from the source owner providing information directly related to air pollution registration.

(b) On-site inspections necessary to verify compliance with registration requirements.

(c) Data storage and retrieval systems necessary for support of the registration program.

(d) Emission inventory reports and emission reduction credits computed from information provided by sources pursuant to registration.

(e) Staff review, including engineering analysis for accuracy and currentness, of information provided by sources pursuant to registration program requirements.

(f) Clerical and other office support provided in direct furtherance of the registration program.

(g) Administrative support provided in directly carrying out the registration program.

(3) Ecology or local air authority will provide a written verification of registration to owners or operators of facilities subject to the provisions of WAC 173-491-040 (2) through (5). Such verification shall be available for inspection by ecology or local air authority personnel during normal business hours.

(4) The owner or operator of a gasoline loading terminal or a gasoline dispensing facility shall maintain total annual gasoline throughput records for the most recent two calendar years. Such records shall be available for inspection by ecology or local air authority personnel during normal business hours.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-491-030, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 70.94.331. 91-14-101 (Order 90-63), § 173-491-030, filed 7/2/91, effective 8/2/91.]

WAC 173-491-040 Gasoline vapor control requirements. (1) Fixed-roof gasoline storage tanks.

(a) All fixed-roof gasoline storage tanks having a nominal capacity greater than forty thousand gallons shall comply with one of the following:

(i) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources - Storage Vessels for Petroleum Liquids (40 CFR 60, subparts K, KA and KB).

(ii) Be retrofitted with a floating roof or internal floating cover using a metallic seal or a nonmetallic resilient seal at least meeting the equipment specifications of the federal standards referred to in (a)(i) of this subsection or its equivalent.

(iii) Be fitted with a floating roof or internal floating cover meeting the manufacturer's equipment specifications in effect when it was installed.

(b) All seals used in (a)(ii) and (iii) of this subsection are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears, or other openings.

(c) All openings not related to safety are to be sealed with suitable closures.

(d) Tanks used for the storage of gasoline in bulk gasoline plants and equipped with vapor balance systems as required in subsection (3)(b) of this section shall be exempt from the requirements of subsection (1) of this section.

(2) Gasoline loading terminals.

(a) This chapter shall apply to all gasoline loading terminals with an average annual gasoline throughput greater than 7.2 million gallons.

(b) Loading facilities. Facilities for the purpose of loading gasoline into any transport tank shall be equipped with a vapor control system (VCS) as described in (c) of this subsection and comply with the following conditions:

(i) The loading facility shall employ submerged or bottom loading for all transport tanks.

(ii) The VCS shall be connected during the entire loading of all transport tanks.

(iii) The loading of all transport tanks shall be performed such that the transfer is at all times vapor tight. Emissions from pressure relief valves shall not be included in the controlled emissions when the back pressure in the VRS collection lines is lower than the relief pressure setting of the transport tank's relief valves.

(iv) All loading lines and vapor lines shall be equipped to close automatically when disconnected. The point of closure shall be on the tank side of any hose or intermediate connecting line.

(c) Vapor control system (VCS). The VCS shall be designed and built according to accepted industrial practices and meet the following conditions:

(i) The VCS shall not allow organic vapors emitted to the ambient air to exceed thirty-five milligrams per liter (three hundred twenty-two milligrams per gallon) of gasoline loaded.

(ii) The VCS shall be equipped with a device to monitor the system while the VCS is in operation.

(iii) The back pressure in the VCS collection lines shall not exceed the transport tank's pressure relief settings.

(3) Bulk gasoline plants.

(a) This section shall apply to all bulk gasoline plants with an average annual gasoline throughput greater than 7.2 million gallons.

(b) Deliveries to bulk gasoline plant storage tanks.

(i) The owner or operator of a bulk gasoline plant shall not permit the loading of gasoline into a storage tank equipped with vapor balance fittings unless the vapor balance system is attached to the transport tank and operated properly. The vapor balance system shall prevent at least ninety percent of the displaced gasoline vapors from entering the ambient air. A vapor balance system that is designed, built, and operated according to accepted industrial practices will satisfy this requirement.

(ii) Storage tank requirements. All storage tanks with a nominal capacity greater than five hundred fifty gallons and used for the storage of gasoline shall comply with the following conditions:

(A) Each storage tank shall be equipped with a submerged fill line.

(B) Each storage tank shall be equipped for vapor balancing of gasoline vapors with transport tanks during gasoline transfer operations.

(C) The vapor line fittings on the storage tank side of break points with the transport tank vapor connection pipe or hose shall be equipped to close automatically when disconnected.

(D) The pressure relief valves on storage tanks shall be set at the highest possible pressure consistent with local and state codes for fire and safety but in no case greater than ninety percent of the tank's safe working pressure.

(iii) Transport tank requirements. All transport tanks transferring gasoline to storage tanks in a bulk gasoline plant shall comply with the following conditions:

(A) The transport tank shall be equipped with the proper attachment fittings to make vapor tight connections for vapor balancing with storage tanks.

(B) The vapor line fittings on the transport tank side of break points with the storage tank connection pipe or hose shall be equipped to close automatically when disconnected.

(C) The pressure relief valves on transport tanks shall be set at the highest possible pressure consistent with local and state codes for fire and safety.

(c) Gasoline transfer operations.

(i) No owner or operator of a bulk gasoline plant or transport tank shall allow the transfer of gasoline between a stationary storage tank and a transport tank except when the following conditions exist:

(A) The transport tanks are being submerged filled or bottom loaded.

(B) The loading of all transport tanks, except those exempted under (c)(ii) of this subsection are being performed using a vapor balance system.

(C) The transport tanks are equipped to balance vapors and maintained in a leak tight condition in accordance with subsection (6) of this section.

(D) The vapor return lines are connected between the transport tank and the stationary storage tank and the vapor balance system is operated properly.

(ii) Transport tanks used for gasoline and meeting the following conditions shall be exempt from the requirement to be equipped with any attachment fitting for vapor balance lines if:

(A) The transport tank is used exclusively for the delivery of gasoline into storage tanks of a facility exempt from the vapor balance requirements of subsection (4) of this section; and the transport tank has a total nominal capacity less than four thousand gallons and is constructed so that it would require the installation of four or more separate vapor balance fittings; or

(B) In eastern Washington counties, a transport tank with a total nominal capacity less than four thousand gallons shall be exempt from the requirement to be fitted with any attachment fitting for vapor balance lines if the transport tank was in use prior to July 1, 1993. Replacement transport tanks or new equipment put into use July 1, 1993, or later are exempt from vapor balance requirements only as specified in (c)(ii)(A) of this subsection.

(4) Gasoline dispensing facilities (Stage I).

(a) This section shall apply to the delivery of gasoline to gasoline dispensing facilities located in ozone nonattainment areas with an annual gasoline throughput greater than two hundred thousand gallons and total storage capacity greater than ten thousand gallons, and to gasoline dispensing facilities located in ozone attainment areas with an annual gasoline throughput greater than three hundred sixty thousand gallons and all new gasoline dispensing facilities with a total gasoline nominal storage capacity greater than ten thousand gallons.

(b) All gasoline storage tanks of the facilities defined in (a) of this subsection shall be equipped with submerged or bottom fill lines and fittings to vapor balance gasoline vapors with the delivery transport tank.

(c) Gasoline storage tanks with offset fill lines shall be exempt from the requirement of (b) of this subsection if installed prior to January 1, 1979.

(d) The owner or operator of a gasoline dispensing facility shall not permit the loading of gasoline into a storage tank equipped with vapor balance fittings from a transport tank equipped with vapor balance fittings unless the vapor balance system is attached to the transport tank and operated satisfactorily.

(5) Gasoline dispensing facilities (Stage II). **Determinations and requirements.** Ecology determines that Stage II vapor recovery systems at gasoline dispensing facilities in Cowlitz and Thurston counties are important to achieving or maintaining the NAAQS for Ozone in Clark and Pierce counties, respectively.

(a) Gasoline dispensing facilities are required to have certified Stage II vapor recovery systems under the following conditions:

(i) By December 31, 1998, all facilities located in an ozone nonattainment or maintenance plan county dispensing greater than six hundred thousand gallons of gasoline annually, except in Kitsap County, all facilities dispensing greater than eight hundred forty thousand gallons annually; and

(ii) All facilities that dispense in excess of one million two hundred thousand gallons of gasoline annually and are located in Thurston or Cowlitz counties. This requirement will end on December 31, 2002, unless ecology determines that Stage II is important to achieving or maintaining the NAAQS for Ozone in a nonattainment or maintenance plan county.

(b) Upon approval of a notice of construction under subsection (4)(e) [(5)(e)] of this section, Stage II is not required and may be removed from any gasoline dispensing facilities located in Whatcom, Skagit, Island, Lewis, and Wahkiakum counties, and from any gasoline dispensing facility located in Thurston and Cowlitz counties dispensing less than one million two hundred thousand gallons annually.

(c) In addition to subsection (5)(a) of this section, all new and modified gasoline dispensing facilities with an annual gasoline throughput of 1.5 million gallons and above are required to have Stage II gasoline vapor recovery systems if a lot with a permanent residence is within the distance and throughput specifications of Table 1 of this subsection, and as explained in (c)(i) and (ii) of this subsection.

Table 1

Gasoline Throughput (millions of gallons)	Allowable Distance to the Property Line (meters)
1.5	20
2.0	25
4.0	38
6.0	49
8.0	58
10.0	66

(i) When the throughput is not shown in the chart, interpolate to get the distance for that throughput.

(ii) The allowable distance shall be measured from the centroid of the pumps to the nearest point on the property line of the nearest lot on which a permanent residence is located. However, if the permanent residence is located at least twice the allowable distance from the centroid of the pumps, the requirements of (c) of this subsection shall not apply.

(d)(i) Beginning on July 1, 2001, and each year thereafter, the department of ecology shall publish the canister capture rate.

(ii) When the canister capture rate reaches fifteen percent and there are no major exceptions, waivers, or other adjustments to the EPA onboard canister regulations or program implementation, the department of ecology shall revise (c) of this subsection to incorporate the effect of canisters.

(e) The owner or operator of new or modified gasoline dispensing facilities subject to any of the requirements of (a), (b) or (c) of this subsection shall file a notice of construction and obtain the approval of the local air authority prior to commencing construction or modification.

(f) The owner or operator of any gasoline dispensing facility may elect to submit a site-specific analysis of the requirement for a Stage II vapor recovery system under (c) of this subsection and request the department of ecology to evaluate it subject to the fees described in (l) of this subsection. The department of ecology will complete a second tier analysis described under WAC 173-460-090 within forty-five days of determining that the analysis submitted is complete and no additional information is needed. The requirements for gasoline vapor control shall be determined as a result of that process.

(g) Fees. The fee for new source review of a gasoline dispensing facility under this section shall be the same as the fee under WAC 173-400-116 (2)(d)(ii) except, if a site-specific review is elected under (f) of this subsection, the fee shall be the same as the fee under WAC 173-400-116 (3)(c) for a tier two analysis.

(h) This section shall apply to the refueling of motor vehicles from stationary tanks at gasoline dispensing facilities located in Washington.

(i) All gasoline dispensing facilities subject to this section shall be equipped with a certified Stage II vapor recovery system.

(j) The owner or operator of a gasoline dispensing facility subject to this section shall not transfer or allow the transfer of gasoline from stationary tanks into motor vehicle fuel tanks unless a certified Stage II vapor recovery system is used.

(k) All Stage II vapor recovery equipment shall be installed in accordance with the system's certification requirements and shall be maintained to be leak free, vapor tight, and in good working order.

(l) Whenever a Stage II vapor recovery system component is determined to be defective, the owner or operator shall take the system out of service until it has been repaired, replaced, or adjusted, as necessary.

(m) The owner or operator of each gasoline dispensing facility utilizing a Stage II system shall conspicuously post operating instructions for the system in the gasoline dispensing area. The instructions shall clearly describe how to fuel vehicles correctly using the vapor recovery nozzles and include a warning against topping off. Additionally, the instructions shall include a prominent display of ecology's toll free telephone number for complaints regarding the operation and condition of the vapor recovery nozzles.

(6) Equipment or systems failures.

(a) Specific applicability. This section shall apply to all gasoline transport tanks equipped for gasoline vapor collection and all vapor collection systems at gasoline loading terminals, bulk gasoline plants, and gasoline dispensing facilities as described in subsections (2) through (5) of this section.

During the months of May, June, July, August, and September any failure of a vapor collection system at a bulk gasoline plant or gasoline loading terminal to comply with this section requires the discontinuation of gasoline transfer operations for the failed part of the system. Other transfer points that can continue to operate in compliance may be used. The loading or unloading of the transport tank connected to the failed part of the vapor collection system may be completed during the other months of the year.

(b) Provisions for specific processes.

(i) The owner or operator of a gasoline loading terminal or bulk gasoline plant shall only allow the transfer of gasoline between the facility and a transport tank if a current leak test certification for the transport tank is on file with the facility or a valid inspection sticker is displayed on the vehicle. Certification is required annually.

(ii) The owner or operator of a transport tank shall not make any connection to the tank for the purpose of loading or unloading gasoline, except in the case of an emergency, unless the gasoline transport tank has successfully completed the annual certification testing requirements in (c) of this subsection, and such certification is confirmed either by:

(A) Have on file with each gasoline loading or unloading facility at which gasoline is transferred a current leak test certification for the transport tank; or

(B) Display a sticker near the department of transportation certification plate required by 49 CFR 178.340-10b which:

(I) Shows the date that the gasoline tank truck last passed the test required in (c) of this subsection;

(II) Shows the identification number of the gasoline tank truck tank; and

(III) Expires not more than one year from the date of the leak tight test.

(iii) The owner or operator of a vapor collection system shall:

(A) Operate the vapor collection system and the gasoline loading equipment during all loadings and unloadings of transport tanks equipped for emission control such that:

(I) The tank pressure will not exceed a pressure of eighteen inches of water or a vacuum of six inches of water;

(II) The concentration of gasoline vapors is below the lower explosive limit (LEL, measured as propane) at all points a distance of one inch from potential leak sources; and

(III) There are no visible liquid leaks except for a liquid leak of less than four drops per minute at the product loading connection during delivery.

(IV) Upon disconnecting transfer fittings, liquid leaks do not exceed ten milliliters (0.34 fluid ounces) per disconnect averaged over three disconnects.

(B) Repair and retest a vapor collection system that exceeds the limits of (b)(iii)(A) of this subsection within fifteen days.

(iv) The department or local air authority may, at any time, monitor a gasoline transport tank and vapor collection system during loading or unloading operations by the procedure in (c) of this subsection to confirm continuing compliance with this section.

(c) Testing and monitoring.

(i) The owner or operator of a gasoline transport tank or vapor collection system shall, at his own expense, demonstrate compliance with (a) and (b) of this subsection, respectively. All tests shall be made by, or under the direction of, a person qualified to perform the tests and approved by the department.

(ii) Testing to determine compliance with this section shall use procedures approved by the department.

(iii) Monitoring to confirm continuing leak tight conditions shall use procedures approved by the department.

(d) Recordkeeping.

(i) The owner or operator of a gasoline transport tank or vapor collection system shall maintain records of all certification tests and repairs for at least two years after the test or repair is completed.

(ii) The records of certification tests required by this section shall, as a minimum, contain:

(A) The transport tank identification number;

(B) The initial test pressure and the time of the reading;

(C) The final test pressure and the time of the reading;

(D) The initial test vacuum and the time of the reading;

(E) The final test vacuum and the time of the reading;

(F) At the top of each report page the company name, date, and location of the tests on that page; and

(G) Name and title of the person conducting the test.

(iii) The owner or operator of a gasoline transport tank shall annually certify that the transport tank passed the required tests.

(iv) Copies of all records required under this section shall immediately be made available to the department, upon written request, at any reasonable time.

(e) Preventing evaporation. All persons shall take reasonable measures to prevent the spilling, discarding in sewers, storing in open containers, or handling of gasoline in a manner that will result in evaporation to the ambient air.

[Statutory Authority: RCW 70.94.165. 98-01-184 (Order 97-07), § 173-491-040, filed 12/23/97, effective 1/23/98. Statutory Authority: 1996 c 294. 97-04-012 (Order 95-15), § 173-491-040, filed 1/27/97, effective 2/27/97. Stat-

utory Authority: RCW 70.94.331. 93-13-011 (Order 92-47), § 173-491-040, filed 6/7/93, effective 7/8/93; 91-14-101 (Order 90-63), § 173-491-040, filed 7/2/91, effective 8/2/91.]

WAC 173-491-050 Reserved.

[Statutory Authority: 1996 c 294. 97-04-012 (Order 95-15), § 173-491-050, filed 1/27/97, effective 2/27/97. Statutory Authority: RCW 70.94.331. 93-13-068 (Order 92-47), § 173-491-050, filed 6/17/93, effective 7/18/93; 93-03-089 (Order 92-42), § 173-491-050, filed 1/20/93, effective 2/20/93; 91-14-101 (Order 90-63), § 173-491-050, filed 7/2/91, effective 8/2/91.]

Chapter 173-492 WAC

MOTOR FUEL SPECIFICATIONS FOR OXYGENATED GASOLINE

WAC

173-492-010 Policy and purpose.
173-492-020 Applicability.
173-492-030 Definitions.
173-492-040 Compliance requirements.
173-492-050 Registration requirements.
173-492-060 Labeling requirements.
173-492-070 Control areas and control periods.
173-492-080 Enforcement and compliance.
173-492-090 Unplanned conditions.
173-492-100 Severability.

WAC 173-492-010 Policy and purpose. The purpose of this regulation is to reduce carbon monoxide emissions from gasoline powered motor vehicles, through the wintertime use of oxygenated gasolines.

[Statutory Authority: RCW 70.94 and section 211(m) of the Federal Clean Air Act. 96-19-094 (Order 96-03), § 173-492-010, filed 9/18/96, effective 10/19/96. Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-010, filed 11/30/92, effective 12/1/92.]

WAC 173-492-020 Applicability. This regulation shall apply to all gasoline offered for sale in the control areas and over the control periods defined in WAC 173-492-070.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-020, filed 11/30/92, effective 12/1/92.]

WAC 173-492-030 Definitions. The following words and phrases shall have the following meanings:

"Authority" means an air pollution control authority activated pursuant to chapter 70.94 RCW that has jurisdiction over the subject source.

"Blender" means a person who owns oxygenated gasoline which is sold or dispensed from an oxygenate blending facility for use in a control area during a control period.

"Control area" means an area in which only oxygenated gasoline under the oxygenated gasoline program of this chapter may be sold or dispensed. Each control area is a county or group of counties administered by a separate air pollution control authority.

"Control period" means the period during which oxygenated gasoline must be sold or dispensed within the control area.

"Ecology" means the Washington state department of ecology.

"Gasoline" means any fuel sold for use in motor vehicles and motor vehicle engines, and commonly known or sold as gasoline.

"Large volume blender" means blenders that blend and offer for sale or sell one million gallons or more, but less than fifteen million gallons, of oxygenated gasoline per month on average during a control period within a control area.

"Medium volume blender" means blenders that blend and offer for sale or sell one hundred thousand gallons or more, but less than one million gallons, of oxygenated gasoline per month on average during a control period within a control area.

"Oxygenate" means any substance which, when added to gasoline, increases the amount of oxygen in the gasoline blend. Lawful use of any combination of these substances requires that they be "substantially similar" under section 211 (f)(1) of the federal Clean Air Act (CAA), or be permitted under a waiver granted by the Administrator of the Environmental Protection Agency under the authority of section 211 (f)(4) of the CAA.

"Oxygenated gasoline" means gasoline which contains a measurable amount of oxygenate, generally an alcohol or ether.

"Small volume blender" means blenders that blend and offer for sale or sell less than one hundred thousand gallons of oxygenated gasoline per month on average during a control period within a control area.

"Very large volume blender" means blenders that blend and offer for sale or sell fifteen million gallons or more of oxygenated gasoline per month on average during a control period within a control area.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-030, filed 11/30/92, effective 12/1/92.]

WAC 173-492-040 Compliance requirements. (1) Retail sales. No gasoline intended as a final product for fueling of motor vehicles within the control areas and control periods as defined in WAC 173-492-070 shall be offered for sale, sold or dispensed by any person unless the gasoline has at least 2.0% oxygen content by weight.

(2) Average blend requirements. Over each two-month interval during the control period, gasoline intended as a final product for fueling of motor vehicles within the control areas defined in WAC 173-492-070 supplied by blenders to purchasers within the control areas defined in WAC 173-492-070 shall average at least 2.7% oxygen by weight, and in no case be less than 2.0% oxygen content by weight.

(3) Reports. Blenders shall provide periodic reports, as stipulated in the blenders registration, to ecology or the authority summarizing how the requirements of subsection (2) of this section were met. With prior approval from ecology or the authority, a credit trading program may be used to comply with these requirements. Such reports shall be on forms provided by ecology or the authority.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-040, filed 11/30/92, effective 12/1/92.]

WAC 173-492-050 Registration requirements. Each blender shall register with ecology or the authority each year, in each control area where a blender offers for sale, sells, or dispenses gasoline. Each request for registration shall be on forms supplied by ecology or the authority and shall be

accompanied by a fee to compensate for the cost of administering the registration program, including on-site inspections necessary to verify compliance with these requirements. The location of each blender facility shall be included in the information provided by the blender at registration. The fee may be based on the volume of oxygenated gasoline sold or offered for sale by the blender in that control area to comply with the provisions of WAC 173-492-040, including separate fee categories for small, medium, large and very large volume blenders.

Registration fees shall be set by regulation by ecology or the authority.

[Statutory Authority: RCW 70.94 and section 211(m) of the Federal Clean Air Act. 96-19-094 (Order 96-03), § 173-492-050, filed 9/18/96, effective 10/19/96. Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-050, filed 11/30/92, effective 12/1/92.]

WAC 173-492-060 Labeling requirements. In addition to other labeling requirements, fuel dispensing systems delivering oxygenated gasoline shall be conspicuously labeled during the control periods and in the control areas stated in WAC 173-492-070 as follows:

"The gasoline dispensed from this pump is oxygenated and will reduce carbon monoxide pollution from motor vehicles."

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-060, filed 11/30/92, effective 12/1/92.]

WAC 173-492-070 Control areas and control periods. Beginning in 1992, the oxygenated gasoline requirements of this chapter shall apply to the following control area during the following control period:

		Control Period	
Control Area	County	Beginning	Ending
Spokane	Spokane	September 1	February 29

Upon approval by EPA, the control period for Spokane will be from October 1 to February 29.

[Statutory Authority: RCW 70.94 and section 211(m) of the Federal Clean Air Act. 96-19-094 (Order 96-03), § 173-492-070, filed 9/18/96, effective 10/19/96. Statutory Authority: Chapter 70.94 RCW and 42 USC 7545 Sec. 211(m). 94-07-040 (Order 93-20), § 173-492-070, filed 3/9/94, effective 4/9/94. Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-070, filed 11/30/92, effective 12/1/92.]

WAC 173-492-080 Enforcement and compliance. (1) Compliance with the requirements of this section shall be monitored and enforced by ecology or the authority. Noncompliance shall be subject to the penalties and other remedies provided in chapter 70.94 RCW.

(2) Ecology or the authority may designate any appropriate agency of the state to assist in the compliance monitoring of this regulation. Ecology shall make every effort to coordinate compliance monitoring of this regulation with the current duties of the department of agriculture division of weights and measures.

(3) Compliance with the standards set forth in this section shall be determined by use of testing methods approved by ecology. The maximum accuracy tolerance of this method shall be limited to +/-0.3% oxygen by weight, or an equivalent tolerance when measured by volume.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-080, filed 11/30/92, effective 12/1/92.]

WAC 173-492-090 Unplanned conditions. An unplanned condition, such as an unforeseen emergency or "act of God," which may interfere with compliance to this chapter, shall be reported to ecology or the authority as soon as possible. The responsible party shall also submit a full written report within ten days to ecology or the authority, including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence. Compliance with the requirements of this section does not relieve the responsible party from the responsibility to maintain continuous compliance with all the requirements of this chapter nor from the resulting liabilities for failure to comply. Ecology or the authority must consider the circumstances of the unplanned condition, and may use the circumstances when determining enforcement.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-090, filed 11/30/92, effective 12/1/92.]

WAC 173-492-100 Severability. The provisions of this regulation are severable and if any provision is held invalid, the application of such provision to the other circumstances and the remainder of this regulation shall not be affected.

[Statutory Authority: Chapter 70.94 RCW and 1990 42 USC 7545 Sec. 211(m). 92-24-057 (Order 91-58), § 173-492-100, filed 11/30/92, effective 12/1/92.]

Chapter 173-495 WAC
WEATHER MODIFICATION

WAC

173-495-010	Purpose.
173-495-020	Definitions.
173-495-030	Requirement for licenses and permits.
173-495-040	Requirements for exempt activities.
173-495-045	Requirements for a regular license.
173-495-050	Requirements for a restricted license.
173-495-060	Procedures for issuing license.
173-495-065	Period of license.
173-495-070	Permit requirements.
173-495-080	Permittee's report of operations—Requirement.
173-495-100	Revocation, suspension, modification.
173-495-120	Proof of financial responsibility.

WAC 173-495-010 Purpose. This chapter, adopted under chapters 43.37 and 70.94 RCW establishes the responsibilities for the supervision and control of all weather modification activities within the state, and representation by the state in all interstate contacts relating to weather modification and control. This regulation provides the basic framework for carrying out the state's responsibility for such a program through the establishment of license and permit requirements and procedures, reporting, and fee requirements. The provisions of this chapter apply to all weather modification activities in all parts of the state except as specifically exempted in this chapter.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-010, filed 12/3/99, effective 1/3/00. Statu-

tory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-010, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-010, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, words and phrases as used in this chapter have the following meanings:

(1) "Operation" means the performance of weather modification and control activities using a single permit or license under contract for the purpose of producing or attempting to produce a weather modifying effect within a geographical area.

(2) "Research and development" means theoretical analysis, exploration and experimentation, and the extension of investigative findings of theories of a scientific or technical nature into practical application for experimental and demonstration purposes. This includes the experimental production and testing of models, devices, equipment, materials, and processes.

(3) "Weather modification and control" means changing or attempting to change or control by artificial methods, the natural development of any or all atmospheric cloud forms or precipitation forms which occur in the troposphere.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-020, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-020, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-020, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-030 Requirement for licenses and permits. No person shall engage in weather modification activities except under and in accordance with a license and a permit issued by ecology, unless specifically exempt from this requirement in WAC 173-495-040.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-030, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-030, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-040 Requirements for exempt activities. The following weather modification and control activities are exempt from the license and permit requirements of RCW 43.37.100, and the liability requirements of RCW 43.37.190:

(1) All research and experiments related to weather modification control conducted within laboratories;

(2) Those weather modification operations designed to alleviate sudden, unexpected, hazardous conditions which require expeditious localized action for:

(a) Protection against fire;

(b) Prevention of frost;

(c) Dispersal of fog;

(3) Field research and development by institutions of higher learning;

(4) Any person proposing to conduct weather modification and control activities as described in subsection (2) of this section shall notify the air quality program, department of ecology, headquarters offices in Olympia, Washington, before proceeding. Notification must include the type of activity to be carried out, the person carrying out the activity, and the materials and technique of the application to be used;

(5) Any person proposing to conduct weather modification and control activities as described in subsection (3) of this section shall provide:

(a) A written description of the proposed program;

(b) Notice of actual operations ten days before beginning those activities; and

(c) Quarterly reports of operations and status to the Headquarters Office, Air Quality Program, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-040, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-040, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-040, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-045 Requirements for a regular license. All applicants for a weather modification license must be certified professional members of the American Meteorological Society or possess the academic achievements and professional experience necessary to receive such a certification. In cases where the applicant is an organization, the individual or individuals who will be in control and in charge of the weather modification and control activities must be required to meet the above standard.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-045, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-045, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-045, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-050 Requirements for a restricted license. (1) A restricted license may be issued to an applicant when:

(a) The applicant's proposed weather modification activities are limited solely to those designed to disperse fog over airports; and

(b) The applicant will be fully advised of the pertinent weather information by the meteorologist on duty during the airport fog dispersal activities.

(2) Applicants for restricted licenses are not required to meet the qualifications otherwise imposed by WAC 173-495-040.

[Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-050, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-050, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-060 Procedures for issuing license. (1) Any person or organization desiring to obtain a license or restricted license shall apply to ecology on the form prescribed, listing name, business address, etc.

(2) Ecology may require additional information of the applicant to determine competency in the field of meteorology. The additional information must be requested of the applicant by certified mail, and must be submitted in writing.

(3) Before issuing any license, the applicant shall pay a fee as outlined in chapter 173-455 WAC.

(4) The application shall be deemed received by ecology when received at the Headquarters Offices, Air Quality Program, Department of Ecology, P.O. Box 47600, Olympia, Washington, 98504-7600.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-

495-060, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 79.94.-331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-060, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-060, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-060, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-065 Period of license. (1) Licenses issued under chapter 43.37 RCW and these regulations are effective for a period of one year, and will terminate at the end of the calendar year of issuance.

(2) The licensee may request a renewal of the license no later than December 1st. Ecology shall review the license renewal request after receiving a renewal fee outlined in chapter 173-455 WAC.

(3) In the determination of whether or not to grant a license renewal, ecology shall consider information provided by the applicant on the facts and circumstances used to issue the original permit that were changed or altered. If ecology determines that the licensee no longer meets the requirements of competency in the field of meteorology, ecology may refuse to renew the license.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-495-065, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 79.94.-331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-065, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-065, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-065, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-070 Permit requirements. (1) Each weather modification operation not specifically exempted by statute or these regulations requires a permit. A separate permit must be issued for each operation.

(2) A license holder desiring to conduct a weather modification operation shall submit an application for a permit to ecology.

(3) The permit applicant must hold a valid weather modification license from the state of Washington.

(4) The applicant shall publish a notice of intention at least once a week for three consecutive weeks in a newspaper that has general circulation within the county in which the operation is to be conducted or affected.

(5) The licensee shall file proof of publication of the notice of intention with ecology within fifteen days from the date of last publication of the notice.

(6) The notice of intention must contain at least the following:

(a) The name and address of the licensee;

(b) The nature and object of the intended operation and the person or organization on whose behalf it is to be conducted;

(c) The area in which and the appropriate time during which the operation will be conducted;

(d) The area intended to be affected by the operation; and

(e) The materials and methods to be used in conducting the operation.

(7) The applicant shall furnish proof of financial responsibility, as described in WAC 173-495-120 of this chapter.

(8) The applicant shall pay a permit fee outlined in chapter 173-455 WAC.

(9) Before issuing a permit, ecology shall state, in writing, that the weather modification and control activities proposed have been determined to be for the general welfare and public good.

(10) Ecology shall hold a public hearing before any weather modification permit is issued.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]-650, [70.94.]745, [70.94.]892, [70.94.]011. 07-19-005 (Order 07-10), § 173-495-070, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 79.94.-331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-070, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-070, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-070, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-080 Permittee's report of operations—Requirement. The permittee is required to maintain reports on all operations on a daily basis, and submit them twice a month (1st day and 15th day) to ecology. The semi-monthly reports must include the following information:

(1) Number of days under contract;

(2) Number of days of operation and number of hours of each day, for all stations operated;

(3) The consumption rate and name of seeding agent used;

(4) A brief summary statement evaluating the past fifteen day period in regard to the seeding potential and experience;

(5) Location of operations;

(6) Name and mailing address of each individual, other than the licensee, participating or assisting in the operation;

(7) A brief statement of projected plans for the upcoming fifteen-day period;

(8) The permittee shall, in the event operations are unexpectedly terminated, submit a special report covering the portion of the half-month period of operation. All reports must be post-marked not later than one day after due date;

(9) All semi-monthly reports are public records, which are open to public inspection.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-080, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-080, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-080, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-100 Revocation, suspension, modification. (1) All permits authorized by RCW 43.37.110 must contain the following provisions: "Ecology may, if it appears that continuing operation under this permit will cause immediate injury to persons or property, terminate or otherwise modify the terms of this permit in order to alleviate an emergency situation by giving notice to the permittee by telegram or other writing."

(2) All permits authorized by RCW 43.37.110 may be revoked, suspended, or modified when ecology has reason to believe that good cause exists and that the revocation, suspension, or modification is required for the general welfare and public good. A written notice must be sent by certified mail to the permittee before any revocation, suspension, or modification of the permit is executed. Opportunity for comment by the permittee must be allowed. Any final ecology decision must be in writing.

(3) In the event the applicant desires to appeal any permit revocation, modification, or suspension action by ecology the appeal must be filed with the pollution control hearings board in Olympia within thirty days of ecology's action. An appeal does not constitute a stay.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-100, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-100, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-100, filed 12/29/77. Formerly chapter 508-20 WAC.]

WAC 173-495-120 Proof of financial responsibility. A permit applicant shall furnish proof of financial responsibility to ecology by one of the following:

(1) Copy of insurance policy or binder for the operator;

(2) A current balance sheet showing sufficient assets to demonstrate financial responsibility;

(3) A bond for safe performance; or

(4) Other information the applicant may provide to ecology, in writing, if the alternate documents contained in subsections (1) through (3) of this section, are not feasible or available. If other information is provided, the applicants must explain the reason the documents listed in subsections (1) through (3) of this section are not provided.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. 00-01-009 (Order 99-14), § 173-495-120, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. 90-19-062 (Order 90-10), § 173-495-120, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-120, filed 12/29/77.]

Chapter 173-500 WAC

WATER RESOURCES MANAGEMENT PROGRAM ESTABLISHED PURSUANT TO THE WATER RESOURCES ACT OF 1971

WAC

173-500-010	Background.
173-500-020	Purpose.
173-500-030	Authority.
173-500-040	Water resource inventory areas.
173-500-050	Definitions.
173-500-060	General provisions.
173-500-070	Regulation review.
173-500-080	Critical water resource situation response process.
173-500-990	Map—Water resources inventory areas sub-basins.

WAC 173-500-010 Background. (1) The Water Resources Act of 1971 (chapter 90.54 RCW) sets forth fundamentals of water resource policy to insure that the waters of the state will be protected and fully utilized for the greatest benefit to the people of the state of Washington and, in relation thereto, to provide direction to the department of ecology and other state agencies and officials in carrying out water and related resource programs.

(2) The department was directed, through the adoption of appropriate rules, to develop and implement a comprehensive state water program which would provide a process for making decisions on future water resource allocations and uses.

(3) The act provides that the department of ecology may develop a water program in regional segments so that immediate attention may be given to waters of a give physio-economic region of the state or to specific critical problems of water allocation and use.

(4) The act further directed the department of ecology to modify existing regulations and adopt new regulations to insure that existing regulatory programs are in accord with the water resource policies of the act.

[Statutory Authority: Chapters 43.27A and 90.54 RCW. 88-13-037 (Order 88-11), § 173-500-010, filed 6/9/88; Order DE 75-23, § 173-500-010, filed 1/6/76.]

WAC 173-500-020 Purpose. The purpose of this chapter is to set forth a program which will provide guidelines to facilitate the further development of the water resources to the extent of their availability for further appropriation and implement the legislative intent as contained in RCW 90.54.040(1). The program shall, where appropriate:

(1) Identify and foster development of water resource projects;

(2) Declare preferences or priorities of use by categories;

(3) Set forth streams closed to future appropriation;

(4) Establish flows on perennial streams of the state in amounts necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values, and navigational values;

(5) Allocate quantities for beneficial uses;

(6) Reserve water for future beneficial use;

(7) Withdraw waters from additional appropriation when sufficient information or data are lacking for the making of sound decisions;

(8) Establish criteria for limit beyond which further appropriation will not be made;

(9) Designate areas within the state to be used for management purposes; and

(10) Be guided by the declaration of fundamentals contained in RCW 90.54.020.

[Order DE 75-23, § 173-500-020, filed 1/6/76.]

WAC 173-500-030 Authority. This regulation is promulgated by the department of ecology under the authority of chapter 90.54 RCW.

[Statutory Authority: Chapters 43.27A and 90.54 RCW. 88-13-037 (Order 88-11), § 173-500-030, filed 6/9/88; Order DE 75-23, § 173-500-030, filed 1/6/76.]

WAC 173-500-040 Water resource inventory areas. For the purposes of this chapter, the state is divided into 62 areas known as water resource inventory areas (WRIAs). The names and numbers of these areas are as follows and are shown on the attached map:

WATER RESOURCES INVENTORY AREAS

WRIA Number,	Name
01.	Nooksack
02.	San Juan
03.	Lower Skagit-Samish
04.	Upper Skagit
05.	Stillaguamish
06.	Island
07.	Snohomish
08.	Cedar-Sammamish
09.	Duwamish-Green
10.	Puyallup-White
11.	Nisqually

WATER RESOURCES INVENTORY AREAS

WRIA Number	Name
12.	Chambers-Clover
13.	Deschutes
14.	Kennedy-Goldsborough
15.	Kitsap
16.	Skokomish-Dosewallips
17.	Quilcene-Snow
18.	Elwah-Dungeness
19.	Lyre-Hoko
20.	Soleduck-Hoh
21.	Queets-Quinault
22.	Lower Chehalis
23.	Upper Chehalis
24.	Willapa
25.	Grays-Elokoman
26.	Cowlitz
27.	Lewis
28.	Salmon-Washougal
29.	Wind-White Salmon
30.	Klickitat
31.	Rock-Glade
32.	Walla Walla
33.	Lower Snake
34.	Palouse
35.	Middle Snake
36.	Esquatzel Coulee
37.	Lower Yakima
38.	Naches
39.	Upper Yakima
40.	Alkali-Squilchuck
41.	Lower Crab
42.	Grand Coulee
43.	Upper Crab-Wilson
44.	Moses Coulee
45.	Wenatchee
46.	Entiat
47.	Chelan
48.	Methow
49.	Okanogan
50.	Foster
51.	Nespelem
52.	Sanpoil
53.	Lower Lake Roosevelt
54.	Lower Spokane
55.	Little Spokane
56.	Hangman
57.	Middle Spokane
58.	Middle Lake Roosevelt
59.	Colville
60.	Kettle
61.	Upper Lake Roosevelt
62.	Pend Oreille

[Order DE 75-23, § 173-500-040, filed 1/6/76.]

WAC 173-500-050 Definitions. For purposes of this chapter and subsequent regulations formulated for planning and management within individual water resource inventory areas, the following definitions shall be used:

(1) "**Allocation**" means the designating of specific amounts of the water resource for specific beneficial uses.

(2) "**Appropriation**" means the process of legally acquiring the right to specific amounts of the public water resource for application to beneficial uses.

(3) "**Base flow**" means a level of streamflow established in accordance with provisions of chapter 90.54 RCW required in perennial streams to preserve wildlife, fish, scenic, aesthetic, and other environmental and navigational values.

(4) "**Beneficial uses**" are uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

(5) "**Consumptive use**" means use of water whereby there is a diminishment of the water source.

(6) "**Department**" means the Washington state department of ecology.

(7) "**Hydrograph**" is a graph showing the variations of streamflow (or stream discharge) with respect to time during a year as determined at a specific cross-sectional location on the stream.

(8) "**Low flow**" means those flow level limitations appearing as provisions on permits and certificates issued by the department, or its predecessors, prior to the effective dates of chapters 173-501 through 173-599 WAC.

(9) "**Nonconsumptive use**" is a type of water use where either there is no diversion from a source body, or where there is no diminishment of the source.

(10) "**Perennial stream**" means a stream the natural flow of which is normally continuous at any given location.

(11) "**Stream management unit**" means stream segments, reaches, or tributaries, each containing a control station, that are identified on stream reach maps in adopted water resource management program documents as units for defining base flow levels.

(12) "**Water right**" means a right to make beneficial use of public waters of the state.

[Order DE 75-23, § 173-500-050, filed 1/6/76.]

WAC 173-500-060 General provisions. (1) The provisions of this chapter shall apply to chapters 173-501 through 173-599 WAC unless the language of said chapters is clearly to the contrary.

(2) As sufficient data are obtained for each WRIA and/or grouping thereof in the state to enable the department to formulate a water resource planning and management program for such area, the department shall by regulation establish policies for the beneficial use of public waters pursuant to RCW 90.54.040.

(3) Water rights established prior to the effective date of rules adopted under chapters 173-500 and 173-501 through 173-599 WAC shall not be affected by such rules.

(4) **Low flow limitations to prevail** (1) Notwithstanding the establishment of base flows established hereunder, existing low flow limitations shall remain in effect.

(5) **Base flow provisions for water rights.**

(a) Surface water and/or ground water appropriation permits, issued subsequent to the effective dates of chapters 173-501 through 173-599 WAC, that will allow either direct diversion from or have a measurable effect on streams where base flow limitations of this chapter, and any such permits or certificates shall be appropriately conditioned to assure maintenance of said base flows.

(b) The base flow provisions for any water right located in a stream management unit shall specifically describe the base flow levels for the control station in that unit and shall refer generally to other downstream base flow requirements that may also become controlling and critical to the use of water under such right.

(6) **Base flow changes.** If it becomes necessary to change a control station location or to add new control stations to improve management capability, the department shall develop streamflow relationships, by accepted engineering procedures, between previously established control station locations and the new location for use in regulating water rights that are subject to base flow limitations.

(7) **Minimum water flows and levels.** The provisions of this chapter shall in no manner be interpreted to preclude utilization of chapter 90.22 RCW.

(8) **Priorities or allocation by use categories - limitations.** Nothing in chapters 173-501 through 173-599 WAC relating to priorities or allocations by use shall be construed to apply to water rights or the historic water use patterns that predate the individual management regulations.

[Order DE 75-23, § 173-500-060, filed 1/6/76.]

WAC 173-500-070 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.27A and 90.54 RCW. 88-13-037 (Order 88-11), § 173-500-070, filed 6/9/88.]

WAC 173-500-080 Critical water resource situation response process. In areas subject to the department of ecology's jurisdiction, where there may be current or anticipated critical water resource or related water quality concerns, the local government(s), the state or the affected federally recognized tribe(s) may request that representatives from all three governmental entities and, as needed, appropriate federal agencies agree to the designation of the area as a critical water resource situation. All represented parties must agree to the designation. Upon designation, an intergovernmental group will be convened.

The purpose of the intergovernmental group is to cooperatively design a consultation strategy to address the problem(s) which triggered this critical situation response process.

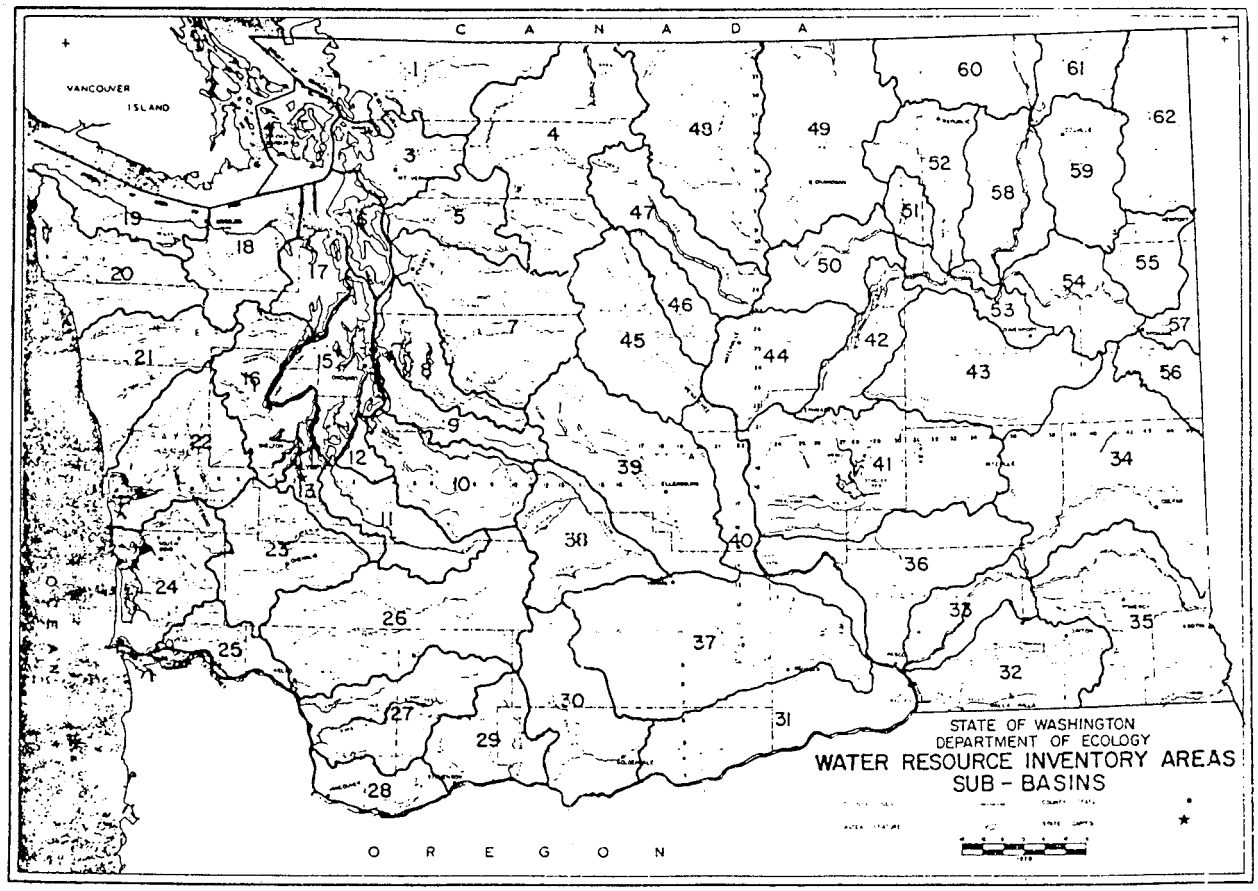
The legal rights and remedies available to the three governmental entities shall not be compromised or abridged by participation in the critical situation response process. However, all of the parties agree to undertake a good faith effort to resolve the critical water resource situation without first resorting to legal action.

When the intergovernmental group determines that a critical water resource situation exists or requires further evaluation or data collection, the parties will consider applying those tools necessary to protect the resources. These tools must be exercised within 12 months or as otherwise agreed to by the parties, and include, but are not limited to: Targeted conservation, efficiency, reuse; compliance and enforcement; dispute resolution assistance, memoranda of understanding and other agreements; local government restrictions on permit issuance or moratoria; basin withdrawal by adoption of administrative regulations under RCW 90.54.050 or limited state permit issuance.

[Statutory Authority: Chapters 34.05 and 90.54 RCW. 91-18-011 (Order 91-25), § 173-500-080, filed 8/23/91, effective 9/23/91.]

WAC 173-500-990 Map—Water resources inventory areas sub-basins.

WATER RESOURCES INVENTORY AREAS SUB-BASINS.



[Order DE 75-23, Map (codified as WAC 173-500-990), filed 1/6/76.]

Chapter 173-501 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—NOOKSACK WATER RESOURCE INVENTORY AREA (WRIA) 1

WAC

173-501-010	General provision.
173-501-020	Purpose.
173-501-030	Establishment of instream flows.
173-501-040	Surface water source limitations to further consumptive appropriation.
173-501-050	Lakes.
173-501-060	Ground water.
173-501-070	Exemptions.
173-501-080	Policy statement for future permitting actions.
173-501-090	Enforcement.
173-501-095	Appeals.
173-501-100	Regulation review.

WAC 173-501-010 General provision. These rules apply to waters within the Nooksack water resource inventory area (WRIA 1), as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (Minimum water flows and levels), and in accordance with chapter 173-500 WAC (Water resources management program).

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-010, filed 12/4/85.]

WAC 173-501-020 Purpose. Chapter 90.54 RCW (Water Resources Act of 1971) requires that utilization and management of waters of the state be guided by a number of fundamentals, including:

Uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state, are declared to be beneficial. (RCW 90.54.020(1))

The quality of the natural environment shall be protected and, where possible, enhanced as follows:

Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. Lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized

only in those situations where it is clear that overriding considerations of the public interest will be served. (RCW 90.54.020 (3)(a))

Waters of the state shall be of high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry. Notwithstanding that standards of quality established for the waters of the state would not be violated, wastes and other materials and substances shall not be allowed to enter such waters which will reduce the existing quality thereof, except in those situations where it is clear that overriding considerations of the public interest will be served. (RCW 90.54.020 (3)(b))

The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Nooksack water resource inventory area with instream flows and levels necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values, and navigational values, as well as recreation and water quality.

In administering and enforcing this regulation, the department's actions shall be consistent with the provisions of chapter 90.54 RCW.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-020, filed 12/4/85.]

WAC 173-501-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Stream Management Reach
Anderson Creek Gage # WDOE-2109-00	1.4 Section 19 T. 39 N., R. 4 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Bells Creek Gage # WDOE-2073-00	0.5 Section 21 T. 39 N., R. 5 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Bertrand Creek Gage # WDOE-2124-00	1.0 Section 26 T. 40 N., R. 2 E.	From U.S./Canada border to confluence with Nooksack River, including all tributaries.
California Creek Gage # WDOE-2134-00	3.0 Section 21 T. 40 N., R. 1 E.	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
Canyon Creek Gage # WDOE-2045-00	0.2 Section 35 T. 40 N., R. 6 E.	From confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Canyon Creek at Kulshan Gage # 12-2085-00	0.2 Section 27 T. 39 N., R. 5 E.	From confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Cornell Creek Gage # WDOE-2057-00	0.6 Section 1 T. 39 N., R. 6 E.	From the confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Dakota Creek near Blaine Gage # 12-2140-00	3.5 Section 9 T. 40 N., R. 1 E.	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
Deer Creek Gage # WDOE-2130-50	0.2 Section 28 T. 39 N., R. 2 E.	From the confluence with Tenmile Creek to headwaters, including all tributaries.
Fishtrap Creek at Lynden Gage # 12-2120-00	6.9 Section 16 T. 40 N., R. 3 E.	From U.S./Canada border to confluence with Nooksack River, including all tributaries.
Gallop Creek Gage # WDOE-2056-00	0.3 Section 7 T. 39 N., R. 7 E.	From the confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Hutchinson Creek Gage # WDOE-2101-00	1.8 Section 36 T. 38 N., R. 5 E.	From confluence with South Fork Nooksack River to headwaters, including all tributaries.
Johnson Creek Gage # WDOE-2149-00	0.5 Section 35 T. 41 N., R. 4 E.	From U.S./Canada border to headwaters including all tributaries.
Kendall Creek Gage # 12-2065-00	0.1 Section 3 T. 39 N., R. 5 E.	From the confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Maple Creek Gage # WDOE-2059-00	0.8 Section 30 T. 40 N., R. 6 E.	From confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Nooksack River (at Deming) 12-2105-00	36.6 Section 31 T. 39 N., R. 5 E.	From confluence with Smith Creek to confluence of North Fork and Middle Fork Nooksack Rivers.
Nooksack River (at Ferndale) 12-2131-00	5.8 Section 29 T. 39 N., R. 2 E.	From influence of mean annual high tide at low instream flow levels to confluence with, and including, Smith Creek.
Nooksack River (Middle Fork) 12-2080-00	5.0 Section 13 T. 38 N., R. 5 E.	From confluence with North Fork to headwaters.
Nooksack River (North Fork) 12-2072-00	44.1 Section 10 T. 39 N., R. 5 E.	From confluence with Middle Fork to headwaters.
Nooksack River (South Fork) 12-2090-00	5.0 Section 19 T. 38 N., R. 5 E.	From confluence with Nooksack River (mainstem) to headwaters.
Porter Creek Gage # WDOE-2084-00	0.7 Section 11 T. 38 N., R. 5 E.	From the confluence with M. Fk. Nooksack R. to headwaters, including all tributaries.
Racehorse Creek Gage # WDOE-2071-00	1.5 Section 11 T. 39 N., R. 5 E.	From confluence with N. Fk. Nooksack River to headwaters, including all tributaries.
Saar Creek Gage # 12-2155-00	0.2 Section 31 T. 41 N., R. 5 E.	From U.S./Canada border to headwaters, including all tributaries.
Silver Creek Gage # WDOE-2132-00	2.0 Section 4 T. 38 N., R. 2 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Skookum Creek near Wickersham Gage # 12-2095-00	0.1 Section 27 T. 37 N., R. 5 E.	From confluence with South Fork Nooksack River to headwaters, including all tributaries.

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Stream Management Reach
Smith Creek Gage # WDOE-2111-00	0.8 Section 22 T. 39 N., R. 4 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Sumas River near Sumas Gage # 12-2145-00	2.1 Section 2 T. 41 N., R. 4 E.	From U.S./Canada border to headwaters including all tributaries.
Tenmile Creek at Laurel Gage # 12-2129-00	4.4 Section 13 T. 39 N., R. 2 E.	From confluence with Nooksack River to headwaters, including all tributaries.
Terrell Creek Gage # WDOE-2133-00	2.2 Section 31 T. 40 N., R. 1 E.	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
Wiser Lake Creek Gage # WDOE-2126-00	0.7 Section 2 T. 39 N., R. 2 E.	From confluence with Nooksack River to headwaters, including all tributaries.

(2) Instream flows are established for the stream management units in WAC 173-501-030(1) as follows:

Instream Flows in the Nooksack WRIA
(Instantaneous cubic feet per second)

Month	Day	WDOE-2109-00 Anderson Cr.	WDOE-2073-00 Bells Cr.	WDOE-2124-00 Bertrand Cr.	WDOE-2134-00 California Cr.
Jan.	1	50	4*	90*	40*
	15	50	4*	90*	40*
Feb.	1	50	4*	90*	40*
	15	50	3*	90*	40*
Mar.	1	50	2*	90*	40*
	15	50	2*	90*	25*
Apr.	1	40	3*	80*	18*
	15	31	4*	60*	13*
May	1	25*	5*	50*	9*
	15	20*	6*	40*	6*
Jun.	1	16*	6*	33*	4*
	15	13*	6*	25*	3*
Jul.	1	10*	3*	21*	2*
	15	8*	2*	17*	2*
Aug.	1	6*	1*	13*	2*
	15	6*	1*	13*	2*
Sep.	1	6*	1*	13*	2*
	15	6*	1*	13*	2*
Oct.	1	8*	1*	13*	2*
	15	11*	2*	20*	2*
Nov.	1	15*	3*	30*	4*
	15	20	4*	40*	7*
Dec.	1	30	4*	60*	15*
	15	50	4*	90*	40*

* Denotes closure period. No further consumptive rights issued for use during this time.

Month	Day	WDOE-2045-00 Canyon Creek	WDOE-2085-00 Canyon (Lk) Cr.	WDOE-2057-00 Cornell Creek
Jan.	1	150	50	20
	15	150	50	20
Feb.	1	150	50	20
	15	150	50	20
Mar.	1	150	50	20
	15	150	50	20
Apr.	1	150	50	20
	15	150	50	20
May	1	150	50	20
	15	150	50	20
Jun.	1	150	50	15
	15	150	50	9
Jul.	1	150*	50*	25*
	15	80*	30*	3*
Aug.	1	40*	15*	3*
	15	40*	10*	3*
Sep.	1	40*	10*	3*
	15	40*	10*	3*
Oct.	1	55*	20*	5*
	15	80*	23*	10*
Nov.	1	90*	27*	20*
	15	110	32	20
Dec.	1	130	40	20
	15	150	43	20

Month	Day	12-2140-00 Dakota Creek	WDOE-2130-50 Deer Creek	12-2120-00 Fishtrap Cr.
Jan.	1	60*	10*	55*
	15	60*	10*	55*
Feb.	1	60*	10*	55*
	15	60*	10*	55*
Mar.	1	60*	10*	55*
	15	40*	10*	55*
Apr.	1	30*	8*	45*
	15	20*	6*	35*
May	1	15*	5*	30*
	15	10*	4*	25*
Jun.	1	7*	3*	20*
	15	5*	2*	15*
Jul.	1	4*	2*	12*
	15	3*	1*	10*
Aug.	1	3*	1*	8*
	15	3*	1*	8*
Sep.	1	3*	1*	8*
	15	3*	1*	8*
Oct.	1	3*	2*	18*
	15	4*	2*	20*
Nov.	1	5*	3*	30*
	15	10*	4*	40*
Dec.	1	20*	5*	55*
	15	60*	7*	55*

Month	Day	WDOE-2056-00 Gallop Creek	WDOE-2101-00 Hutchinson Creek	WDOE-2149-00 Johnson Creek	12-2065-00 Kendall Cr.
Jan.	1	12	60	60*	10*
	15	12	60	60*	10*
Feb.	1	12	60	60*	10*
	15	12	60	60*	10*
Mar.	1	12	60	60*	10*
	15	12	60	60*	10*
Apr.	1	`12	60	60*	10*
	15	12	60	45*	10*
May	1	12	60	35*	10*
	15	12	60	25*	10*
Jun.	1	12	60	20*	10*
	15	12	60	15*	10*
Jul.	1	12*	60*	12*	10*
	15	8*	40*	9*	6*
Aug.	1	6*	25*	9*	4*
	15	5*	15*	9*	3*
Sep.	1	5*	15*	9*	3*
	15	5*	15*	9*	3*
Oct.	1	5*	25*	9*	5*
	15	5*	30*	9*	6*
Nov.	1	8*	35*	13*	7*
	15	12	40	20*	8*
Dec.	1	12	50	30*	9*
	15	12	60	60*	10*

Month	Day	WDOE-2059-00 Maple Creek	12-2105-00 Nooksack R. (at Deming)	12-2131.00 Nooksack R. (at Ferndale)
Jan.	1	20	2050	2900
	15	20	2050	2900
Feb.	1	20	2150	2900
	15	30	2350	2900
Mar.	1	30	2350	2900
	15	30	2350	2900
Apr.	1	30	2350	2900
	15	30	2350	2900
May	1	30	3325	2900
	15	30	3400	3500
Jun.	1	30	3400	3500
	15	30	3400	3500
Jul.	1	20*	3400	3500
	15	20*	2950	3000
Aug.	1	20*	1700	2400
	15	10*	1700	1900
Sep.	1	10*	1700	1800
	15	10*	1700	1700
Oct.	1	20*	1700	1700
	15	20*	2050	2050
Nov.	1	20*	2050	2300
	15	20	2050	2500
Dec.	1	20	2050	2900
	15	20	2050	2900

Month	Day	12-2080-00 Nooksack River (Middle Fork)	12-2072-00 Nooksack River (North Fork nr. Deming)	12-2090-00 Nooksack River (South Fork)
Jan.	1	275	1100	650
	15	275	1100	650
Feb.	1	380	1100	650
	15	380	1100	850
Mar.	1	380	1100	850
	15	380	1100	850
Apr.	1	380	1100	850
	15	380	1100	850
May	1	380	1100	850
	15	450	2000	850
Jun.	1	525	2000	850
	15	525	2000	850
Jul.	1	525	2000	850*
	15	400	2000	550*
Aug.	1	275	1100	300*
	15	275	1100	300*
Sep.	1	275	1100*	300*
	15	275	1100*	300*
Oct.	1	275	1100*	300*
	15	275	1100*	650*
Nov.	1	275	1100*	650
	15	275	1100	650
Dec.	1	275	1100	650
	15	275	1100	650

Month	Day	WDOE-2084-00 Porter Creek	WDOE-2071-00 Racehorse Cr.	WDOE-2155-00 Saar Creek
Jan.	1	10	60	35*
	15	10	60	35*
Feb.	1	10	60	35*
	15	10	60	35*
Mar.	1	10	60	35*
	15	10	60	35*
Apr.	1	10	60	35*
	15	10	80	35*
May	1	10	80	35*
	15	10	90	35*
Jun.	1	10	90	35*
	15	10	90	35*
Jul.	1	10*	50*	22*
	15	6*	35*	15*
Aug.	1	3*	20*	9*
	15	3*	20*	6*

Month	Day	WDOE-2084-00 Porter Creek	WDOE-2071-00 Racehorse Cr.	WDOE-2155-00 Saar Creek
Sep.	1	3*	20*	6*
	15	3*	20*	6*
Oct.	1	3*	20*	12*
	15	6*	30*	14*
Nov.	1	10*	35*	17*
	15	10	40	19*
Dec.	1	10	47	23*
	15	10	55	35*

Month	Day	WDOE-2132-00 Silver Creek	12-2095-00 Skookum Cr.	WDOE-2111-00 Smith Creek
Jan.	1	12	115	40
	15	12	115	40
Feb.	1	12	115	40
	15	12	115	40
Mar.	1	12	115	40
	15	12	115	40
Apr.	1	12	115	40
	15	12	115	60
May	1	12*	115	60*
	15	9*	115	60*
Jun.	1	7*	115	60*
	15	6*	115	40*
Jul.	1	4*	115*	35*
	15	3*	66*	25*
Aug.	1	3*	66*	15*
	15	3*	66*	10*
Sep.	1	3*	66*	10*
	15	3*	66*	10*
Oct.	1	4*	66*	15*
	15	4*	80*	20*
Nov.	1	6*	115*	23*
	15	10	115	25
Dec.	1	12	115	30
	15	12	115	35

Month	Day	12-2145-00 Sumas River	12-2129-00 Tenmile Cr.	WDOE-2133-00 Terrell Cr.	WDOE-2126-00 Wiser Lk. Cr.
Jan.	1	100*	40*	12	11
	15	100*	40*	12	11
Feb.	1	100*	40*	12	11
	15	100*	40*	12	11
Mar.	1	100*	40*	12	11
	15	100*	40*	12	11
Apr.	1	100*	40*	12	9
	15	100*	40*	12	7
May	1	70*	30*	8*	6*
	15	60*	22*	5*	5*
Jun.	1	40*	17*	4*	4*
	15	35*	12*	3*	3*
Jul.	1	25*	10*	2*	2*
	15	20*	7*	2*	2*
Aug.	1	20*	5*	2*	2*
	15	20*	5*	2*	2*
Sep.	1	20*	5*	2*	2*
	15	20*	6*	2*	2*
Oct.	1	20*	7*	2*	2*
	15	20*	10*	2*	2*
Nov.	1	35*	15*	3*	3*
	15	60*	20*	5	6
Dec.	1	80*	30*	7	8
	15	100*	40*	12	11

(3) Instream flow hydrographs, as represented in Appendix A of the document entitled Nooksack Instream Resources Protection Program, shall be used for identification of instream flows on those days not specifically identified in WAC 173-501-030(2).

(4) Future consumptive water right permits issued hereafter for diversion of surface water in the Nooksack WRIA

and perennial tributaries shall be expressly subject to instream flows established in WAC 173-501-030 (1) through (3) as measured at the appropriate gage, preferably the nearest one downstream and at all other downstream control stations, except for those uses described in WAC 173-501-070 (1) through (3).

(5) Projects that would reduce the flow in a section of stream's length (e.g., hydroelectric projects that withdraw streamflow from some length of the channel) are considered consumptive with respect to the affected stream reach. Such projects will be subject to instream flow requirements as specified by the department. These flows will be those established in WAC 173-501-030 (1) through (3) and WAC 173-501-040, or may be flows specifically tailored to that particular project and stream reach. When studies are required to determine such reach and project-specific flow requirements, the department will require the project proponent to conduct such studies in consultation with affected state and federal agencies and Indian tribes.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-030, filed 12/4/85.]

WAC 173-501-040 Surface water source limitations to further consumptive appropriation. (1) The following table indicates the status of streams, tributaries and lakes affected by this chapter.

Source Name	Tributary To	Former Administrative Status	Status Under Regulation	Period of Closure	Flow Established
Anderson Creek	Nooksack River	low flow	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Bells Creek	North Fork Nooksack	open	closure	year round	WAC 173-501-030(2)
Bertrand Creek	Nooksack River	closure	closure	year round	WAC 173-501-030(2)
Black Slough	Nooksack - South Fork	low flow	low flow		
California Creek	Drayton Harbor	closure	closure	year round	WAC 173-501-030(2)
Canyon Creek	North Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Canyon (Lake) Creek	Middle Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Chuckanut Creek	Chuckanut Bay	low flow	closure	year round	natural flow
Colony Creek (incl. Whitehall)	Samish Bay	open	closure	year round	natural flow
Cornell Creek	North Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Dakota Creek	Drayton Harbor	closure	closure	year round	WAC 173-501-030(2)
Deer Creek	Barrett Lake (Tenmile)	closure	closure	year round	WAC 173-501-030(2)
Fishtrap Creek (incl. Double Ditch)	Nooksack River	closure	closure	year round	WAC 173-501-030(2)
Fourmile Creek	Tenmile Creek	closure	closure	year round	
Gallop Creek	North Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Hutchinson Creek	South Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Johnson Creek	Sumas River	closure	closure	year round	WAC 173-501-030(2)
Kamm Ditch/Stickney Slough	Nooksack River	closure	closure	year round	natural flow
Kendall Creek	North Fork Nooksack	open	closure	year round	WAC 173-501-030(2)
Maple Creek	North Fork Nooksack	open	closure	July 1-Oct. 31	WAC 173-501-030(2)
Nooksack River - mainstem	Bellingham Bay	low flow	minimum flow (new flow)		WAC 173-501-030(2)
Nooksack River - Middle Fk.	Nooksack River	low flow	minimum flow (new flow)		WAC 173-501-030(2)
Nooksack River - North Fk.	Nooksack River	low flow	partial year closure	Sept. 1-Oct. 31	WAC 173-501-030(2)
Nooksack River - South Fk.	Nooksack River	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Oyster Creek	Samish Bay	open	closure	year round	natural flow
Padden Creek	Bellingham Bay	open	closure	year round	natural flow
Porter Creek	Middle Fork Nooksack	open	partial year closure	July 1-Oct. 1	WAC 173-501-030(2)
Racehorse Creek	North Fork Nooksack	open	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Saar Creek	Vedder Canal-Canada	open	closure	year round	WAC 173-501-030(2)
Saxon Creek	South Fork Nooksack	open	closure	year round	natural flow
Silver Creek	Nooksack River	low flow	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Skookum Creek	South Fork Nooksack	low flow	partial year closure	July 1-Oct. 31	WAC 173-501-030(2)
Smith Creek	Nooksack River	low flow	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Squalicum Creek	Bellingham Bay	closure	closure	year round	
Sumas River	Vedder Canal-Canada	closure	closure	year round	WAC 173-501-030(2)
Tenmile Creek	Nooksack River	closure	closure	year round	WAC 173-501-030(2)
Terrell Creek	Birch Bay	open	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Thompson Creek	Glacier Cr./N. Fk.	open	partial year closure	July 1-Oct. 31	natural flow
Unnamed Stream - Elder Ditch/Scott Ditch	Nooksack River	low flow	low flow		
Unnamed stream - White Creek	Colony Creek	closure	closure		
Whatcom Creek*	Bellingham Bay	open	closure	year round	natural flow
Wiser Lake Creek	Nooksack River	low flow	partial year closure	May 1-Oct. 31	WAC 173-501-030(2)
Lummi Indian Reservation Streams		closure	closure		
Barrett Lake	Tenmile Creek	closure	closure		NA
Green Lake	Fourmile Creek	closure	closure		NA
Lake Terrell	Terrell Creek	closure	closure		NA
Lake Whatcom**	Whatcom Creek	court-ordered lake level	closure	year round	
Wiser Lake	Wiser Lake Creek	closure	closure		NA

For streams listed as "natural flow," insufficient data are available to develop instream flows outside the closure period. Water right applications for consumptive use will be considered on a case by case basis in consultation with the departments of fisheries and game; tribes will also be notified.

Streams which are not specifically listed in this regulation are affected by the regulation if they are tributary to streams or lakes listed herein; otherwise such streams are not affected.

* No exemptions. See WAC 173-501-070(2).

** Lake Whatcom and its tributaries are closed to all further consumptive appropriation; however, any water right applications for consumptive use which were on file with the department of ecology on August 7, 1985 shall be exempt from the closure through the period extending one year from the effective date of this chapter.

(2) When a project (as described in WAC 173-501-030(5)) is proposed on a stream that is closed to further appropriations, the department shall deny the water right application unless the project proponent can adequately demonstrate that the project does not conflict with the intent of the closure.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-040, filed 12/4/85.]

WAC 173-501-050 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-050, filed 12/4/85.]

WAC 173-501-060 Ground water. If department investigations determine that there is significant hydraulic continuity between surface water and the proposed ground water source, any water right permit or certificate issued shall be subject to the same conditions as affected surface waters. If department investigations determine that withdrawal of ground water from the source aquifers would not interfere with stream flow during the period of stream closure or with maintenance of minimum instream flows, then applications to appropriate public ground waters may be approved.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-060, filed 12/4/85.]

WAC 173-501-070 Exemptions. (1) Nothing in this chapter shall affect existing water rights, perfected riparian rights, federal Indian and non-Indian reserved rights, appropriative or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Single domestic, (including up to 1/2 acre lawn and garden irrigation and associated noncommercial stockwatering) shall be exempt from the provisions established in this chapter, except that Whatcom Creek is closed to any further appropriation, including otherwise exempted single domestic use. For all other streams, when the cumulative impact of single domestic diversions begins to significantly affect the quantity of water available for instream uses, then any water rights issued after that time shall be issued for in-house use only, if no alternative source is available.

(3) Nonconsumptive uses which are compatible with the intent of this chapter may be approved.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-070, filed 12/4/85.]

WAC 173-501-080 Policy statement for future permitting actions. (1) No rights to divert or store public surface waters of WRIA 1 shall hereafter be granted which shall conflict with the purpose of this chapter except as provided in RCW 90.54.020 (3)(a).

(2) Consistent with the provisions of chapter 90.54 RCW, it is the policy of the department to preserve an appropriate minimum instream flow in all perennial streams and rivers as well as the water levels in all lakes in the Nooksack WRIA by encouraging the use of alternate sources of water which include (a) ground water, (b) storage water, or (c) acquisition of existing water rights.

[Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-080, filed 12/4/85.]

WAC 173-501-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-501-090, filed 6/9/88. Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-090, filed 12/4/85.]

WAC 173-501-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-501-095, filed 6/9/88.]

WAC 173-501-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-501-100, filed 6/9/88. Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-100, filed 12/4/85.]

Chapter 173-503 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—LOWER AND UPPER SKAGIT WATER RESOURCES INVENTORY AREA (WRIA 3 AND 4)

WAC

173-503-010	General provision.
173-503-020	Purpose.
173-503-025	Definitions.
173-503-030	Findings.
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173-503-050	Water availability determination.
173-503-051	Future stream closures.

173-503-052	Future out-of-stream uses in the Upper Skagit River subbasin management unit.
173-503-060	Future water rights.
173-503-061	Baker River project settlement agreement flows.
173-503-070	Exemptions.
173-503-071	Lakes and ponds.
173-503-072	Administrative requirements.
173-503-073	Water reservations.
173-503-074	Establishment of subbasin management units and reservation quantities by subbasin management unit.
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173-503-110	Establishment of trust water rights program.
173-503-116	Incorporating new hydrologic investigations and information in rule.
173-503-120	Maps.
173-503-130	Appeals.
173-503-140	Regulation review.
173-503-150	Water rights subject to instream flows predating the reservations.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-503-080	Policy statement for future permitting actions. [Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-080, filed 3/14/01, effective 4/14/01.] Repealed by 06-11-070 (Order 05-15), filed 5/15/06, effective 6/15/06. Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW.

WAC 173-503-010 General provision. These rules apply to waters within the Lower and Upper Skagit water resources inventory area (WRIA 3 and 4), as defined in WAC 173-500-040, excluding the Samish River subbasin, and any islands surrounded by saltwater including Fidalgo, Guemes, Cypress, Hope and Goat islands. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (Minimum water flows and levels), and chapter 173-500 WAC (Water resources management program).

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-010, filed 5/15/06, effective 6/15/06. Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-010, filed 3/14/01, effective 4/14/01.]

WAC 173-503-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Lower and Upper Skagit water resources inventory area, including the Cultus Mt. Tributaries, as defined in WAC 173-503-040, with instream flows and levels necessary to provide for the protection and preservation of wildlife, fish, scenic, aesthetic, and other environmental values, and navigational values, as well as recreation and water quality. In addition, these flows are necessary to satisfy stock watering objectives, consistent with RCW 90.22.040.

Chapter 90.54 RCW (Water Resources Act of 1971) requires that utilization and management of waters of the state be guided by a number of fundamentals, including:

Uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state, are declared to be beneficial. (RCW 90.54.020(1))

The quality of the natural environment shall be protected and, where possible, enhanced, as follows:

Perennial rivers and streams of the state shall be retained with base flows necessary to provide for the protection and preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. Lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served. (RCW 90.54.020 (3)(a))

Waters of the state shall be of high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry. Notwithstanding that standards of quality established for the waters of the state would not be violated, wastes and other materials and substances shall not be allowed to enter such waters which will reduce the existing quality thereof, except in those situations where it is clear that overriding considerations of the public interest will be served. (RCW 90.54.020 (3)(b))

In furtherance of these statutory objectives, this chapter creates a reservation of a limited amount of water for specific future uses. It establishes closures for tributaries, and sets forth conditions for future water right permitting.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-020, filed 5/15/06, effective 6/15/06. Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-020, filed 3/14/01, effective 4/14/01.]

WAC 173-503-025 Definitions. For the purposes of this chapter, the following definitions shall be used:

"Agricultural irrigation" means the application of water to crops grown for commercial agricultural purposes.

"Allocation" means the designation of specific amounts of water for specific beneficial uses.

"Appropriation" means the process of legally acquiring the right to use specific amounts of water for beneficial uses, as consistent with the ground and surface water codes and other applicable water resource statutes. This term refers to both surface and ground water right permits and to ground water withdrawals otherwise exempted from permit requirements under RCW 90.44.050.

"Commercial/industrial use" means use of water for the purpose of business activities, including human domestic needs within the business property, manufacturing or production activities and maintenance of vegetated areas on the business property. For permit exempt commercial/industrial water ground water uses, it also means irrigation of agricultural products.

"Consumptive use" means a use of water whereby there is a diminishment of the water source.

"Department" means the Washington state department of ecology.

"Domestic water use" means, for the purposes of administering WAC 173-503-073 and 173-503-074 only, potable water to satisfy the human domestic needs of a house-

hold, including water used for drinking, bathing, sanitary purposes, cooking, laundering, maintenance of vegetation, care of household pets and incidental livestock, and other incidental uses. For permit-exempt domestic water use of ground water sources, total outdoor watering for multiple residences shall be consistent with the ground water permit exemption provisions in RCW 90.44.050.

"Incidental stock water use" means, for the purposes of administering WAC 173-503-073 and 173-503-074 only, sufficient water to care for small scale domestic livestock operations.

"Instream flow" means a stream flow level set in rule that is needed to protect and preserve fish, wildlife, scenic, aesthetic, recreational, water quality, and other environmental values, and navigational values. The term "instream flow" means a base flow under chapter 90.54 RCW, a minimum flow under chapter 90.03 or 90.22 RCW, or a minimum instream flow under chapter 90.82 RCW.

"Maximum average consumptive daily use" means the use of water measured over the highest period of use divided by the number of days in that period, less any applicable return flow recharge credit.

"Mitigation plan" means a scientifically sound plan voluntarily submitted by a proponent to offset the impacts of a proposed water use and must be approved by the department.

"Municipal water supplier" means an entity that supplies water for municipal water supply purposes. (RCW 90.03.015)

"Municipal water supply purposes" means a beneficial use of water as defined in RCW 90.03.015, including:

(a) For residential purposes through fifteen or more residential service connections or for providing residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year;

(b) For governmental or governmental proprietary purposes by a city, town, public utility district, county, sewer district, or water district; or

(c) Indirectly for the purposes in (a) or (b) of this subsection through the delivery of treated or raw water to a public water system for such use.

"Nonconsumptive use" means a type of water use where either there is no diversion from a source body, or where there is no diminishment of the source.

"Permit-exempt withdrawals" or **"permit exemption"** means a ground water withdrawal exempted from permit requirements under RCW 90.44.050, but which is otherwise subject to the ground water code.

"Public water system" means any system defined in RCW 70.119.020(8) which provides water for human consumption through pipes or other constructed conveyances, excluding a system serving only one single-family residence and excluding a system with four or fewer connections all of which serve residences on the same farm. This term includes group domestic systems.

"Reservation" means an allocation of water for future beneficial uses. The priority date of a given allocation from the reservation is the same as the effective date of rulemaking that established the reservation.

"Retail service area" means the area where a municipal water supplier currently provides direct water service and has documented plans to provide new water service.

"Scientifically sound" means adhering to the requirements of best available science as defined in WAC 365-195-905 (5)(a) and (b).

"Stream management unit" means a stream segment, reach, or tributary used to describe the part of the relevant stream to which a particular instream flow level applies. Most of these units contain a control station.

"Stock water" means drinking water supply for the raising of livestock animals and associated uses of water related to care of stock animals.

"Subbasin management unit" means a stream segment, reach, or tributary basin, used to describe where a particular instream flow level, water reservation budget, or water diversion or withdrawal limit applies.

"Timely and reasonable manner" means the way in which potable water service can be provided by a public water system to a property as defined in local coordinated water system plans, or by public water systems, or by local legislative authorities.

"Withdrawal" means the extraction and use of ground water, or the diversion and use of surface water.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-025, filed 5/15/06, effective 6/15/06.]

WAC 173-503-030 Findings. Ecology finds that:

(1) The magnitude or variability of flows are important in maintaining the aquatic ecosystem that sustains both fish and other valuable resources. Criteria to limit total withdrawals of water from the Lower Skagit River were developed to protect the aquatic ecosystem in the region covered by this rule.

(2) To protect the estuary area below river mile 8.1 the duration of flow inundation of at least one foot of depth, in selected estuary habitat, can be reduced no more than ten percent from existing conditions from the date of enactment of this regulation. This criterion applies to the period of February through August to withdrawals from the Skagit River. Total withdrawals greater than eight hundred thirty-six cubic feet per second during that period will result in a greater than ten percent deviation from existing conditions and therefore would result in harm to the fisheries resources and aquatic ecosystem in the region covered by this rule.

(3) Protection of the aquatic ecosystem of the estuary in the months of September through January requires that the total withdrawals of water from the Skagit River not exceed 1/10 of the fifty percent exceedance flow for each month, based on the period of record (1/1/41 - 12/31/95) for the U.S. Geological Survey (USGS) stream gage on the Skagit River near Mt. Vernon, WA (Sta. #12-2005-00) in order to maintain channel morphology and other estuarine and riverine functions. This equates to a low point of eight hundred thirty cubic feet per second during the month of September. Total withdrawals greater than eight hundred thirty cubic feet per second during the month of September will not protect and preserve fish, wildlife and other environmental values and therefore would be harmful to fisheries resources and the aquatic ecosystem in the region covered by this rule in violation of chapter 90.54 RCW.

(4) The rules setting minimum flows in the Lower and Upper Skagit River (WRIA 3 and 4) (WAC 173-503-040) and finding certain waters available (WAC 173-503-050) are necessary to protect and preserve wildlife, fish, scenic, aesthetic and other environmental values.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-030, filed 3/14/01, effective 4/14/01.]

WAC 173-503-040 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Stream Management Unit Name Control Station No.	Control Station by River Mile and Section, Township and Range; Latitude and Longitude	Stream Management Reach
Skagit Mainstem:		
Skagit River near Mt. Vernon, WA USGS Sta. #12-2005-00	River Mile (RM) 15.7	From mouth of Skagit River including tidal fluctuation to headwaters.*
Cultus Mountain Tributaries:		
Mundt Creek	Stream gage will be installed at RM 3.4 (Sec/Twn/Rng; Lat/Long)	From mouth to headwaters.
Turner Creek	Stream gage will be installed at RM 4.2 (Sec/Twn/Rng; Lat/Long)	From mouth to headwaters.
Gilligan Creek	Stream gage will be installed at RM 3.2 (Sec/Twn/Rng; Lat/Long)	From mouth to headwaters.
Salmon Creek	Staff gage periodically recorded will be installed at RM 4.3 (Sec/Twn/Rng; Lat/Long)	From mouth to headwaters.

*Other additional control stations and instream flows may be established in WRIAs 3 & 4 to improve water management.

(2) Instream flows are established for the stream management units in WAC 173-503-040(1) as follows (See Figures 1 through 3):

Instream Flows as measured at USGS Sta. #12-2005-00
(Instantaneous cubic feet per second)

Month	Day	USGS Sta. #12-2005-00 Skagit River
Jan.	1–31	10,000
Feb.	1–29	10,000
Mar.	1–31	10,000
Apr.	1–30	12,000
May	1–31	12,000
Jun.	1–30	12,000
Jul.	1–31	10,000
Aug.	1–31	10,000
Sep.	1–30	10,000
Oct.	1–31	13,000
Nov.	1–15	13,000
	16–30	11,000
Dec.	1–15	11,000
	16–31	10,000

Instream Flows for Cultus Mountain Tributaries, WRIA 3
(Instantaneous cubic feet per second)

Month	Day	RM 3.4 Mundt Creek	RM 4.2 Turner Creek	RM 3.2 Gilligan Creek	RM 4.3 Salmon Creek
Jan.	1-31	6.4	7.9	19.8	4.0
Feb.	1-29	6.4	5.4	19.8	4.0
Mar.	1-15	6.4	5.4	19.8	4.0
	16-31	9.4	5.4	27.7	4.0
Apr.	1-30	9.4	7.9	31.7	4.0
May	1-31	9.4	7.9	31.7	1.4
Jun.	1-30	9.4	4.9	31.7	1.4
Jul.	1-31	7.6	4.9	39.6	1.4
Aug.	1-31	7.6	4.9	39.6	1.4
Sep.	1-30	7.6	4.9	39.6	4.0
Oct.	1-31	7.6	7.9	23.8	4.0
Nov.	1-30	9.4	7.9	27.7	4.0
Dec.	1-31	9.4	7.9	27.7	4.0

(3) Instream flow hydrograph.

Figure 1

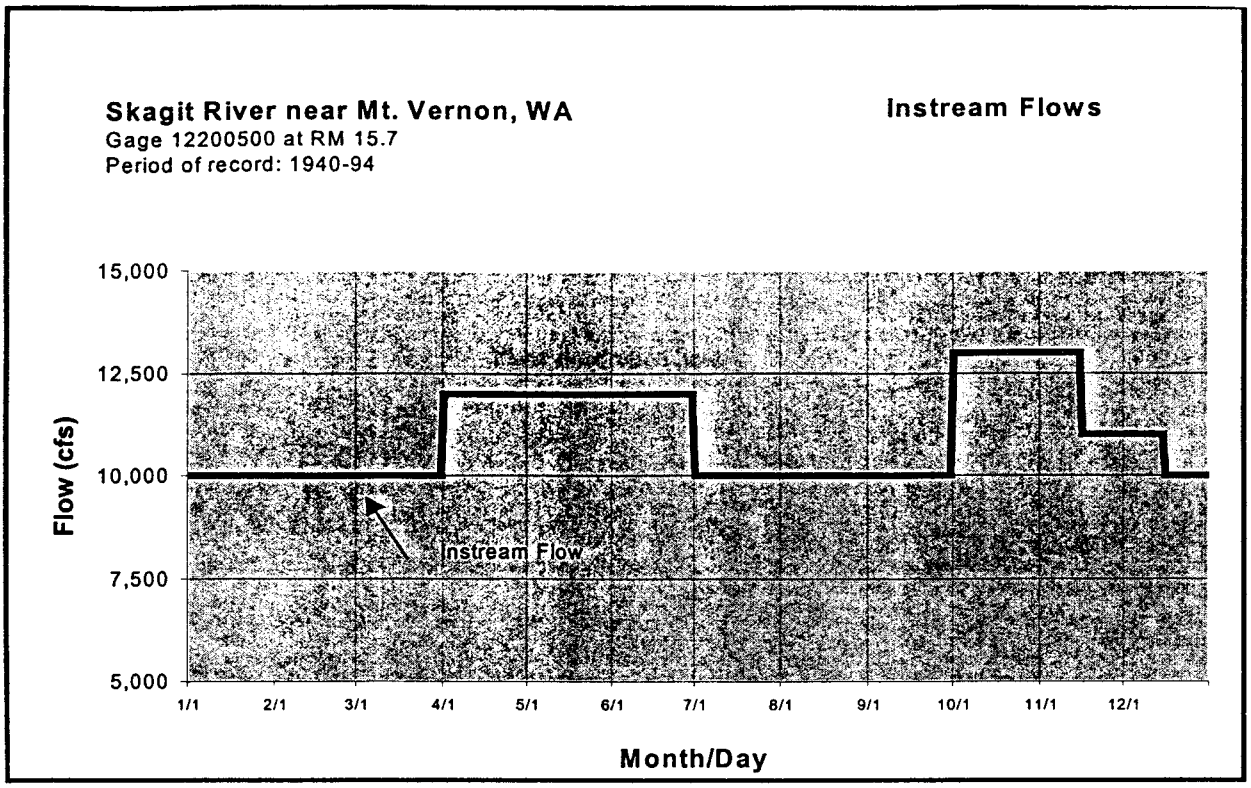


Figure 2

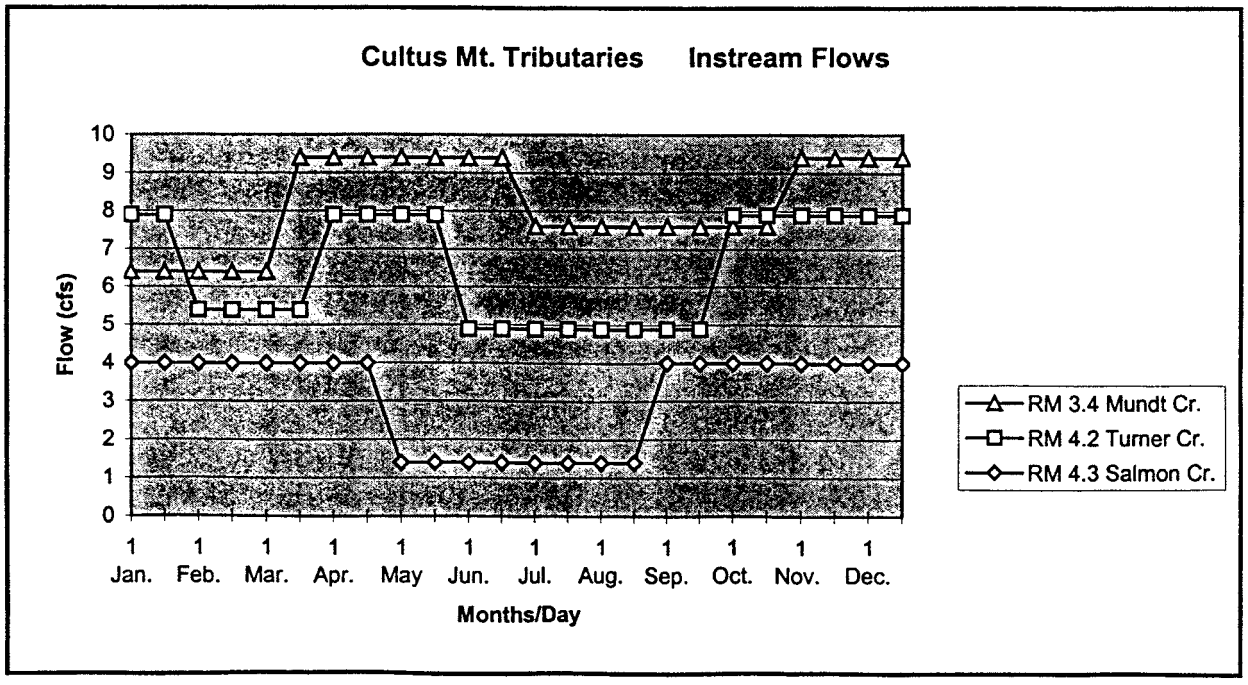
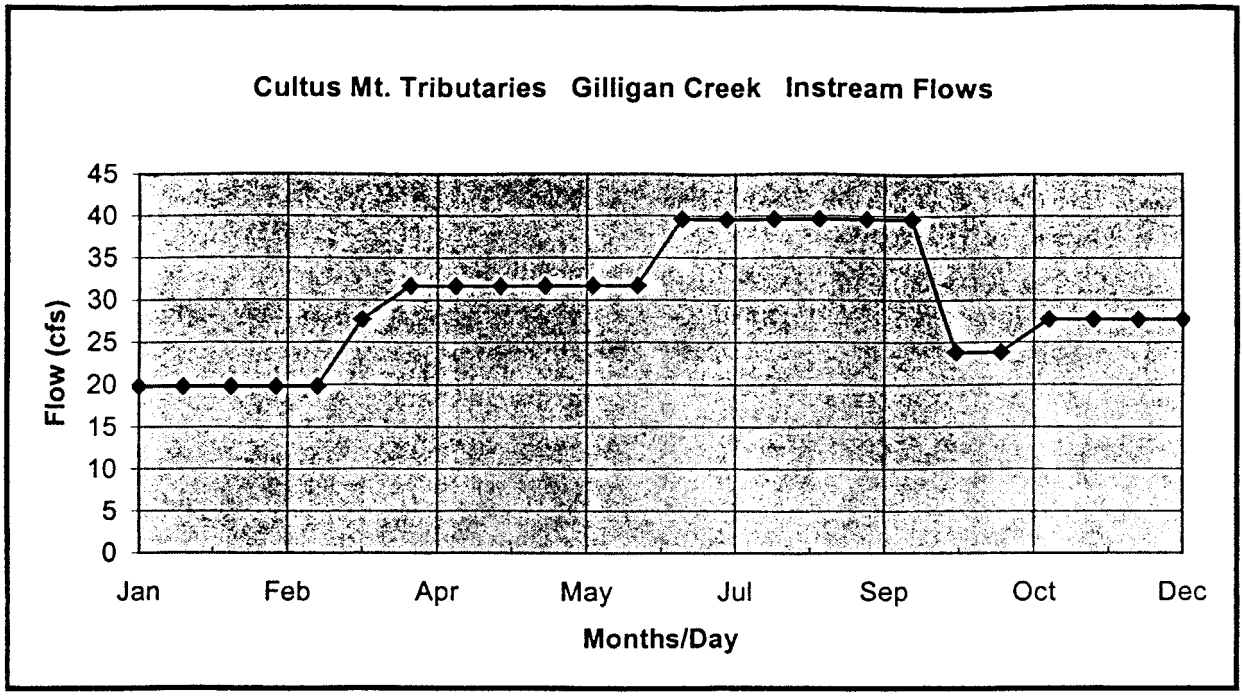


Figure 3



(4) The instream flow hydrographs, as represented in Figures 1 through 3 in WAC 173-503-040(3) shall be used for identification of instream flows.

(5) Future consumptive water right permits issued hereafter for diversion of surface water in the Lower and Upper Skagit (WRIA 3 and 4) and perennial tributaries, and withdrawal of ground water in hydraulic continuity with surface water in the Skagit River and perennial tributaries, shall be expressly subject to instream flows established in WAC 173-503-040 (1) through (3) as measured at the appropriate gage, and also subject to WAC 173-503-060.

(6) Future consumptive water rights issued to applications pending at the effective date of the regulation are superior in priority date but shall be conditioned on the instream flows established in WAC 173-503-040 (1) through (3). (RCW 90.03.247)

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-040, filed 3/14/01, effective 4/14/01.]

WAC 173-503-050 Water availability determination. (1) The department has made a determination that two hundred cubic feet per second is available to be appropriated through ground water withdrawal or surface water diversion for further instantaneous consumptive appropriation in the Lower and Upper Skagit watershed (WRIA 3 and 4). These waters are available for appropriation, subject to existing rights, exemptions in WAC 173-503-070, and instream flows in WAC 173-503-040(2). This determination was based upon review of existing water right records and existing water use, and is consistent with the findings section (WAC 173-503-030) of this regulation.

(2) The department advises that water rights issued to appropriate these waters determined to be available by this rule will be interruptible rights.

(3) After these instantaneous diversion or withdrawal of the 200 cfs quantities identified in subsection (1) of this section have been allocated by ecology, the Lower and Upper Skagit Watershed (WRIA 3 and 4) shall be withdrawn from further consumptive appropriations. This rule may be reopened to further consumptive appropriation only if further information demonstrates that such appropriations can be made consistent with the finding section (WAC 173-503-030) and the instream flow section (WAC 173-503-040). If further information demonstrates that the amount in the availability determination set forth in subsection (1) of this section should have been less than two hundred cubic feet per second, ecology will not be bound by the two hundred cubic feet per second number when processing individual water right applications.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-050, filed 3/14/01, effective 4/14/01.]

WAC 173-503-051 Future stream closures. (1) The department determines that, based on historical and current low flows and existing water uses, water is not available for year-round consumptive appropriation in the Skagit River basin. However, in order to provide for some limited future out-of-stream uses, the department has set aside a limited amount of water for future out-of-stream uses in the subbasin management units of the Skagit River identified in WAC 173-503-074 that can be used under certain criteria described in WAC 173-503-073. When and if the full amount of the reserved quantities are allocated and used by permitted or exempt use, those subbasins identified as subject to closure in WAC 173-503-074 shall thereby be closed without further action of the department, except for the Upper Skagit, Middle Skagit, and Lower Skagit subbasin management units, which will remain open to out-of-stream uses subject to instream

flows. If subsequent water use information indicates that the basin can be reopened, the department shall notify the public and local governments of the change in the status of the basin as provided for below.

(2) The department will notify the public of effective subbasin closures and reopening of subbasins through publication of a notice in a newspaper of general circulation in each affected county in WRIA 3 and 4.

(3) Exceptions to the closures and instream flow requirements are provided in WAC 173-503-060, 173-503-073, 173-503-074 and 173-503-075.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-051, filed 5/15/06, effective 6/15/06.]

WAC 173-503-052 Future out-of-stream uses in the Upper Skagit River subbasin management unit. In order to allow for some limited future out-of-stream uses while protecting instream resources in the Upper Skagit River subbasin management unit, the department has set aside a limited amount of water for future out-of-stream uses in the Upper Skagit subbasin management unit and important tributaries in this subbasin management unit identified in Figure 5 of WAC 173-503-120.

All appropriations in each Upper Skagit tributary subbasin identified in Figure 5 of WAC 173-503-120 are to be from ground water sources only and are cumulatively limited to a maximum average consumptive daily use of 25,851 gallons per day in each tributary basin identified in Figure 5 of WAC 173-503-120. These uses must comply with the criteria described in WAC 173-503-073 and will be debited against the Upper Skagit subbasin reservation quantity.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-052, filed 5/15/06, effective 6/15/06.]

WAC 173-503-060 Future water rights. (1) Surface and ground water rights, including permit exempt uses under RCW 90.44.050, may be obtained that are not subject to the instream flows established in WAC 173-503-040 and closures established in WAC 173-503-051 if all statutory requirements are met and if any of the following situations apply:

(a) The proposed use is nonconsumptive, and compatible with the intent of this chapter.

(b) The water use qualifies for the reservations established in this chapter. The proposed use from the reservation must be consistent with all the conditions outlined in WAC 173-503-073, 173-503-074 and 173-503-075. The department shall deduct the water use from its record of water available from the reservations as described in WAC 173-503-073 and 173-503-075.

(c) The applicant or governmental agency elects to submit a scientifically sound mitigation plan and it is approved by the department. A mitigation plan can be submitted to mitigate for an individual withdrawal or to mitigate for multiple withdrawals in a subbasin. A mitigation plan may be approved if the proponent can demonstrate to the department's satisfaction that when the mitigation is implemented the proposed withdrawal(s) will not impair senior water rights, including instream flow rights, adversely impact instream resources, or diminish water quality. An approved mitigation plan shall include a monitoring and reporting plan, including a quality assurance/quality control plan. It shall also include conditions that the plan be implemented as long as the associated water right is used and that any water provided for mitigation purposes be prohibited from being applied to any other purpose. Except for closed basins, if monitoring of a mitigation plan shows the mitigation is not effective, departmental approval of the mitigation plan shall be suspended and the use of water under the water right shall then be subject to the instream flows until the department finds the mitigation plan is effective. In the case of a closed basin, if monitoring of a mitigation plan shows the mitigation is not effective, departmental approval of the mitigation plan shall be suspended and the water use shall cease until the department approves a new or revised mitigation plan.

(d) A proposed ground water use will not impair senior water rights or withdraw water from a legally closed basin. Based on the hydrogeology of the basin, and the location and depth where ground water withdrawals generally occur, future ground water withdrawals may capture water that would result in impacts to surface water flows and levels in the Skagit River basin. A ground water right that is not subject to the instream flows or closures may only be approved if an applicant can demonstrate, through scientifically sound studies and technical analysis, and to the satisfaction of the department, that the proposed use will not cause impairment to existing water rights, including the instream flows set in this chapter or withdraw water from a legally closed source. The department acknowledges that additional scientific investigations may identify areas where water may be used without impairing the instream flows set in this chapter. If future scientifically sound investigations sufficiently identify such areas, the department will notify the public of these findings through publication of a *Skagit River Water Supply Bulletin*, and will account for uses under the reservations in WAC 173-503-073, 173-503-074 and 173-503-075 in accordance with these findings.

(2) Before the department can approve a water right application for a new public water system under subsection (1)(b), (c), or (d) of this section, the applicant must also demonstrate that there are no other public water systems in the same proposed retail service area that can provide timely and reasonable water service as defined in WAC 173-503-025. If domestic potable water can be provided by another public water system, the department shall reject the water right application.

(3) Surface and ground water appropriations may be issued in subbasins identified in WAC 173-503-074 that are subject to the instream flows and subject to the maximum water availability determination of two hundred cubic feet per second pursuant to WAC 173-503-050. The applicant must adequately demonstrate to the satisfaction of the department that the proposed withdrawal can be managed to avoid impairment of the instream flows established in WAC 173-503-040. The project proponent must also describe how its water needs will be met when water use is curtailed. If the water source is located in a closed subbasin, a water right can only be obtained under conditions in subsection (1)(a), (c) or (d) of this section.

(4) No appropriation to withdraw, divert or store the public surface or ground waters of the Skagit River basin that conflicts with the provisions of this chapter will hereafter be

commenced, except in cases where such rights will clearly meet the standards set forth in RCW 90.54.020 (3)(a).

(5) All future surface and ground water appropriations shall be measured through installation and maintenance of appropriate measuring device(s) (water source meters), except for permit exempt uses serving a single residence. Water users required to measure water use must provide a reasonable right of inspection, allow access for the meter to be read, and report the data to the department or a local entity the department designates. The department may require additional users to measure water use, if the department determines that water supplies warrant further monitoring.

(6) Any authorization for new beneficial uses must require development on a timeline that shows reasonable progress and due diligence.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-060, filed 5/15/06, effective 6/15/06. Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-060, filed 3/14/01, effective 4/14/01.]

WAC 173-503-061 Baker River project settlement agreement flows. The department acknowledges that the project releases submitted to the Federal Energy Regulatory Commission for relicense of Puget Sound Energy's Baker River project are a necessary component to adequately mitigate for the ongoing impacts of Baker River project operations. Therefore, in order to prevent detriment to the public interest, new permits for withdrawals or diversions that would impact the portion of the Skagit River basin between Sedro Woolley up to and including the Baker River, will only be issued if the applicant can demonstrate that there will be no measurable reduction in the mitigation benefits associated with the flow release provisions associated with the Baker River relicense. However, this provision shall not apply to new appropriations that are obtained under a reservation provided for in WAC 173-503-073, 173-503-074 and 173-503-075.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-061, filed 5/15/06, effective 6/15/06.]

WAC 173-503-070 Exemptions. (1) Nothing in this chapter shall affect existing water rights, including perfected riparian rights, federal Indian and non-Indian reserved rights, or other appropriative rights existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any hydroelectric or water storage reservoir or related facilities.

(2) Nonconsumptive uses which are compatible with the intent of this chapter may be approved.

[Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-070, filed 3/14/01, effective 4/14/01.]

WAC 173-503-071 Lakes and ponds. RCW 90.54.020 (3)(a) requires, in part, that the quality of the natural environment shall be protected, and where possible, enhanced, and lakes and ponds shall be retained substantially in their natural condition. Future withdrawals that would not be consistent with this requirement shall be denied.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-071, filed 5/15/06, effective 6/15/06.]

WAC 173-503-072 Administrative requirements. In administering and enforcing this regulation, the department's actions shall be consistent with the provisions of chapter 90.54 RCW. Additionally, all agencies of state and local government, including counties and municipal and public corporations, shall, whenever possible, carry out powers vested in them in manners which are consistent with the provisions of this chapter (RCW 90.54.090).

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-072, filed 5/15/06, effective 6/15/06.]

WAC 173-503-073 Water reservations. (1) The department has weighed the public interest supported by providing a limited amount of water for domestic supply, commercial/industrial supply, municipal supply, stock watering and agricultural irrigation with the potential for negative impact to instream resources. The department finds that the public interest advanced by these limited reservations clearly overrides the potential for negative impacts on instream resources. (RCW 90.54.020 (3)(a).) Critical to the department's finding that the public interest overrides the negative impacts is the limited nature of the reservations. The department does not anticipate the ability to make additional future reservations given the volume of water previously allocated in the basin for out-of-stream uses and the distressed condition of the fishery resource. Further reservations would be expected to exceed "potential" negative impacts and create actual negative impacts.

Based on this finding, the department hereby reserves specific quantities of an amount of surface and ground water, which can be allocated for specific future beneficial uses. These reservations of water are not subject to the instream flows established in WAC 173-503-040 or closures established in WAC 173-503-051. Uses of the water under the reservation are available only if all the conditions set forth in this section are fully complied with. The department reserves its authority to review an application for new water use under the reservation in light of new information that may reflect upon or alter its current findings of availability, beneficial use, impairment, and/or public interest.

(a) Agricultural irrigation reservation. A reservation of 3,564 acre-feet of water annually, is available for agricultural irrigation purposes not subject to the instream flows.

(b) Domestic, municipal, and commercial/industrial water supply reservation. A reservation of a maximum average consumptive daily use of 9,370,208 gallons per day of water is available for domestic, municipal, or commercial/industrial water supply not subject to the instream flows.

(2) Conditions for use of the reserved agricultural irrigation water are as follows:

(a) The reservation is available for both ground and surface water and is only available from the Lower, Middle or Upper Skagit River subbasin management units.

(b) The reservation shall be only for the purpose of agricultural irrigation, as defined in WAC 173-503-025.

(c) A water right for use from the reservation must be obtained from the department. The department will condition uses under the reservation to minimize the instantaneous

impact of withdrawals on instream flows. Such conditions may include requiring efficient conveyance and irrigation methods or irrigation scheduling.

(d) Water use will be authorized for only the irrigation season, unless the applicant can demonstrate to the department's satisfaction a need for a continuous, year-round, irrigation demand.

(e) A water user must install and maintain a water measuring device (water source meters) in accordance with specifications provided by the department. The user or other designated local entity must report the data to the department in accordance with the permit requirements.

(f) The department will maintain an estimate of the amount of water used from the reservation based on water rights issued by the department and actual measured water use.

(g) Agricultural irrigation water rights obtained under this reservation are limited to irrigation purposes only. The purpose of use of a water right obtained under the agricultural irrigation reservation cannot be changed. In the event that the water use authorized under a water right from the reservation is no longer desired, has been abandoned, or has been relinquished, the department will credit the quantity of water previously used back to the reservation for that purpose, once the department is notified of the discontinuation.

(3) Conditions for use of the reserved domestic, municipal, and commercial/industrial water reservation are as follows:

(a) The reservation shall be only for the purpose of domestic, municipal, or commercial/industrial water use as defined in WAC 173-503-025. It is available to users exempt from the permitting process and to users requiring a water right, as outlined in WAC 173-503-060.

(b) This reserve of water shall be allocated and used consistent with WAC 173-503-074. The water source must be a ground water well if the source is located in a subbasin management unit tributary to the Skagit River. Such use of the reservation is subject to availability of water in the reservation and the conditions of use of the reservation. For water sources located in identified tributaries in the Upper Skagit subbasin management unit in Figure 5 of WAC 173-503-120, water withdrawals must meet the restrictions described in WAC 173-503-052. A surface water source can be used only if the following conditions are met:

(i) The source is located in the Upper, Middle or Lower Skagit subbasin management units, or the applicant demonstrates to the department that surface water is the only physically available source of water that can be obtained in the tributary subbasin;

(ii) The appropriation complies with the conditions of the reservation; and

(iii) The appropriation is approved by the department through a water right permit.

(c) Water use shall meet the water use efficiency standards of the uniform plumbing code as well as any applicable local or state requirements for conservation standards.

(d) All users of this reservation, except for permit exempt appropriations serving a single residence, shall install and maintain a measuring device (water source meter), in accordance with specifications provided by the department. Water users required to measure their water use must provide a reasonable right of inspection, allow the meter to be read, and report the data to the department or a designated local entity. The department may require additional users to measure their water use, if the department determines that water supplies require further monitoring.

(e) This reservation shall be administered and accounted for by the department and local governmental authorities.

(f) A new withdrawal for potable water supply under this reservation is not allowed in areas where a public water system has been established and a connection can be provided in a timely and reasonable manner. If an applicant for a building permit or subdivision approval cannot obtain water through a public water system, the applicant must present written evidence to the department that water service cannot be provided in a timely and reasonable manner by a public water supplier prior to drilling a well. This determination shall be consistent with the criteria listed in RCW 43.20.260.

(g) For appropriations under this reservation utilizing a permit-exempt ground water source, water use shall be consistent with the provisions in RCW 90.44.050.

(h) All users of this reservation, including permit exempt users, which would like to obtain the septic recharge credit must state, at the time of the appropriation of water, the type of wastewater disposal system for the property or properties that the appropriation serves. If the initial wastewater disposal system is a septic system, and the property or properties subsequently connect(s) to a sewer system, the users of the appropriation must report to the department the change in the wastewater disposal system in a timely manner.

(4) It shall be the responsibility of an applicant for a building permit or subdivision approval seeking water, or a subsequent owner using water under the reservation to comply with the conditions in WAC 173-503-073(3) and all other conditions of this chapter.

(5) The reservations are a one-time, finite resource. Once the reservations are fully allocated, they are no longer available and the subbasin management units identified as subject to closure in WAC 173-503-074 are closed, except for the Upper, Middle and Lower Skagit subbasin management units. Upon closure, new appropriations, including permit exempt wells, may be available only under the provisions in WAC 173-503-060, 173-503-081, 173-503-100 and 173-503-110. If subsequent water use information indicates that the basin can be reopened, the department shall notify the public and local governments of the change in the status of the basin as described below.

The department shall notify the appropriate county, in writing, when it determines that fifty percent, seventy-five percent, and one hundred percent of the reservation for each subbasin management unit has been allocated. The department shall also issue a public notice annually in a newspaper of general circulation for the region that shows the amount of reserved water for each subbasin management unit that has been allocated, remains unallocated, any subbasin management units that have been fully allocated and from which water is no longer available under these reservations, and any subbasin management units that are reopened.

(6) If an appropriation from a reservation is not in compliance with any condition of these reservations, the department may take action consistent with WAC 173-503-090.

(7)(a) A record of all withdrawals from the domestic, municipal, and commercial/industrial reservation shall be maintained by the department. The record will readily show both the allocated and unallocated quantities of water that are in reserved status.

(b) All uses of this reservation shall be debited against the reservation. The department will account for water use under the reservation based on actual measured water use or a standard quantity. If actual measuring data are not available, the department will deduct the authorized quantities under water right permits or certificates from the reservation. For permit exempt appropriations, the department will deduct a standard amount of 350 gallons per day for each domestic or residential service connection in a group domestic water system. The standard amount will be adjusted periodically based on reported water use to reflect the maximum average daily use before any recharge credit for those users that are required to measure and report water use. The department will deduct 5,000 gallons per day for each commercial/industrial use, unless actual measured use is available. Additionally, the department reserves the right to account for water use based on the best available information contained in well logs, water approvals issued by local jurisdictions, water rights issued by the department, public water system approvals or other documents.

(c) For water users using individual and community on-site septic systems, fifty percent of the water used will be credited to the reservations for recharge from on-site septic systems provided that the water user's point of withdrawal is not located in the service area of a sewer provider's adopted general sewer plan as defined in WAC 173-240-050(3). The septic system credit will be removed for water users of the reservation that are subsequently converted to sewer systems whose discharge is located outside of the basin of origin. If water users are subsequently converted to sewer from septic systems, total water uses under the reservation in the applicable subbasin shall remain below the maximum average consumptive daily use limits in the applicable subbasin. Actions to remain in compliance with maximum average consumptive daily use limits could include: Reducing the number of withdrawals under the appropriate subbasin reservation, reducing actual water use, providing an equal quantity of imported water to the subbasin as has been provided through septic recharge return flow allowance, implementing a department approved mitigation plan, or by connecting to water sources from outside of the subbasin.

(d) If a water user under the reservation subsequently abandons or relinquishes the withdrawal, the department will credit back to the reservation the actual amount of water used and/or debited from the reservation, upon demonstration to the department that the well or surface water source has been decommissioned through written certification.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-073, filed 5/15/06, effective 6/15/06.]

WAC 173-503-074 Establishment of subbasin management units and reservation quantities by subbasin management unit. The department hereby establishes the following subbasin management units. The boundaries of the management units are shown on the maps in WAC 173-503-120. Table 1 shows the approximate location and maximum average consumptive daily use of reserved water that can be withdrawn for each management unit. Appropriations established after April 14, 2001, will be debited from the reserved quantities in accordance with the provisions contained in WAC 173-503-060, 173-503-073 and 173-503-150.

Table 1

Subbasin Management Unit	Location	Reservation Quantity
*Denotes basins subject to future closure under WAC 173-503-051	Approximate point where the stream meets a connecting water body	Maximum average consumptive daily use in gallons per day
Alder Creek*	NE 1/4, SW 1/4, Sec. 18, T35N, R7E (RM 41.7)	81,430
Anderson/Parker/ Sorenson creeks*	Sec. 26, T35N, R5E (flows into slough on south side of Skagit River)	20,034
Careys Creek*	NE 1/4, SW 1/4, Sec. 14, T35N, R6E	11,633
Carpenter/Fisher Creek*	NE 1/4, Sec. 30, T33N, R4E	11,633
Childs/Tank creeks*	Sec. 13, T35N, R5E (flows into Minkler Lake)	18,096
Coal Creek*	NW 1/4, SE 1/4, Sec. 21, T35N, R5E (flows into Skiyou Slough)	18,742
Cumberland Creek*	SW 1/4, SE 1/4, Sec. 14, T35N, R6E (RM 39.9)	25,851
Day Creek*	NE 1/4, Sec. 20, T35N, R6E	131,839
Gilligan Creek*	SE 1/4, SE 1/4, Sec. 27, T35N, R5E (RM 28.4)	25,851
Grandy Creek*	NE 1/4, SE 1/4, Sec. 15, T35N, R7E (RM 45.6)	147,350

Subbasin Management Unit	Location	Reservation Quantity
*Denotes basins subject to future closure under WAC 173-503-051	Approximate point where the stream meets a connecting water body	Maximum average consumptive daily use in gallons per day
Hansen Creek*	SE 1/4, Sec. 30, T35N, R5E (RM 24.2)	38,130
Jones Creek*	SE 1/4, NE 1/4, Sec. 17, T35N, R6E (RM 35.1)	67,212
Loretta Creek*	SW 1/4, Sec. 22, T35N, R6E	11,633
Mannser Creek*	SE 1/4, NE 1/4, Sec. 17, T35N, R6E	15,511
Morgan Creek*	NE 1/4, NE 1/4, Sec. 25, T35N, R5E (flows into slough on south side of Skagit River)	13,572
Muddy Creek*	SW 1/4, NW 1/4, Sec. 14, T35N, R6E (flows into Davis Slough)	28,436
Nookachamps Creek - East Fork*	Sec. 10, T34N, R4E	14,218
Nookachamps Creek - Upper*	Sec. 10, T34N, R4E	12,279
O'Toole Creek*	NW 1/4, NW 1/4, Sec. 21, T35N, R7E (RM 43.6)	23,266
Red Cabin Creek*	NW 1/4, NW 1/4, Sec. 15, T35N, R6E (flows into Jims Slough)	42,653
Salmon/Stevens creeks*	SE 1/4, SE 1/4, Sec. 28, T35N, R5E	5,170
Skagit - Lower	From the Skagit River at the east edge of Sec. 30, T35N, R5E downstream to the mouth	5,254,103
Skagit - Middle	From the Skagit River at the west edge of Sec. 29, T35N, R5E to the Skagit River at the east edge of Sec. 21, T35N, R7E	1,394,655
Skagit - Upper✥	Water Resource Inventory Area 4 (Upper Skagit) excluding Grandy Creek subbasin management unit	1,938,816
Wiseman Creek*	NW 1/4, SW 1/4, Sec. 23, T35N, R5E	18,095
Total Reservation		9,370,208

✥All uses in each Upper Skagit tributary subbasin identified in Figure 5 of WAC 173-503-120 are limited to a maximum average consumptive daily use of 25,851 gallons per day. These uses will be debited against the Upper Skagit tributary subbasin reservation quantity.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-074, filed 5/15/06, effective 6/15/06.]

WAC 173-503-075 Future stock watering. (1) Consistent with RCW 90.22.240, the department retains sufficient minimum flows or levels in streams, lakes, or other public waters to provide adequate waters in such water sources to satisfy stock watering requirements for stock on riparian grazing lands. Future permit exempt stock water uses and future stock water uses requiring a water right can be obtained as outlined below.

A reservation of 324,000 gallons per day of water is reserved for new stock water uses not subject to instream flows. It is available to users exempt from the permitting process and to users requiring a water right. Users of this reservation would be limited to a source within the Lower, Middle and Upper Skagit subbasins and must use the source only for stock watering purposes. Future permit exempt stock water users would not have to measure and report their water use, although the department encourages water withdrawal measuring. The department would measure and account for permit exempt stock water appropriations using stock inventory reports or actual measuring data, if such data exist. New stock water sources using surface water can be authorized under this reservation if authorized under an approved water right from the department. Measurement requirements for these appropriations would be outlined in the water right permit.

(2) Chapter 173-503 WAC shall be implemented consistent with RCW 90.22.040 and the department's policy that encourages direct stock water uses from streams to remove

livestock from streams for the purpose of protecting water quality and stream habitat. This applies to both existing and new stock water rights.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-075, filed 5/15/06, effective 6/15/06.]

WAC 173-503-081 Future changes and transfers. No changes or transfers to existing surface or ground water rights in the Skagit River basin shall hereafter be granted that conflict with the purposes or provisions of this chapter. Any change or transfer proposals can be approved only if there is a finding that existing rights, including instream flows hereby established, will not be injured or impaired under the provisions of RCW 90.03.380 or 90.44.100.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-081, filed 5/15/06, effective 6/15/06.]

WAC 173-503-090 Compliance and enforcement. (1) In accordance with RCW 90.03.605, in order to obtain compliance with this chapter, the department shall prepare and make available to the public, technical and educational information regarding the scope and requirements of this chapter. This is intended to assist the public in complying with the requirements of their water rights and applicable water laws.

(2) When the department determines that a violation has occurred, it shall:

(a) First attempt to achieve voluntary compliance, except in egregious cases involving potential harm to other water rights or to the environment. An approach to achieving this is to offer information and technical assistance to the person, in writing, identifying one or more means to accomplish the person's purposes within the framework of the law.

(b) If education and technical assistance do not achieve compliance, the department shall issue a notice of violation, a formal administrative order under RCW 43.27A.190, or assess penalties under RCW 43.83B.336, 90.03.400, 90.03.410, 90.03.600, 90.44.120 and 90.44.130.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-090, filed 5/15/06, effective 6/15/06. Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-090, filed 3/14/01, effective 4/14/01.]

WAC 173-503-100 Alternative sources of water. (1) The legislature has long acknowledged that water supply and availability around the state are becoming increasingly limited, particularly during summer and fall months and dry years when demand is greatest. Growth and prosperity have significantly increased the competition for this limited resource (RCW 90.54.090 (1)(a)). This chapter provides limited exceptions for new uses in the Skagit River basin.

(2) However, there is a continuing need for ongoing and reliable sources for new water uses. The need dictates the continued development and use of alternative sources of water. Alternative sources of water of equal or better quality than the proposed source have the potential to be used, where appropriate to improve stream flows for fish, to offset impacts of withdrawals on stream flows and provide sources of water for future out-of-stream uses. Alternative sources include, but are not limited to:

- Reuse of reclaimed water;
- Artificial recharge and recovery;
- Multipurpose water storage facilities;
- Conservation and efficiency measures applied to existing uses and the transfer of saved water;
- Acquisition of existing water rights; and
- Establishment of a trust water rights program.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-100, filed 5/15/06, effective 6/15/06. Statutory Authority: Chapters 90.54 and 90.22 RCW, and chapter 173-500 WAC. 01-07-027 (Order 99-05), § 173-503-100, filed 3/14/01, effective 4/14/01.]

WAC 173-503-110 Establishment of trust water rights program. (1) The department may establish a trust water rights program to facilitate the acquisition of existing water rights through purchases, long-term leases, donations and conserved water saved through state and federally funded conservation projects.

(2) The determination of how much water should be allocated between future out-of-stream uses and the restoration and enhancement of instream flows will be made at the time the water is acquired and deposited into the trust water rights program.

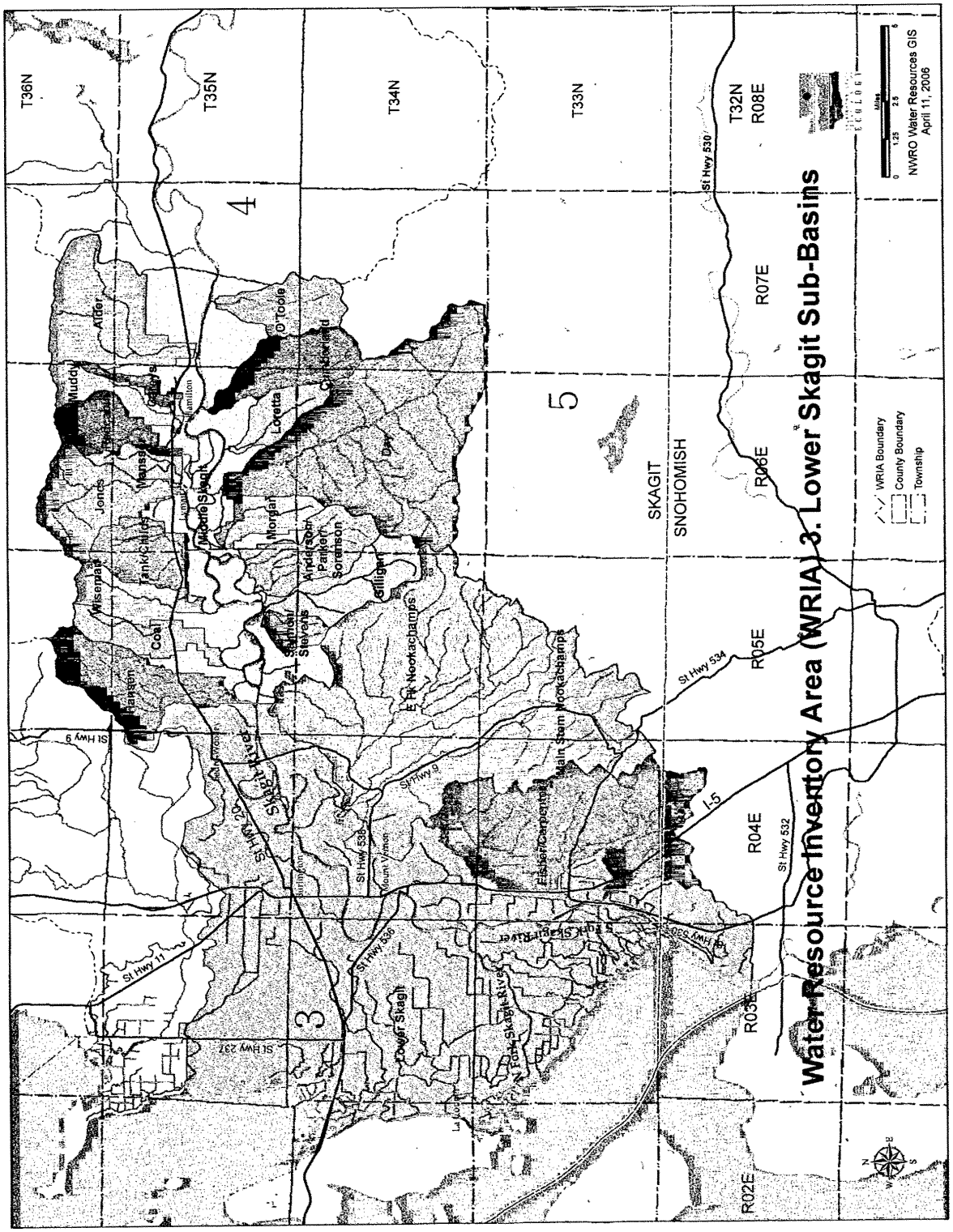
[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-110, filed 5/15/06, effective 6/15/06.]

WAC 173-503-116 Incorporating new hydrologic investigations and information in rule. The Skagit River basin and estuary is a complex river system. Consequently, the department acknowledges that additional hydrologic investigations, ground and surface water modeling, and fisheries studies may enhance scientific understanding of the hydrology and ecology of the Skagit River system. If further scientific investigations produce results that indicate the findings and conditions of this chapter should be updated, the department will publish, after consultation with local and tribal governments, the scientific findings in a *Skagit River Water Resources Supply Bulletin* and will account for uses under the reservations in WAC 173-503-073, 173-503-074 and 173-503-075 in accordance with these findings. If necessary, the department will outline a process for updating maps described in WAC 173-503-120.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-116, filed 5/15/06, effective 6/15/06.]

WAC 173-503-120 Maps. For the purposes of administering this chapter, the boundaries of the Skagit River basin and subbasin management units contained in Figures 4 and 5 are presumed to accurately reflect the basin hydrology and will be updated as information becomes available as provided under WAC 173-503-116.

Figure 4


Water Resource Inventory Area (WRIA) 3. Lower Skagit Sub-Basins
NWRO Water Resources GIS
April 11, 2006
WRIA Boundary
County Boundary
Township
T36N
T35N
T34N
T33N
T32N
R08E
R07E
R06E
R05E
R04E
R03E
R02E
SKAGIT
SNOHOMISH
St Hwy 530
St Hwy 534
St Hwy 532
St Hwy 9
St Hwy 11
St Hwy 237
St Hwy 20
St Hwy 536
I-5
Skagit River
Lower Skagit
Main Stem Nookachamps
E Fk Nookachamps
Andersen/Parker/Sorenson
Gilligan
Morgan
Middle Skagit
Loretta
Cumberland
O'Toole
Alder
Muddy
Jones
Wiseman
Coal
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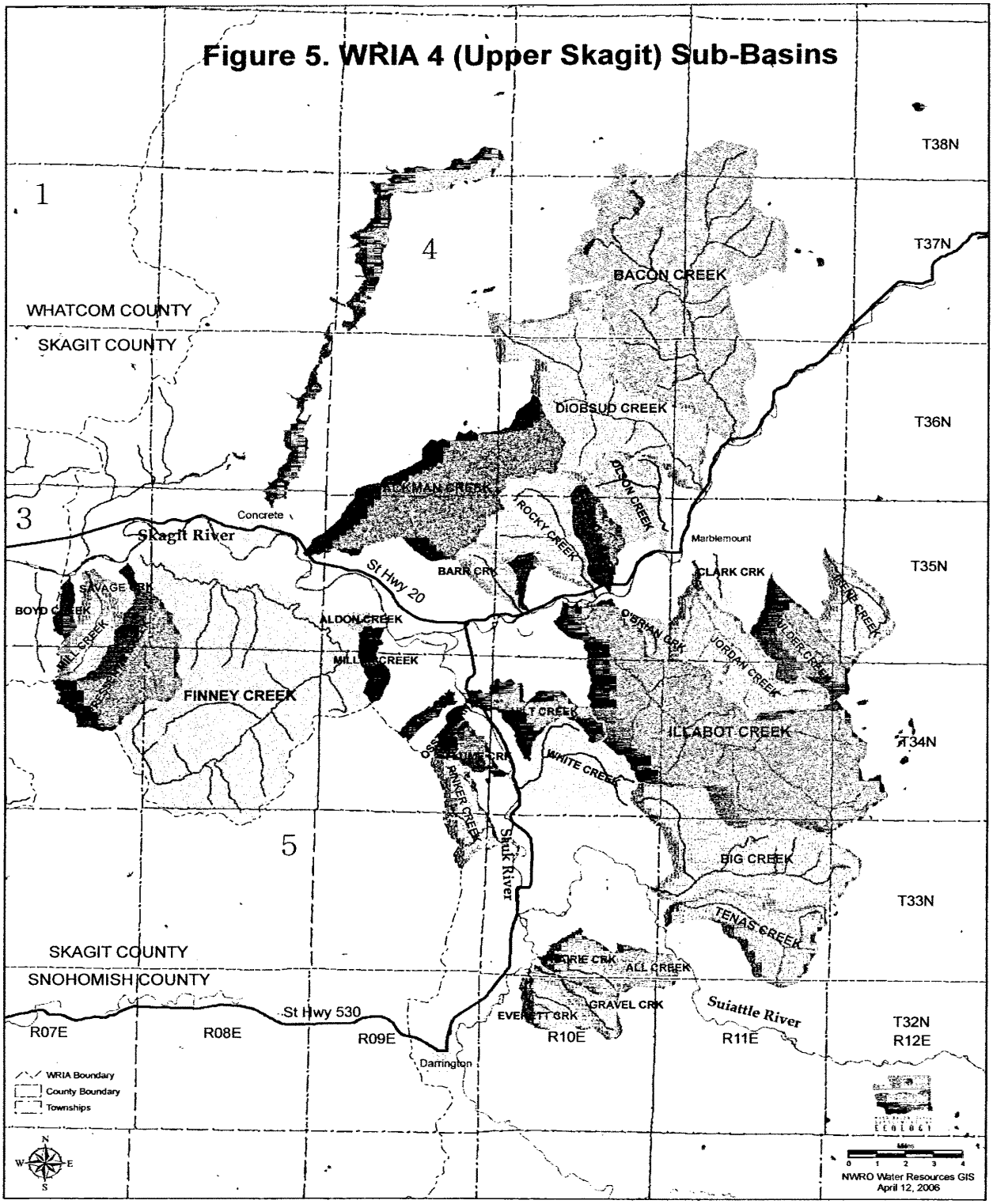
Burlington
Lamilton
Sauk
Stevens
Day
3
4
5

Figure 5



[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-120, filed 5/15/06, effective 6/15/06.]

WAC 173-503-130 Appeals. All final written decisions of the department pertaining to water right permits, regulatory orders, and related water right decisions made pursuant to this chapter can be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-130, filed 5/15/06, effective 6/15/06.]

WAC 173-503-140 Regulation review. Review of the rules in this chapter may be initiated by the department when-

ever new information is available, a change in conditions occurs, or statutory modifications are enacted that are determined by the department to require review.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-140, filed 5/15/06, effective 6/15/06.]

WAC 173-503-150 Water rights subject to instream flows predating the reservations. All water rights established after this amendment shall be subject to the provisions of this chapter as now amended. Water rights that were established after April 14, 2001, the original effective date of this chapter, but that were established prior to the effective date of the reservations contained in WAC 173-503-073, and 173-503-074, may participate in the appropriate reservation provided they agree to change their priority date to that of the reservations. The department assumes that these water rights established during this period will participate under the reservation, unless the water user notifies the department otherwise in writing. For accounting purposes, these water rights, including permit exempt commercial/industrial irrigation users, will be debited against the subbasin reservations at an amount equal to the maximum average consumptive daily water use of 350 gpd, and an amount of 5,000 gpd for commercial/industrial uses, unless the department determines that other information demonstrates an alternative water use quantity should be deducted. Mitigation credits, including, but not limited to, the recharge credit described in WAC 173-503-073(7), apply to these water uses, if appropriate.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 06-11-070 (Order 05-15), § 173-503-150, filed 5/15/06, effective 6/15/06.]

Chapter 173-505 WAC

INSTREAM RESOURCES PROTECTION AND WATER RESOURCES PROGRAM

WAC

STILLAGUAMISH RIVER BASIN
WATER RESOURCES INVENTORY AREA (WRIA) 5

173-505-010	General provisions—Authority and applicability.
173-505-020	Purpose.
173-505-030	Definitions.
173-505-040	Establishment of stream management units.
173-505-050	Establishment of instream flows.
173-505-060	Lakes and ponds.
173-505-070	Stream closures.
173-505-080	Future stock watering.
173-505-090	Reservation of permit-exempt ground water for future domestic uses.
173-505-100	Maximum allocations.
173-505-110	Future permitting actions.
173-505-120	Alternative sources of water.
173-505-130	Establishment of trust water rights program.
173-505-140	Future changes and transfers.
173-505-150	Compliance and enforcement.
173-505-160	Appeals.
173-505-170	Regulation review.
173-505-180	Map.

STILLAGUAMISH RIVER BASIN WATER RESOURCES INVENTORY AREA (WRIA) 5

WAC 173-505-010 General provisions—Authority and applicability. (1) This chapter is adopted under the authority of the Water Resources Act of 1971 (chapter 90.54 RCW), Minimum Water Flows and Levels Act (chapter 90.22 RCW), Water Well Construction Act (chapter 18.104 RCW), Water resource management (chapter 90.42 RCW), Regulation of public ground waters (chapter 90.44 RCW), and Water resources management program (chapter 173-500 WAC).

(2) This chapter applies to the use and appropriation of:

(a) All surface waters that drain within the Stillaguamish River basin, also known as water resources inventory area (WRIA) 5, including its tributaries and areas adjacent to the mouth of the Stillaguamish River that drain to salt water; and

(b) All ground water hydraulically connected with surface waters of the Stillaguamish River basin. Existing studies indicate a substantial likelihood that all waters within WRIA 5 are in hydraulic continuity with the surface waters covered herein.

(3) This chapter shall not affect existing water rights, including perfected riparian rights or other appropriative rights existing on the effective date of this chapter, unless otherwise provided for in the conditions of the water right in question.

(4) This chapter shall also not affect federal Indian and non-Indian reserved rights. The Stillaguamish Tribe of Indians and the Tulalip Tribes reserve the right to a claim for a treaty-derived off-reservation instream flow right with senior priority. The extent of such rights can only be adjudicated in federal or state court.

(5) This chapter does not limit the department's authority to establish instream flow requirements or conditions under other laws, including hydropower licensing under RCW 90.48.260.

(6) In accordance with RCW 90.54.090, all agencies of state and local government, including counties and municipal and public corporations, shall, whenever possible, carry out powers vested in them in manners which are consistent with this chapter.

(7) In administering and enforcing this chapter, the department's actions shall be consistent with the provisions of chapter 90.54 RCW.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-010, filed 8/26/05, effective 9/26/05.]

WAC 173-505-020 Purpose. (1) The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Stillaguamish River basin with instream flows and levels necessary to protect and preserve wildlife, fish, scenic, aesthetic, recreation, water quality and other environmental values, navigational values, and stock water requirements.

(2) The chapter creates a reservation of adequate and safe supplies of potable water to satisfy human domestic needs, and reservations for stock watering.

(3) This chapter sets forth the department's policies to guide the protection, utilization and management of Stillaguamish River basin surface water and interrelated ground water resources. It establishes instream flows and closures, and sets forth a program for administration of future water allocation and use. This chapter does not relieve anyone from compliance with relevant statutory requirements.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-020, filed 8/26/05, effective 9/26/05.]

WAC 173-505-030 Definitions. For the purposes of this chapter, the following definitions shall be used. In the event that these definitions differ from those contained in related rules, the definitions presented here will supersede any others for this chapter:

(1) **"Allocation"** means the designating of specific amounts of water for specific beneficial uses.

(2) **"Appropriation"** means the process of legally acquiring the right to specific amounts of water for beneficial uses, as consistent with the requirements of the ground and surface water codes and other applicable water resource statutes. This term refers to both surface and ground water right permits and to ground water withdrawals otherwise exempted from permit requirements under RCW 90.44.050.

(3) **"Consumptive use"** means a use of water that diminishes the amount or quality of water in the water source.

(4) **"Department"** means the Washington state department of ecology.

(5) **"Domestic water use"** means, for the purposes of administering WAC 173-505-090, potable water to satisfy the human domestic needs of a household or business, including water used for drinking, bathing, sanitary purposes, cooking, laundering, and other incidental uses. Outdoor watering shall be limited to an area not to exceed a total of 1/12th of an acre, or three thousand six hundred thirty square feet, for all outdoor uses for each individual domestic water use. Under all circumstances, total outdoor watering for multiple residences under the permit exemption (RCW 90.44.050) shall not exceed one-half acre.

(6) **"Instream flow"** means a stream flow level set in rule that is required to protect and preserve fish, wildlife, scenic, aesthetic and other environmental values, and navigational values. The term "instream flow" means a base flow under chapter 90.54 RCW, a minimum flow under chapter 90.03 or 90.22 RCW, or a minimum instream flow under chapter 90.82 RCW.

(7) **"Mitigation plan"** means a scientifically sound plan voluntarily submitted by a project proponent to offset the impacts of a proposed water use and approved by the department. A mitigation plan can be submitted to the department for a stream, basin, reach, or other area. A mitigation plan must show that the withdrawal with mitigation in place will not impair existing water rights, including instream flow rights, or diminish water quality. The plan must provide mitigation for the duration of the water use.

(8) **"Municipal water supplier"** means an entity that supplies water for municipal water supply purposes. (RCW 90.03.015.)

(9) **"Municipal water supply purposes"** means a beneficial use of water: (a) For residential purposes through fifteen or more residential service connections or for providing residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year; (b) for governmental or governmental proprietary purposes by a city, town, public utility district, county, sewer district, or water district; or (c) indirectly for the purposes in (a) or (b) of this subsection through the delivery of treated or raw water to a public water system for such use. (Partial definition; for the complete text of this definition refer to RCW 90.03.015.)

(10) **"Nonconsumptive use"** means a use of water that does not diminish the amount or quality of water in the water source.

(11) **"Permit-exempt withdrawals"** or **"permit exemption"** means a ground water withdrawal exempted from permit requirements under RCW 90.44.050, but which is otherwise subject to the ground water code.

(12) **"Reservation"** means an allocation of water for future beneficial uses. The effective date of a reservation, as well as the priority date of a given appropriation from a reservation, is the same as the effective date of this chapter.

(13) **"Stream management unit"** means a stream segment, reach, or tributary used to describe the part of the relevant stream to which a particular instream flow level applies.

(14) **"Withdrawal"** means the appropriation or use of ground water, or the diversion or use of surface water.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-030, filed 8/26/05, effective 9/26/05.]

WAC 173-505-040 Establishment of stream management units. The department hereby establishes the following stream management units.

Table 1
Stream Management Unit Information
(N.F. is North Fork; S.F. is South Fork)

Stream Management Unit Name	Control Point by River Mile (RM) or Latitude North (Lat.) and Longitude West (Long.)	Stream Management Reach
Stillaguamish Mainstem	Stillaguamish River nr Silvana Ecology Station #05A070 RM 11.2 Lat. 48 11 49.5, Long. 122 12 32	From the mouth at Port Susan to the confluence of the N.F. of the Stillaguamish River and the S.F. of the Stillaguamish River.
North Fork (N.F.) Stillaguamish River:		
N.F. Stillaguamish River at Arlington, WA	USGS Station #12167000 RM 6.5 Lat. 48 15 42, Long. 122 02 47	From confluence with the S.F. Stillaguamish to river mile 17.6.
N.F. Stillaguamish River at Oso	Ecology Station #05B090 RM 17.6 Lat. 48 16 21, Long. 122 53 17	From river mile 17.6 to headwaters.
South Fork (S. F.) Stillaguamish River:		
S.F. Stillaguamish River	RM 24.4	From confluence with the N.F. Stillaguamish River to RM 34.9.

Stream Management Unit Name	Control Point by River Mile (RM) or Latitude North (Lat.) and Longitude West (Long.)	Stream Management Reach
S.F. Stillaguamish River at Granite Falls, WA	USGS Station #12161000 RM 34.9 Lat. 48 06 12, Long. 121 57 07	From S.F. Stillaguamish River at RM 34.9 to headwaters.
Stillaguamish River Tributaries:		
Church Creek nr Stanwood	Ecology Station #05L070 RM 3 Lat. 48 14 54, Long. 122 18 48	From mouth to headwaters, including tributaries.
Glade Bekken Creek - stream 0030	At the Sylvania Terrace Rd. crossing RM 0.5	From mouth to headwaters, including tributaries.
Portage Creek	At 208th St. NE & 66th Ave. crossing RM 7.0	From mouth to headwaters, including tributaries.
Fish Creek	At Sill Rd. crossing RM 2.0	From mouth to headwaters, including tributaries.
Pilchuck at Bridge 626	Ecology Station #05D070 RM 0.5 Lat. 48 12 49, Long. 122 13 03	From mouth to the Campground Bridge, including tributaries.
Pilchuck Creek above Lake Creek	Ecology Station #05D150 RM 17 Lat. 48 20 35, Long. 122 03 23	From Campground Bridge to headwaters, except Lake Cavanaugh.
Pilchuck Creek Tributaries:		
Lake Creek nr mouth	Ecology Station #05K060 RM 0.2 Lat. 48 20 29, Long. 122 03 18	From mouth to headwaters, including tributaries, except Lake Cavanaugh.
North Fork (N. F.) Stillaguamish River Tributaries:		
Squire Creek at Squire Creek Park	Ecology Station #05H070 RM 1.2 Lat. 48 16 13, Long. 121 40 17	From mouth to headwaters, including tributaries.
Deer Creek nr Oso	Ecology Station #05C090 RM 1.3 Lat. 48 17 03, Long. 121 55 35	From mouth to headwaters, including tributaries.
Brooks Creek	At Brooks Creek Rd. Bridge RM 0.3	From mouth to headwaters, including tributaries.
Montague Creek	At Hwy 530 bridge RM 0.3	From mouth to headwaters, including tributaries.
Rollins Creek	Off C Post off Hwy 530 about RM 1.0	From mouth to headwaters, including tributaries.
Boulder River nr mouth	Ecology Station #05J060 RM 0.5 Lat. 48 16 40, Long. 121 46 52	From mouth to headwaters, including tributaries.
French Creek	At Hwy 530 bridge RM 0.4	From mouth to headwaters, including tributaries.
Segelson Creek	At Swede Haven Rd. bridge off Hwy 530 RM 0.3	From mouth to headwaters, including tributaries.
Furland Creek	At Hwy 530 bridge RM 0.2	From mouth to headwaters, including tributaries.
Ashton Creek	At Hwy 530 bridge RM 0.2	From mouth to headwaters, including tributaries.
Grant Creek	At Hillis Rd. bridge off Hwy 530 RM 0.1	From mouth to headwaters, including tributaries.
Rock Creek	At RM 1.1	From mouth to headwaters, including tributaries.
Koonz Creek - Stream 0138	At WDFW bridge RM 1.5	From mouth to headwaters, including tributaries.

Stream Management Unit Name	Control Point by River Mile (RM) or Latitude North (Lat.) and Longitude West (Long.)	Stream Management Reach
Harvey Creek	At side road crossing of Grandview Rd. RM 1.5	From mouth to headwaters, including tributaries.
South Fork (S. F.) Stillaguamish River Tributaries:		
Jim Creek at Whites Road	Ecology Station #05G070 RM 3.3 Lat. 48 10 41, Long. 122 03 06	From mouth to headwaters, including tributaries.
Siberia Creek, tributary to Jim Creek	At mouth near 131st Ave. NE, RM 0.0	From mouth to headwaters, including tributaries.
Canyon Creek nr Masonic Park	Ecology Station #05F080 RM 5.0 Lat. 48 07 17, Long. 121 54 17	From mouth to headwaters, including tributaries.
Armstrong Creek	At Harvey Creek Rd. crossing RM 1.0	From mouth to headwaters, including tributaries.
Jordan Creek	At Jordan Rd. crossing RM 0.1	From mouth to headwaters, including tributaries.
Tiger Creek - stream 0363	Near Masonic Park, RM 1.6	From mouth to headwaters, including tributaries.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-040, filed 8/26/05, effective 9/26/05.]

WAC 173-505-050 Establishment of instream flows. (1) Instream flows established in this section protect stream flows from future withdrawals, and preserve flow levels that are necessary to protect wildlife, fish, water quality, scenic, aesthetic and other environmental values, navigational values, and stock watering requirements.

(2) Instream flows established in this section are water rights with a priority date the same as the effective date of this chapter.

(3) Instream flows are expressed in cubic feet per second (cfs). These flows are measured at the control points identified in WAC 173-505-040 and apply to the stream management reach. The instream flow provisions for any water right located in a stream management unit shall specifically describe the instream flow levels for the control station in that unit and shall refer generally to other downstream instream flow requirements that may also become controlling and critical to the use of water under such right.

(4) Instream flows are to be protected from impairment by junior water rights. Except as provided in WAC 173-505-080, 173-505-090, and 173-505-110, junior water rights shall be exercised only when flow conditions provide enough water to satisfy senior rights, including the instream flows set in this chapter. Withdrawals of water that would conflict with the established instream flows shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

(5) Stream flow requirements on existing water rights are not modified by this chapter. Existing water rights that include a provision that water use will be subject to future instream flows are now subject to the instream flows established in WAC 173-505-050.

(6) Instream flows are established for the stream management units in WAC 173-505-040, as follows:

Table 2
Instream Flows for the Mainstem and North and South Forks, Stillaguamish River
(in cubic feet per second) (RM = River Mile)

Month	Day	Ecology Station #05A070 Stillaguamish RM 11.2	USGS Station #12167000 North Fork Stillaguamish RM 6.5	Ecology Station #05B090 North Fork Stillaguamish RM 17.6	South Fork Stillaguamish RM 24.4	USGS Station #12161000 South Fork Stillaguamish RM 34.9
Jan.	1-31	2200	1200	915	1800	1200
Feb.	1-29	2000	1200	850	1600	1200
Mar.	1-15	2000	1300	850	2250	1600
	16-31	2000	1300	915	2250	1600
Apr.	1-30	2000	1300	915	2000	1600
May	1-31	2000	1300	915	2000	1600
Jun.	1-15	2000	1300	915	1200	1060
	16-30	2000	1400	650	1200	1060
Jul.	1-15	2000	1100	600	1150	1060
	16-31	2000	800	500	750	700

Month	Day	Ecology Station #05A070 Stillaguamish RM 11.2	USGS Station #12167000 North Fork Stillaguamish RM 6.5	Ecology Station #05B090 North Fork Stillaguamish RM 17.6	South Fork Stillaguamish RM 24.4	USGS Station #12161000 South Fork Stillaguamish RM 34.9
Aug.	1-15	1700	800	425	750	700
	16-31	1700	800	500	750	700
Sep.	1-15	1700	800	700	775	700
	16-30	1700	800	850	775	700
Oct.	1-15	1700	800	870	1250	1200
	16-31	1700	800	870	1900	1700
Nov.	1-15	2200	950	915	2300	1800
	16-30	2200	950	915	2300	1800
Dec.	1-31	2200	1300	915	2500	1800

Table 3
Instream Flows for Tributaries of
the Mainstem and North and South Forks Stillaguamish River Basin
(in cubic feet per second) (RM = River Mile)

Month	Day	RM 0.5 Pilchuck Creek	RM 17 Pilchuck Creek	RM 1.2 Squire Creek	RM 3.3 Jim Creek	RM 5.0 Canyon Creek	RM 0.3 Lake Creek	RM 1.3 Deer Creek	RM 0.3 Brooks Creek
Jan.	1-31	170	98	200	250	525	21	411	39
Feb.	1-29	170	98	200	250	450	21	411	39
Mar.	1-15	170	98	280	250	450	21	474	68
Mar.	16-31	170	98	280	250	450	21	474	68
Apr.	1-30	170	98	280	250	450	21	474	68
May	1-31	170	98	280	250	450	21	474	68
Jun.	1-15	170	98	280	250	450	21	313	45
Jun.	16-30	170	98	280	250	350	21	313	45
Jul.	1-31	170	98	200	250	350	21	195	45
Aug.	1-31	140	98	200	250	350	21	88	17
Sep.	1-30	170	98	200	250	400	21	353	17
Oct.	1-31	170	98	200	250	525	21	617	39
Nov.	1-15	170	98	160	250	525	21	411	39
Nov.	16-30	170	98	160	250	525	21	411	39
Dec.	1-31	170	98	160	250	525	21	411	39

Table 4
Instream Flows for Tributaries of
the Mainstem and North and South Forks Stillaguamish River Basin
(in cubic feet per second) (RM = River Mile)

Month	Day	RM 0.3 Montague Creek	RM 1.0 Rollins Creek	RM 0.5 Boulder Creek	RM 0.4 French Creek	RM 0.3 Segelson Creek	RM 0.2 Furland Creek	RM 0.2 Ashton Creek	RM 0.1 Grant Creek
Jan.	1-31	29	47	167	56	47	33	34	67
Feb.	1-29	29	47	167	56	47	33	34	67
Mar.	1-15	53	80	203	73	79	44	46	87
Mar.	16-31	53	80	203	73	79	44	46	87
Apr.	1-30	53	80	203	73	79	44	46	87
May	1-31	53	80	203	73	79	44	46	87
Jun.	1-15	35	53	134	48	52	29	30	57
Jun.	16-30	35	53	134	48	52	29	30	57
Jul.	1-31	35	53	134	48	52	29	30	57
Aug.	1-31	12	20	154	18	20	10	10	23
Sep.	1-30	12	47	250	84	47	49	51	101
Oct.	1-31	29	47	167	84	47	49	51	101
Nov.	1-15	29	47	167	56	47	33	34	67
Nov.	16-30	29	47	167	56	47	33	34	67
Dec.	1-31	29	47	167	56	47	33	34	67

Table 5
Instream
Flows for Tributaries of
the Mainstem and North and South Forks Stillaguamish River Basin
(in cubic feet per second) (RM = River Mile)

Month	Day	RM 3.0 Church Creek	RM 0.5 Glade Bekken Creek	RM 7.0 Portage Creek	RM 2.0 Fish Creek	RM 1.1 Rock Creek	RM 1.5 Koonz Creek
Jan.	1-31	24	10	11	16	29	19
Feb.	1-29	24	10	11	16	29	19
Mar.	1-15	43	21	22	30	53	36
Mar.	16-31	43	21	22	30	53	36
Apr.	1-30	43	21	22	30	53	36
May	1-31	43	21	22	30	53	36
Jun.	1-15	28	14	14	20	35	24
Jun.	16-30	28	14	14	20	35	24
Jul.	1-31	28	14	14	20	35	24
Aug.	1-31	10	4	4	6	12	8
Sep.	1-30	10	4	4	6	29	19
Oct.	1-31	24	10	11	16	29	19
Nov.	1-15	24	10	11	16	29	19
Nov.	16-30	24	10	11	16	29	19
Dec.	1-31	24	10	11	16	29	19

Table 6
Instream Flows for Tributaries of
the Mainstem and North and South Forks Stillaguamish River Basin
(in cubic feet per second) (RM = River Mile)

Month	Day	RM 1.5 Harvey Creek	RM 1.0 Armstrong Creek	RM 0.1 Jordan Creek	RM 1.6 Tiger Creek	RM 0.0 Siberia Creek
Jan.	1-31	9	34	18	27	37
Feb.	1-29	9	34	18	27	37
Mar.	1-15	6	46	34	48	49
Mar.	16-31	6	46	34	48	49
Apr.	1-30	6	46	34	48	49
May	1-31	4	46	34	48	49
Jun.	1-15	4	30	22	32	32
Jun.	16-30	4	30	22	32	32
Jul.	1-31	4	30	22	32	32
Aug.	1-31	4	10	7	11	11
Sep.	1-30	4	51	18	11	27
Oct.	1-31	4	51	18	11	55
Nov.	1-15	9	34	18	27	37
Nov.	16-30	9	34	18	27	37
Dec.	1-31	9	34	18	27	37

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-050, filed 8/26/05, effective 9/26/05.]

WAC 173-505-060 Lakes and ponds. RCW 90.54.020(3) provides, in part, that the quality of the natural environment shall be protected, and where possible, enhanced, and lakes and ponds shall be retained substantially in their natural condition. The department has determined that further consumptive withdrawals would impact the lakes and ponds of the Stillaguamish River basin. Therefore, surface withdrawals from all lakes and ponds shall be limited to single in-house domestic uses not to exceed one hundred fifty gallons per day per residence.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-060, filed 8/26/05, effective 9/26/05.]

WAC 173-505-070 Stream closures. (1) The department determines that, based on historical and current low flows and uses, no water is available for additional year-round appropriation from the streams and tributaries in the Stillaguamish River basin. All unappropriated water from the streams and rivers is hereby appropriated for purposes of protecting and preserving fish and wildlife and other instream values, as of the date of this chapter. Therefore, the depart-

ment closes all the rivers and streams in the Stillaguamish River basin to any further appropriations. This includes all ground water hydraulically connected to those surface waters, the withdrawal of which will have an effect on the flow or level of the rivers and streams.

(2) Exceptions to the closures and instream flow requirements are provided in WAC 173-505-060, 173-505-070(3), 173-505-080, 173-505-090 and 173-505-110.

(3) The department finds that there is some water above the instream flows at specific locations and times of year that could be captured for storage or other projects that do not require year-round, uninterruptible water supplies. Therefore, the water sources described in the table below have water available for the time periods specified. These withdrawals are subject to the instream flows established in WAC 173-505-050 and the maximum allocations defined in WAC 173-505-100(2).

Table 7
Water Source and Open Periods*

Water Source	Open Period
Stillaguamish River from its multiple mouths at Port Susan to the confluence of N.F. Stillaguamish River and S.F. Stillaguamish River (RM 0 to 17.8).	October 16-June 30
N.F. Stillaguamish, from RM 0 (its confluence with the S.F. Stillaguamish) to river mile 17.6.	October 16-June 30
N.F. Stillaguamish River, from RM 17.6 to its headwaters.	November 1-June 30
S.F. Stillaguamish River from its confluence with the N.F. Stillaguamish River (RM 17.8) to RM 34.9.	November 1-June 15
Pilchuck Creek from mouth to RM 16.4 (confluence of Bear Creek).	October 16-May 31
Squire Creek from mouth to its headwaters.	November 1-February 15, and May 1-June 30
Canyon Creek from mouth to RM 11.8 (confluence of N.F. Canyon Creek and S.F. Canyon Creek).	December 1-May 31
N.F. is North Fork **S.F.** is South Fork **RM** is river mile	
*Tributaries to the water sources are excluded from the open period unless specifically listed.	

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-070, filed 8/26/05, effective 9/26/05.]

WAC 173-505-080 Future stock watering. (1) Consistent with RCW 90.22.040, the department retains one cubic foot per second of surface water for future stock watering pursuant to the following requirements:

(a) This surface water flow is available to satisfy stock watering requirements for stock on riparian grazing lands which drink directly from streams, lakes or other public waters. Appropriation or use of water from the reservation for stock watering shall be limited to the land base and carrying capacity of the grazing lands next to the stream or water course. The reservation shall not be available for feedlots and other activities which are not related to normal grazing land uses.

(b) The department encourages existing riparian stock water right holders to remove livestock from streams for the purpose of protecting water quality and stream habitat. Uses that meet the following conditions shall be considered to qualify as direct stock watering from a stream:

(i) Small amounts of water are diverted (screened and piped) to nearby stock water tanks for consumption by livestock;

(ii) Stock water tanks shall be located close to the surface water source, and have as short a bypass reach as possible, while providing protection to the water body, stream bank and associated vegetative zone;

(iii) If a float or demand type valve is not used, the tank overflow must return to the same source, at or near the point of diversion;

(iv) The stock tank must serve stock, which normally range that parcel of property; and

(v) The quantity of water consumed from the stock tank should not exceed the quantity consumed if the stock drank directly from the stream.

(c) The decision by a person to divert stock water from the stream and into a tank does not constitute an adjudication of any claim to the right to the use of the water, as between the claimant and the state, or as between one or more water use claimants and another or others.

(2) The department reserves twenty acre-feet per year of ground water for future stock watering.

(3) The department will maintain an estimate of the amount of water used from the reservation, and reserves the right to require metering and reporting of water use to ensure compliance with the conditions of use for stock watering under this section.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-080, filed 8/26/05, effective 9/26/05.]

WAC 173-505-090 Reservation of permit-exempt ground water for future domestic uses. (1) The department has weighed the public interest supported by providing a limited amount of water for domestic uses with the potential for negative impact to instream flow resources. The department finds that the public interest advanced by this limited reservation clearly overrides the small potential for negative impacts on instream resources (RCW 90.54.020 (3)(a)).

Based on this finding, the department hereby allocates a total amount of water not to exceed five cubic feet per second (5 cfs) to provide adequate and safe supplies of water for year-round future domestic uses. Of that 5 cfs, the reservation is further defined by limits on the amount of reserved water that can be withdrawn from the North and South Forks of the Stillaguamish River, as identified in the following table.

This reservation of ground water is not subject to the instream flows established in WAC 173-505-050 or the stream closures established in WAC 173-505-070.

Table 8
Allocation of Reservation as Measured at Specified River Miles

Water Source (RM - River Mile)	Amount of Water Available, Measured in Cubic Feet per Second (cfs) and Gallons per Day (gpd)
Stillaguamish River at RM 11.2	5 cfs or 3.23 million gpd
Of that 5 cfs, the following maximums may be taken from the specified locations:	
North Fork Stillaguamish River at RM 6.5	2 cfs or 1,292,544 gpd
South Fork Stillaguamish River at RM 24.4	1.5 cfs or 969,408 gpd

(2) Use of water under the reservation is available only if all the conditions set forth in this section are fully complied with. Conditions for use of the reservation water are:

(a) The reserved water shall be for ground water uses exempt from a water right permit application. This reservation is for either single or small group domestic uses, as defined in WAC 173-505-030(5).

(b) This reservation of ground water shall not exceed 3.23 million gallons of water per day (5 cfs).

(c) Domestic water use shall meet the water use efficiency standards of the uniform plumbing code as well as any applicable local or state requirements for conservation standards.

(d) This reservation shall be applicable only when the appropriate city(ies) or counties submit a written acknowledgment to the department that confirms that any legally required determinations of adequate potable water for building permits and subdivision approvals will be consistent with applicable provisions of this chapter.

Once this chapter is adopted and written acknowledgment is received, the department will promptly notify those city(ies) or counties, the tribes, water well contractors and the public that the reserve is in effect in those jurisdictions where acknowledgments exist.

(e) It shall be the responsibility of an applicant for a building permit or subdivision approval proposing a water use under the reservation to comply with the conditions in (a), (c), (e), (f), (g) and (h) of this subsection and all other conditions of this chapter.

(f) A new ground water withdrawal under this reservation is not allowed in areas where a municipal water supply has been established and a connection can be provided by the municipal supplier. If an applicant for a building permit or subdivision approval cannot obtain water through a municipal supplier, the applicant must obtain a letter from a municipal supplier prior to drilling a well which states that service was denied. Such a denial shall be consistent with the criteria listed in RCW 43.20.260.

(g) Outdoor water use is limited to the watering of an outdoor area not to exceed a total of 1/12th of an acre for all outdoor uses under each individual domestic water use. Under all circumstances, total outdoor watering for multiple residences under the permit exemption (RCW 90.44.050) shall not exceed one-half acre.

(h) The department reserves the right to require metering and reporting of water use for single domestic users, if more accurate water use data is needed for management of the reservation and water resources in the area of the reservation. All other ground water users under the permit-exemption shall be required to install and maintain measuring devices, in accordance with specifications provided by the department, and report the data to the department.

(3) The reservation is a one-time, finite amount of water. Once the reservation is fully allocated, it is no longer available. Other water sources may be available under the provisions in WAC 173-505-110, 173-505-120, 173-505-130 and 173-505-140.

(4) The department shall notify the appropriate county, in writing, when it determines that fifty percent, seventy-five percent, and one hundred percent of the reservation has been allocated. The department shall also issue a public notice annually in a newspaper of general circulation for the region that shows the amounts of reserved water that have been allocated and what remains unallocated, as well as identifying any water source that has been fully allocated and from which water is no longer available under this reservation.

(5) If a water use is not in compliance with any condition of this reservation, the department may take action consistent with WAC 173-505-150.

(6)(a) A record of all ground water withdrawals from the reservation shall be maintained by the department. The department will account for water use under the reservation based on the best available information reflecting actual water uses contained in well logs, water availability certificates issued by the counties, water rights issued by the department, public water system approvals or other documents. When other sources of information are not readily available, the department may account for water use at a rate of three hundred fifty gallons per day (gpd) per residence or business. This figure may be adjusted down to one hundred seventy-five gpd if the residence or business is served by an on-site septic system.

(b) If an entity using water under this reservation subsequently abandons the withdrawal and notifies the department, the water use may be credited back to the reservation.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-090, filed 8/26/05, effective 9/26/05.]

WAC 173-505-100 Maximum allocations. (1) High flows provide critical ecological functions such as channel and riparian zone maintenance, flushing of sediments, and in and out migration of fish. The protection of the frequency and duration of higher ecological flows can be accomplished by establishing a maximum amount of water/flow that can be withdrawn from the stream above the instream flow levels.

(2) Therefore, the department determines that the total consumptive withdrawals from existing and future water rights in the Stillaguamish River basin during open periods shall not exceed a total of 300 cubic feet per second (cfs) as measured at ecology station #05A070, river mile 11.2. Of that 300 cfs, the maximum allocation is further defined by limits on the amount of water that can be withdrawn from specified stream reaches, at specific times. Refer to the table and map, below.

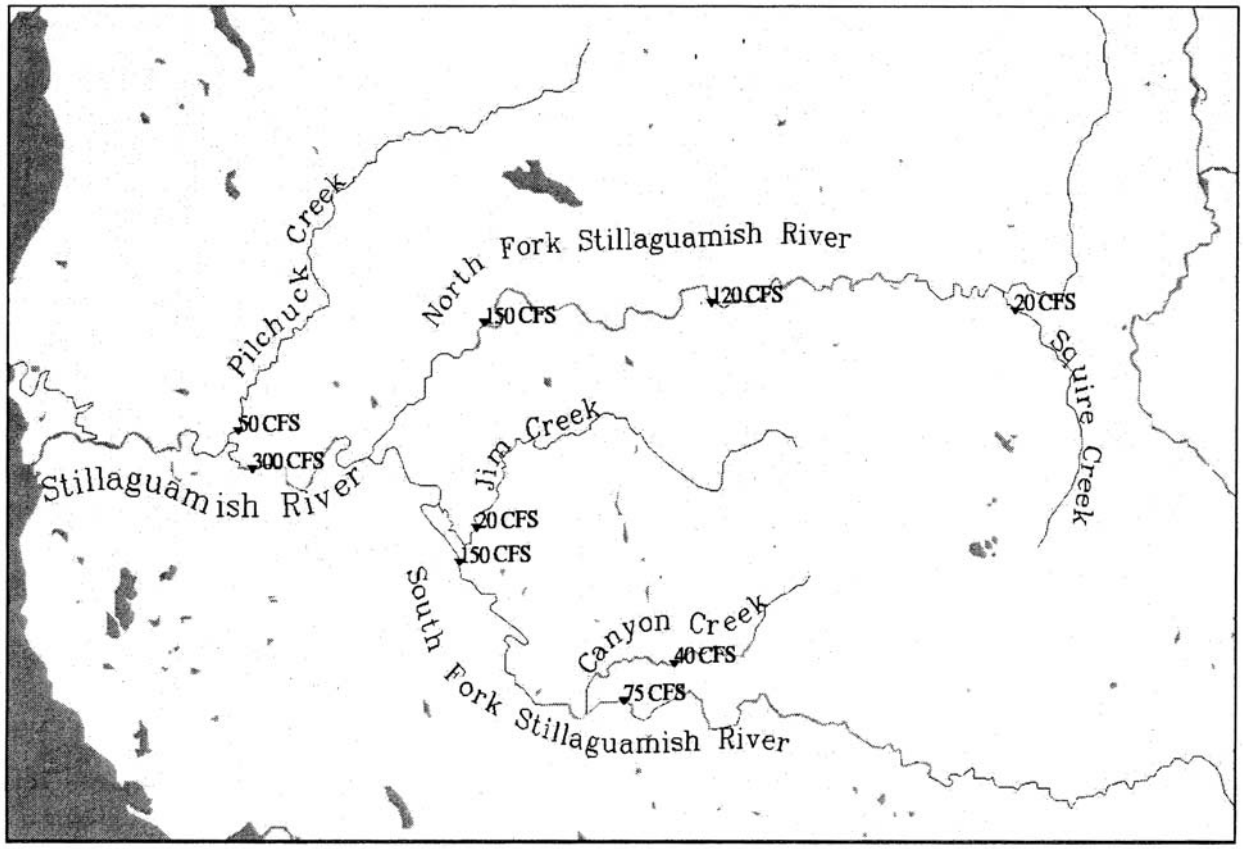
Table 9
Maximum Allocation

Water Source*	**Open Period**
Stillaguamish River from its multiple mouths at Port Susan to the confluence of N.F. Stillaguamish River and S.F. Stillaguamish River (RM 0 to 17.8).	October 16-June 30 Maximum Allocation 300 cfs
Of that 300 cfs, the following maximums may be taken from the specified stream reaches at the specified times:	
N.F. Stillaguamish, from RM 0 (its confluence with the S.F. Stillaguamish) to river mile 17.6.	October 16-June 30 Maximum Allocation 150 cfs
N.F. Stillaguamish River, from RM 17.6 to its headwaters.	November 1-June 30 Maximum Allocation 120 cfs
S.F. Stillaguamish River from its confluence with the N.F. Stillaguamish River (RM 17.9) to RM 34.9.	November 1-June 15 Maximum Allocation 150 cfs
Pilchuck Creek from mouth to RM 16.4 (confluence of Bear Creek).	October 16-May 31 Maximum Allocation 50 cfs
Squire Creek from mouth to its headwaters.	November 1-February 15, and May 1-June 30 Maximum Allocation 20 cfs
Canyon Creek from mouth to RM 11.8 (confluence of N.F. Canyon Creek and S.F. Canyon Creek).	December 1-May 31 Maximum Allocation 40 cfs
N.F. is North Fork	**S.F.** is South Fork; **RM** is river mile

* Tributaries to the water sources are excluded from the open period unless specifically listed.

N.F. is North Fork; **S.F.** is South Fork; **cfs** is cubic feet per second; **confluence** = the juncture of two or more flowing streams

Figure 1
Maximum allocations for specific stream reaches (listed above) in the Stillaguamish River basin, measured at designated control points



(3) All water rights issued after the effective date of this chapter are subject to the maximum allocation limits, the instream flows established in WAC 173-505-050 and other applicable provisions in this chapter. Use of the water must be consistent with the requirements of the surface water code (chapter 90.03 RCW) and other applicable statutory, administrative and case laws.

(4) The department will maintain a record of the amount of water allocated from all water rights in the Stillaguamish River basin, including those existing prior to the effective date of this chapter. When the maximum allocation is fully appropriated for any river, river reach, or stream, the department shall notify the appropriate county, in writing. The department shall also issue a public notice in a newspaper of general circulation for the region stating the maximum allocation is fully allocated.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-100, filed 8/26/05, effective 9/26/05.]

WAC 173-505-110 Future permitting actions. (1) Surface and ground water permits not subject to the instream flows and closures established in WAC 173-505-050 and 173-505-070 may be issued if any of the following situations apply:

(a) The proposed use is nonconsumptive, and compatible with the intent of this chapter.

(b) The applicant elects to submit a scientifically sound mitigation plan, as defined in WAC 173-505-030(7), and it is approved by the department. If monitoring of a mitigation plan shows the mitigation is not effective, use of water under the permit shall then be subject to the instream flows. In the case of a closed stream, the use shall cease until a more effective mitigation plan is put in place.

(c) The proposed ground water use will not impair senior water rights. Based on the hydrogeology of the basin, and the location and depth where ground water withdrawals generally occur, future ground water withdrawals have a high likelihood of capturing water that would result in impacts to surface water flows and levels in the Stillaguamish River basin. Therefore, a ground water permit that is not subject to the instream flows or closures may be approved only if an applicant can demonstrate, through studies and technical analysis, and to the satisfaction of the department, that the proposed use will not cause impairment to existing water rights, including the instream flows set in this chapter.

(d) Before the department can approve a water right application for a new public water supply under (b) or (c) of this subsection, the applicant must also demonstrate that there are no other municipal water suppliers in the same proposed

retail service area that can provide water. If domestic potable water can be provided by another municipal supplier, the department shall reject the water right application.

(e) The proposed use is for a salmon recovery project recommended for approval by the department of fish and wildlife.

(2) All water right permits approved by the department for a consumptive use from a water source with instream flows established by this chapter and during open periods are subject to those instream flows, as established in WAC 173-505-050. In addition, the total appropriation cannot exceed the maximum allocation limits described in WAC 173-505-100.

(3) No right to withdraw, divert or store the public surface or ground waters of the Stillaguamish River basin that conflicts with the provisions of this chapter will hereafter be granted, except in cases where such rights will clearly serve overriding considerations of the public interest, as stated in RCW 90.54.020 (3)(a).

(4) All future surface and ground water permit holders shall be required to install and maintain measuring devices, in accordance with specifications provided by the department, and report the data to the department in accordance with the permit requirements. In addition, the department may require the permit holder to monitor stream flows and ground water levels.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-110, filed 8/26/05, effective 9/26/05.]

WAC 173-505-120 Alternative sources of water. (1) The legislature has long acknowledged that water supply and availability around the state are becoming increasingly limited, particularly during summer and fall months and dry years when demand is greatest. Growth and prosperity have significantly increased the competition for this limited resource (RCW 90.54.090 (1)(a)). This chapter provides limited exceptions for new uses in the Stillaguamish River basin. However, there is a continuing need for ongoing and reliable sources for new water uses. This need dictates the continued development and use of alternative sources of water, such as:

- Reuse of reclaimed water;
- Artificial recharge and recovery;
- Multipurpose water storage facilities;
- Conservation and efficiency measures applied to existing uses and the transfer of saved water;
- Acquisition of existing water rights; and
- Establishment of a trust water rights program.

(2) Alternative sources of water of equal or better quality than a new source can be used to improve stream flows for fish, offset impacts of withdrawals on stream flows and provide sources of water for future out-of-stream uses.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-120, filed 8/26/05, effective 9/26/05.]

WAC 173-505-130 Establishment of trust water rights program. (1) The department will establish a trust water right program to facilitate the acquisition of existing water rights through purchases, long-term leases, donations and conserved water saved through state and federally funded conservation projects.

(2) The determination of how much water should be allocated between future out-of-stream uses and the restoration and enhancement of instream flows will be made at the time the water is acquired and deposited into the trust water rights program.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-130, filed 8/26/05, effective 9/26/05.]

WAC 173-505-140 Future changes and transfers. No changes or transfers to existing surface or ground water rights in the Stillaguamish River basin shall hereafter be granted that conflict with the purposes or provisions of this chapter. Any change or transfer proposals can be approved only if there is a finding that existing rights, including instream flows hereby established, will not be impaired.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-140, filed 8/26/05, effective 9/26/05.]

WAC 173-505-150 Compliance and enforcement. (1) In accordance with RCW 90.03.605, in order to obtain compliance with this chapter, the department shall prepare and distribute technical and educational information regarding the scope and requirements of this chapter to the public. This is intended to assist the public in complying with the requirements of their water rights and applicable water laws.

(2) When the department determines that a violation has occurred, it shall:

(a) First attempt to achieve voluntary compliance. An approach to achieving this is to offer information and technical assistance to the person, in writing, identifying one or more means to accomplish the person's purposes within the framework of the law.

(b) If education and technical assistance do not achieve compliance, the department shall issue a notice of violation, a formal administrative order under RCW 43.27A.190, or assess penalties under RCW 43.83B.336, 90.03.400, 90.03.410, 90.03.600, 90.44.120 and 90.44.130.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-150, filed 8/26/05, effective 9/26/05.]

WAC 173-505-160 Appeals. All final written decisions of the department of ecology pertaining to water right applications, permits, certificates, regulatory orders and related decisions made pursuant to this chapter can be appealed to the pollution control hearings board in accordance with chapter 43.21B RCW.

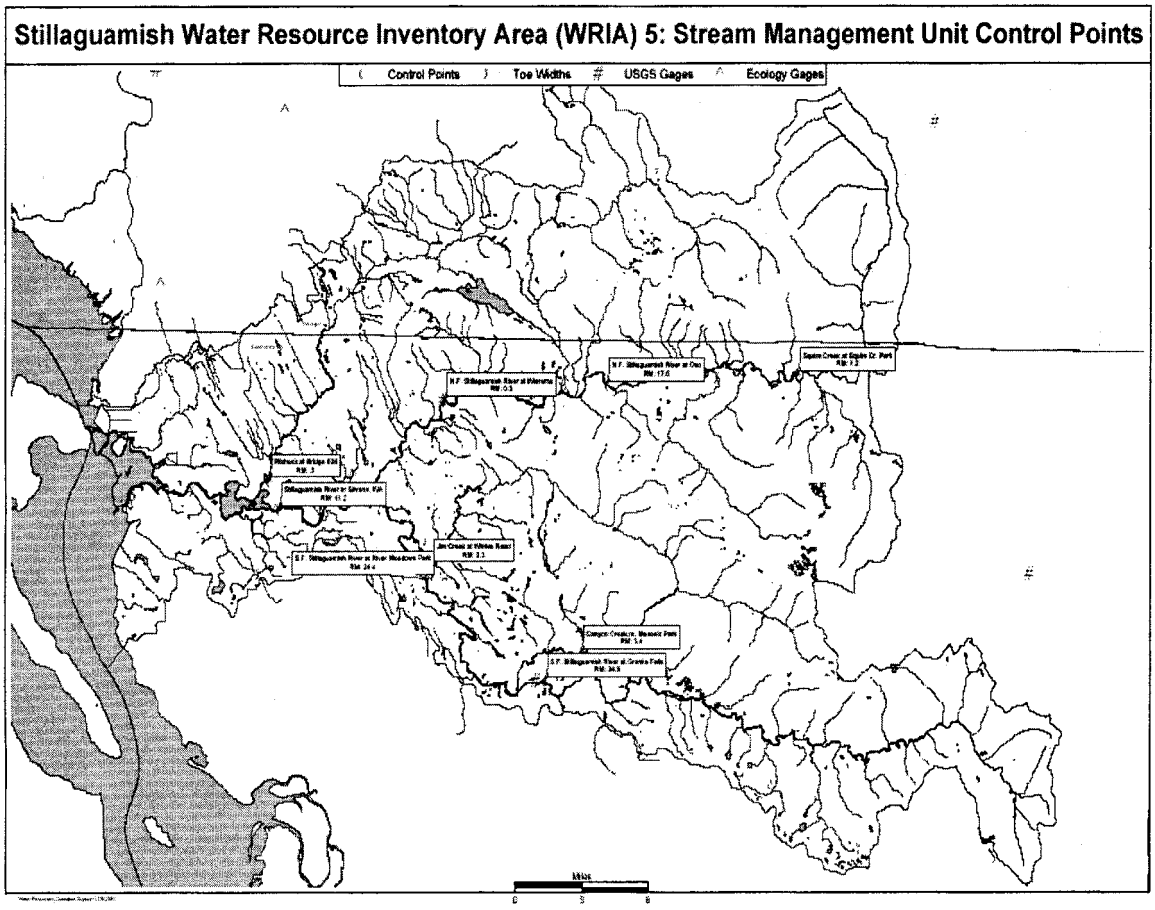
[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-160, filed 8/26/05, effective 9/26/05.]

WAC 173-505-170 Regulation review. Review of this chapter may be initiated by the department whenever significant new information is available, a significant change in conditions occurs, or statutory changes are enacted that are determined by the department to require review of the chapter.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-170, filed 8/26/05, effective 9/26/05.]

WAC 173-505-180 Map. For the purposes of administering this chapter, the boundaries of the Stillaguamish River basin contained in the figure below are presumed to accurately reflect the basin hydrology unless demonstrated otherwise.

Figure 2



[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-18-016 (Order 02-17), § 173-505-180, filed 8/26/05, effective 9/26/05.]

Chapter 173-507 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—SNOHOMISH RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 7

WAC

173-507-010	General provision.
173-507-020	Establishment of instream flows.
173-507-030	Surface water source limitations to further consumptive appropriations.
173-507-040	Ground water.
173-507-050	Exemptions.
173-507-060	Future rights.
173-507-070	Enforcement.
173-507-075	Appeals.
173-507-080	Regulation review.

WAC 173-507-010 General provision. These rules apply to surface waters within the Snohomish River basin, WRIA-7 (see WAC 173-500-040). Chapter 173-500 WAC, the general rules of the department of ecology for the implementation of the comprehensive water resources program, applies to this chapter 173-507 WAC.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-010, filed 9/6/79.]

WAC 173-507-020 Establishment of instream flows. (1) Instream flows are established for stream management units with monitoring to take place at certain control stations as follows:

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Affected Stream Reach Including Tributaries
12.1330.00 So. Fk. Skykomish River	51.6 28-27-10E	From confluence with N. Fk. Skykomish River to headwaters.
12.1381.50 Sultan River	5.1 17-28-8E	From mouth to headwaters.
12.1411.00 Skykomish River	25.0 12-27-6E	From mouth to headwaters, excluding So. Fk. Skykomish River and Sultan River.
12.1430.00 No. Fk. Snoqualmie	2.2 26-24-8E	From mouth to headwaters.

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Affected Stream Reach Including Tributaries
12.1445.00 Snoqualmie River	40.0 19-24-8E	From Snoqualmie Falls to headwaters, excluding No. Fork Snoqualmie River.
12.1485.00 Tolt River	8.7 31-26-8E	From mouth to headwaters.
12.1490.00 Snoqualmie River	23.0 9-25-7E	From confluence with Harris Creek to Snoqualmie Falls, excluding Tolt River.
12. Snoqualmie River	2.5 26-27-6E	From mouth to confluence with Harris Creek, including Harris Creek.
12.1554.00 Pilchuck River	1.9 18-28-6E	From mouth to headwaters.
12.1508.00 Snohomish River	20.4 16-27-6E	From influence of mean annual high tide at low base flow levels to confluence with Skykomish River and Snoqualmie River, excluding Pilchuck River.

(2) Instream flows established for the stream management units in WAC 173-507-020(1) are as follows:

INSTREAM FLOWS IN THE SNOHOMISH RIVER BASIN
(in Cubic Feet per Second)

Month	Day	12.1330.00 So. Fk. Skykomish	12.1411.00 Skykomish	12.1430.00 No. Fk.* Snoqualmie	No. Fk.** Snoqualmie
Jan.	1	900	2200	260	200
	15	900	2200	260	200
Feb.	1	900	2200	260	200
	15	900	2200	260	200
Mar.	1	900	2200	260	200
	15	900	2200	300	200
Apr.	1	1100	2650	300	200
	15	1250	3250	300	200
May	1	1250	4000	300	200
	15	1250	4900	300	200
June	1	1250	4900	300	200
	15	1250	4900	300	200
July	1	1250	3250	300	200
	15	950	2170	195	140
Aug.	1	650	1450	130	100
	15	450	1000	130	100
Sept.	1	450	1000	130	100
	15	450	1000	130	100
Oct.	1	550	1300	130	130
	15	700	1700	165	165
Nov.	1	900	2200	210	200
	15	900	2200	260	200
Dec.	1	900	2200	260	200
	15	900	2200	260	200

* Normal year flows must be maintained at all times unless a critical condition is declared by the director. The director, or his designee, may authorize, in consultation with the state departments of fisheries and wildlife, a reduction in instream flows during a critical condition period. At no time are diversions subject to this regulation permitted for any reason when flows fall below the following critical year flows, except where a declaration of overriding considerations of public interest is made by the director.

** Critical year flows represent flows below which the department believes substantial damage to instream values will occur.

Month	Day	12.1381.50 Sulton	12.1445.00 Snoqualmie (above Falls)	12.1485.50 Tolt River*	Tolt River**
Jan.	1		1550	280	190
	15		1550	280	190
Feb.	1		1550	280	190
	15		1550	280	190
Mar.	1		1550	280	190
	15		1550	280	190
Apr.	1		1550	280	190
	15		1550	280	190
May	1		1550	280	190
	15		1550	280	190
June	1		1550	280	190
	15		1550	280	165
July	1		1550	280	140
	15		1100	240	120
Aug.	1		770	170	120
	15		600	120	120
Sept.	1		600	120	120
	15		600	120	120
Oct.	1		820	190	185
	15		1100	280	190
Nov.	1		1550	280	190
	15		1550	280	190
Dec.	1		1550	280	190
	15		1550	280	190

* Normal year flows must be maintained at all times unless a critical condition is declared by the director. The director, or his designee, may authorize, in consultation with the state departments of fisheries and wildlife, a reduction in instream flows during a critical condition period. At no time are diversions subject to this regulation permitted for any reason when flows fall below the following critical year flows, except where a declaration of overriding considerations of public interest is made by the director.

** Critical year flows represent flows below which the department believes substantial damage to instream values will occur.

Month	Day	12.1490.00 Snoqualmie (Carnation)	12. Snoqualmie (mouth)	12.1554.00 Pilchuck R.	12.1508.00 Snohomish R.
Jan.	1	2500	2800	300	6000
	15	2500	2800	300	6000
Feb.	1	2500	2800	300	6000
	15	2500	2800	300	6000
Mar.	1	2500	2800	300	6000
	15	2500	2800	300	6000
Apr.	1	2500	2800	300	6000
	15	2500	2800	300	6500
May	1	2500	2800	300	7200
	15	2500	2800	300	8000
June	1	2500	2800	300	8000
	15	2500	2800	300	8000
July	1	1850	2180	220	5700
	15	1300	1550	160	4000
Aug.	1	950	1080	120	2800
	15	700	800	85	2000
Sept.	1	700	800	85	2000
	15	700	800	85	2000
Oct.	1	1050	1200	130	2900
	15	1650	1850	200	4000
Nov.	1	2500	2800	300	6000
	15	2500	2800	300	6000
Dec.	1	2500	2800	300	6000
	15	2500	2800	300	6000

(3) Instream flow hydrographs, as represented in the document entitled "Snohomish River instream resource protection program," shall be used for definition of instream flows on those days not specifically identified in WAC 173-507-020(2).

(4) All consumptive water rights hereafter established shall be expressly subject to the instream flows established in WAC 173-507-020 (1) through (3).

(5) At such time as the departments of fisheries and/or wildlife and the department of ecology agree that additional stream management units should be defined, other than those

specified in WAC 173-507-020(1), the department of ecology shall identify additional control stations and management units on streams and tributaries within the basin and shall set instream flows where possible for those stations as provided in chapters 90.22 and 90.54 RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-507-020, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-020, filed 9/6/79.]

WAC 173-507-030 Surface water source limitations to further consumptive appropriations. (1) The department, having determined further consumptive appropriations would harmfully impact instream values, adopts instream flows as follows confirming surface water source limitations previously established administratively under authority of chapter 90.03 RCW and RCW 75.20.050.

LOW FLOW LIMITATIONS

Stream	Limitation	Point of Measurement
Evans Creek, Tributary to Lake Beecher	No diversion when flow drops below 2.0 cfs.	800 ft. So. and 800 ft. east of center of Sec. 7, T. 27 N., R. 6 E.W.M.
Foye Creek Tributary to Riley Slough	No diversion when flow drops below 4.0 cfs.	750 ft. So. and 325 ft. east of N1/4 cor. of Sec. 18, T. 27 N., R. 6 E.W.M.
French Creek, Tributary to Snohomish River	No diversion when flow drops below 0.75 cfs.	125 ft. No. and 1300 ft. west of E1/4 of Sec. 20, T. 28 N., R. 6 E.W.M.
Langlois Creek Tributary to Tolt River	No diversion when flow drops below 3.0 cfs.	1040 ft. No. and 1250 ft. east of SW1/4 cor. of Sec. 22, T. 25 N., R. 7 E.W.M.
Tate Creek, Tributary to No. Fk. Snoqualmie River	No diversion when flow drops below 2.0 cfs.	900 ft. east and 870 ft. No. of W1/4 cor. of Sec. 26, T. 24 N., R. 8 E.W.M.
Tulalip Creek, Tributary to Tulalip Bay	No diversion when flow drops below 2.5 cfs.	1125 ft. west and 125 ft. No. of S1/4 cor. of Sec. 22, T. 30 N., R. 4 E.W.M.
Unnamed Stream (Coon Creek), Tributary to Pilchuck River.	No diversion when flow drops below 1.0 cfs.	480 ft. No. and 240 ft. west of center of Sec. 19, T. 30 N., R. 7 E.W.M.
Unnamed Stream (Coon Creek), Tributary to Pilchuck River	One-half of low flow must be bypassed.	800 ft. east and 1100 ft. So. of W1/4 cor. of Sec. 19, R. 30 N., R. 7 E.W.M.
Unnamed Stream, Tributary to Cherry Creek	No diversion when flow drops below 1.0 cfs.	1000 ft. So. and 400 ft. west of NE cor. of Sec. 16, T. 26 N., R. 7 E.W.M.
Unnamed Stream, Tributary to McCoy Creek	No diversion when flow drops below 0.5 cfs.	600 ft. west and 100 ft. No. of SE cor. of Sec. 5, T. 27 N., R. 8 E.W.M.
Unnamed Stream, Tributary to Snoqualmie River	No diversion when flow drops below 30.0 cfs.	350 ft. west and 900 ft. No. of SE cor. of Sec. 5, T. 27 N., R. 8 E.W.M.
Unnamed Stream (Solberg Creek), Tributary to Snoqualmie River	No diversion when flow drops below 2.0 cfs.	600 ft. west and 1050 ft. No. of E cor. of Sec. 12, T. 25 N., R. 6 E.W.M.
Unnamed Stream, Tributary to Snoqualmie River	One-half of low flow must be bypassed.	500 ft. So. and 1120 ft. east of center Sec. 28, T. 25 N., R. 7 E.W.M.
Unnamed Stream, Tributary to Snoqualmie River	No diversion when flow falls below 1.0 cfs.	600 ft. No. of E1/4 cor. of Sec. 28, T. 25 N., R. 7 E.W.M.
Wood Creek, Tributary to Snohomish River	No diversion when flow drops below 0.75 cfs.	335 ft. No. and 130 ft. east of S1/4 cor. of Sec. 8, T. 28 N., R. 5 E.W.M.
Woods Creek Tributary to Skykomish River	No diversion when flow drops below 11.0 cfs.	Immediately below confl. of West Fork in SE1/4NW1/4 Sec. 33, T. 28 N., R. 7 E.W.M.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 6.0 cfs.	Immediately above said confl. of West Fork.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 2.5 cfs.	Immediately above confl. of Roesigner Cr. in NE1/4NW1/4 of Sec. 3, T. 28 N., R. 7 E.W.M.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 0.5 cfs.	Roesigner Creek, immediately above said confl. with Woods Creek.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 5.0 cfs.	West Fork, immediately above said confl. with Woods Creek.
Woods Creek, Tributary to Skykomish River	No diversion when flow drops below 2.5 cfs.	West Fork when it crosses the No. line of Sec. 5, T. 28 N., R. 7 E.W.M.
Unnamed Lake (Morris Lake), Tributary to Horseshoe Lake	No diversion when flow drops below 1.0 cfs.	Lake outlet at NE1/4NE1/4 of Sec. 9, T. 25 N., R 7 E.W.M.

Note: Affected stream reaches extend from mouth to headwaters and include all tributaries in the contributing drainage area unless specifically excluded.

(2) The department, having determined there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the following streams to further consumptive appropriation for the periods indicated. These closures confirm surface water source limitations previously established administratively under authority of chapter 90.03 RCW and RCW 75.20.050.

SURFACE WATER CLOSURES

Stream	Date of Closure	Period of Closure
Griffin Creek, Tributary to Snoqualmie River	9/22/53	All year
Harris Creek, Tributary to Snoqualmie River	1/20/44	All year
Little Pilchuck Creek, Tributary to Pilchuck River	5/6/52	All year
May Creek, Tributary to Wallace River	10/13/53	All year
Patterson Creek, Tributary to Snoqualmie River	2/19/52	All year
Quilceda Creek, Tributary to Ebey Slough	6/10/46	All year
Raging River, Tributary to Snoqualmie River	9/20/51	All year
Unnamed Stream (Bodell Creek), Tributary to Pilchuck River	9/6/51	All year

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-030, filed 9/6/79.]

WAC 173-507-040 Ground water. In future permitting actions relating to ground water withdrawals, the natural interrelationship of surface and ground waters shall be fully considered in water allocation decisions to assure compliance with the meaning and intent of this regulation.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-040, filed 9/6/79.]

WAC 173-507-050 Exemptions. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) Domestic inhouse use for a single residence and stock watering, except that related to feed lots, shall be exempt.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-050, filed 9/6/79.]

WAC 173-507-060 Future rights. No right to divert or store public surface waters of the Snohomish WRIA 7 shall hereafter be granted which shall conflict with the instream flows and closures established in this chapter. Future rights for nonconsumptive uses, subject to the conditions herein established, may be granted.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-060, filed 9/6/79.]

WAC 173-507-070 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-507-070, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-070, filed 9/6/79.]

WAC 173-507-075 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-507-075, filed 6/9/88.]

WAC 173-507-080 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-507-080, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-003 (Order DE 79-8), § 173-507-080, filed 9/6/79.]

Chapter 173-508 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—CEDAR-SAMMAMISH BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 8

WAC

173-508-010	Authority.
173-508-020	Purpose.
173-508-030	Closures and instream flows.
173-508-040	Table 1—Cedar-Sammamish basin—WRIA 8.
173-508-050	Ground water.
173-508-060	Instream flows for the Cedar River.
173-508-070	Future rights.
173-508-080	Exemptions.
173-508-090	Enforcement.
173-508-095	Appeals.
173-508-100	Regulation review.

WAC 173-508-010 Authority. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resource management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-010, filed 9/6/79. Formerly chapter 173-30 WAC.]

WAC 173-508-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in Lake Washington drainages with instream flows and levels necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, navigational values, and to preserve water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-020, filed 9/6/79.]

WAC 173-508-030 Closures and instream flows. (1) The department of ecology has determined that additional diversions of water from the Lake Washington drainage system would deplete instream flows and lake levels required to support the uses described in WAC 173-508-020. Therefore, lakes and streams contributing to the Lake Washington drainage above the Hiram M. Chittenden Locks, excluding the Cedar River drainage, shall be closed to further consumptive appropriations. Regulation to protect instream flows in the Cedar River and its tributaries shall be undertaken pursuant to WAC 173-508-060.

(2) WAC 173-508-040—Table 1, includes specific named and unnamed surface water sources in water resource inventory area 8 with restrictions indicated. All tributaries in the Lake Washington drainage not specifically included in Table 1 are closed.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-030, filed 9/6/79.]

WAC 173-508-040 Table 1—Cedar-Sammamish basin—WRIA 8.

Stream or Lake	Tributary to	Restriction
(Little) Bear Creek	Sammamish River	Closure
Cedar River (including tributaries)	Lake Washington	Instream Flow Levels
Coal Creek	Lake Washington	Closure
Cottage Lake Creek and tributaries,	Sammamish River	Closure
Bear Creek		Closure
Evans Creek		Closure
Haller Lake	Thornton Creek	Closure
Issaquah Creek	Sammamish Lake	Closure
N. Fork Issaquah		Closure
E. Fork Issaquah		Closure
Unnamed Stream		Closure
Fifteen Mile Creek		Closure
Holder Creek		Closure
Carey Creek		Closure
Lake Washington	Puget Sound	Closure
Sammamish River	Lake Washington	Closure
Lake Sammamish	Sammamish River	Closure
Tibbetts Creek	Sammamish Lake	Closure
Pine Lake and Unnamed Stream (Pine Lake Creek)	Sammamish Lake	Closure
Laughing Jacobs Creek	Sammamish Lake	Closure
Larson Lake (including tributaries)	Lake Washington	Closure
Lyon Creek	Lake Washington	Closure
Martha Lake	Swamp Creek	Closure
May Creek	Lake Washington	Closure
McAleer Creek		Closure
Lake Ballinger (McAleer Lake)	Lake Washington	Closure
Mercer Slough	Lake Washington	Closure
Kelsey Creek		Closure
Kinsley Creek		Closure
Mercer Slough Creek		Closure
North Creek	Sammamish River	Closure
Silver Lake		Closure
Pipers Creek	Puget Sound	Closure
Rock Creek	Cedar River	Closure
Swamp Creek	Sammamish River	Closure

Stream or Lake	Tributary to	Restriction
Unnamed Springs	Sammamish Lake	Closure
Unnamed Stream (11-26-3E)	Puget Sound	Closure
Unnamed Stream (12-24-5E)	Sammamish Lake	Closure
Unnamed Stream (Jones Creek)	Cedar River	Closure
Unnamed Stream (Juanita Creek)	Lake Washington	Closure
Unnamed Stream (Northrup Creek)	Lake Washington	Closure
Unnamed Stream (Wildcat Creek)	Sammamish River	Closure
Thornton Creek	Lake Washington	Closure

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-040, filed 9/6/79.]

WAC 173-508-050 Ground water. In future permitting actions relating to ground water withdrawals, the natural interrelationship of surface and ground waters shall be fully considered in water allocation decisions to assure compliance with the intent of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-050, filed 9/6/79.]

WAC 173-508-060 Instream flows for the Cedar River. (1) The instream flows established in this section apply to waters of the Cedar River and affect the entire watershed drained by the Cedar River including all tributaries thereto.

(2) Instream flows established in this section shall be measured at the existing U.S. Geological Survey gaging station No. 12.1190.00 on the Cedar River at Renton, Washington.

(3) Except as provided herein (critical year flows), water flows in the Cedar River and tributaries thereto shall, to the extent depletion under existing rights and natural flow conditions permit, be maintained throughout each year at levels which, during the time periods designated, do not fall below the following measurements:

(a) **Normal Year Flow**

January 1 to June 20:	370 cfs
June 20 to July 15:	Linear decrease from 370 cfs on June 20 to 130 cfs on July 15
July 15 to September 10:	130 cfs
September 10 to September 20:	Linear increase from 130 cfs on September 10 to 200 cfs on September 20
September 20 to October 1:	200 cfs
October 1 to October 10:	Linear increase from 200 cfs on October 1 to 370 cfs on October 10
October 10 to January 1:	370 cfs

Normal year flows must be maintained at all times unless a critical condition is declared by the director. If natural Cedar River flows fall below the 1 in 10 year Cedar River flow frequency, the director, or his designee, may authorize flows below the normal year flows, but not lower than the critical year flow except where a declaration of overriding considerations of public interest is made by the director. All requests to deplete below the established instream flow level will be considered on a case-by-case basis.

(b) Critical Year Flow

January 1 to June 15:	250 cfs
June 15 to July 1:	Linear decrease from 250 cfs on June 15 to 110 cfs on July 1
July 1 to October 1:	110 cfs
October 1 to November 1:	Linear increase from 110 cfs on October 1 to 250 cfs on November 1
November 1 to January 1:	250 cfs

Critical year flows represent flows below which the department believes substantial damage to instream values will occur. Critical year flows are expected to be met unless natural Cedar River flows fall below the one in fifty year Cedar River flow frequency.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-060, filed 9/6/79.]

WAC 173-508-070 Future rights. No water rights to divert or store public surface waters of the Cedar-Sammamish basin WRIA 8 shall hereafter be granted which shall conflict with the instream flows and closures established in this chapter. Future rights for nonconsumptive uses may be granted under the provisions of this chapter.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-508-070, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-070, filed 9/6/79.]

WAC 173-508-080 Exemptions. (1) Nothing in this chapter shall affect any existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter; nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) Domestic inhouse use for a single residence and stock watering, except that related to feedlots, shall be exempt from this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-080, filed 9/6/79.]

WAC 173-508-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-508-090, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-090, filed 9/6/79.]

WAC 173-508-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-508-095, filed 6/9/88.]

WAC 173-508-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-508-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-100, filed 9/6/79.]

Chapter 173-509 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—GREEN-DUWAMISH RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 9

WAC

173-509-010 Purpose.
173-509-015 Background.
173-509-020 General provision.
173-509-030 Establishment of instream flows.
173-509-040 Surface water source limitations to further consumptive appropriations.
173-509-050 Ground water.
173-509-060 Future rights.
173-509-070 Exemptions.
173-509-080 Enforcement.
173-509-085 Appeals.
173-509-090 Regulation review.
173-509-100 Implementation.

WAC 173-509-010 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Green-Duwamish drainage basin with instream flows and levels necessary for preservation and protection of wildlife, fish, scenic, aesthetic and other environmental values, recreational and navigational values, and to preserve water quality. Nothing in this chapter shall preclude the future issuance of regulations and/or signing of intergovernmental agreements which attempt to optimize the total public use of the basin water resources, providing they are consistent with the intent of this chapter. The instream flow rules presented here are for preservation of the existing resources so that when future planning or development occurs on this river these resources will be available.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-010, filed 6/6/80.]

WAC 173-509-015 Background. The Green-Duwamish River basin has been modified significantly since settlement of the area. Urbanization in the lower basin has influenced water quality and diversions for municipal and industrial water supply have altered the stream flow of the Green-Duwamish River. Ground water has been developed for consumptive use within the basin. The White River originally had a confluence with the Green River near Auburn but since 1906 it has been diverted into the Puyallup River. A dam on the Black River near Tukwila prevents water from the Green River from flowing into Lake Washington during periods of high flow. In 1913 the city of Tacoma commenced diversions for municipal and industrial uses. Since 1962 the Green-Duwamish River has been influenced by the operation of the Howard A. Hanson Dam, a Corps of Engineers flood control project with authorization to provide instream flow maintenance of at least 110 cfs for fisheries conservation purposes. The operation has also considered drinking water quality requirements of the city of Tacoma.

The Green-Duwamish River basin is a natural rearing and spawning area primarily for steelhead trout and chinook, coho and chum salmon. Fish hatcheries are located on tributary streams and these contribute to total numbers of fish produced by the river system. The river itself and the shoreline also offer easily accessible recreational opportunities.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-015, filed 6/6/80.]

WAC 173-509-020 General provision. These rules apply to all waters within the Green-Duwamish River basin, WRIA 9 (see WAC 173-500-040). This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program). The provisions of this chapter apply, as a matter of state law, to future water right authorizations issued pursuant to the state's water rights codes.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-020, filed 6/6/80.]

WAC 173-509-030 Establishment of instream flows. (1) Instream flows are established for stream management units with monitoring to take place at certain control stations as follows:

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Affected Stream Reach Including Tributaries
12.1130.00 Green River near Auburn, WA	32.0 17-21-5	From influence of mean annual high tide at low instream flow levels (approximately River Mile 11.0) to USGS Gage #12.1067.000
12.1067.00 Green River near Palmer, WA	60.4 13-21-7	From USGS Gage #12.1067.000 to headwaters.

The Palmer gage will be used to condition future water rights upstream from that gage. The Auburn gage will be used to condition future water right appropriations downstream from the Palmer gage. If it becomes necessary to change a control station location to improve measurement accuracy or management capability, the department shall do so under provisions in WAC 173-500-060(6).

(2) Instream flows established for the stream management units in WAC 173-509-030(1) are as follows:

INSTREAM FLOWS FOR FUTURE WATER RIGHTS IN THE GREEN-DUWAMISH RIVER BASIN
(in Cubic Feet per Second)

Month	Day	12,1130.00 Normal Year Green River Near Auburn	12,1067.00 Normal Year Green River Near Palmer	12.1067.00 Critical Year Green River Near Palmer
Jan.	1	650	300	300

Month	Day	12,1130.00 Normal Year Green River Near Auburn	12,1067.00 Normal Year Green River Near Palmer	12.1067.00 Critical Year Green River Near Palmer
	15	650	300	300
Feb.	1	650	300	300
	15	650	300	300
Mar.	1	650	300	300
	15	650	300	300
Apr.	1	650	300	300
	15	650	300	300
May	1	650	300	300
	15	650	300	300
June	1	650	300	300
	15	650	300	210
July	1	550	300	150
	15	300	150	150
Aug.	1	300	150	150
	15	300	150	150
Sept.	1	300	150	150
	15	300	150	150
Oct.	1	300	190	150
	15	350	240	150
Nov.	1	550	300	190
	15	550	300	240
Dec.	1	650	300	300
	15	650	300	300

(a) Future water right holders subject to regulation by the Palmer gage will not be allowed to continue diversions when flows fall below the normal year instream flows at the Palmer gage unless a critical condition is declared by the director. The director, or his designee, may authorize, in consultation with the state departments of fisheries and wildlife, a reduction in instream flows during a critical condition period. At no time will diversions subject to regulation by the Palmer gage be continued when flows fall below the critical year instream flows at Palmer. At no time will diversions subject to regulation by the Auburn gage be continued when flows fall below the normal year instream flows at Auburn. When a declaration of overriding considerations of public interest is made by the director, these requirements may be modified or waived. A declaration of overriding consideration because of drought conditions shall not be made when natural flows equal or exceed the one-in-fifty year low flow condition. The director shall consult with the directors of the state departments of wildlife and fisheries before making a declaration of overriding consideration. Any declaration of critical conditions or overriding considerations of public interest made by the director shall be communicated to all basin resource agencies, water purveyors, and local general purpose governments, and include the reason for such declaration and its expected duration.

(b) The director will consider declaring a critical period when:

(1) In the spring the basin runoff volume forecast of May 1 is not adequate to meet the sum of any rights which the city of Tacoma may have established through historical usage prior to the adoption of this regulation plus the normal year instream flows plus the volume required to replenish the conservation storage.

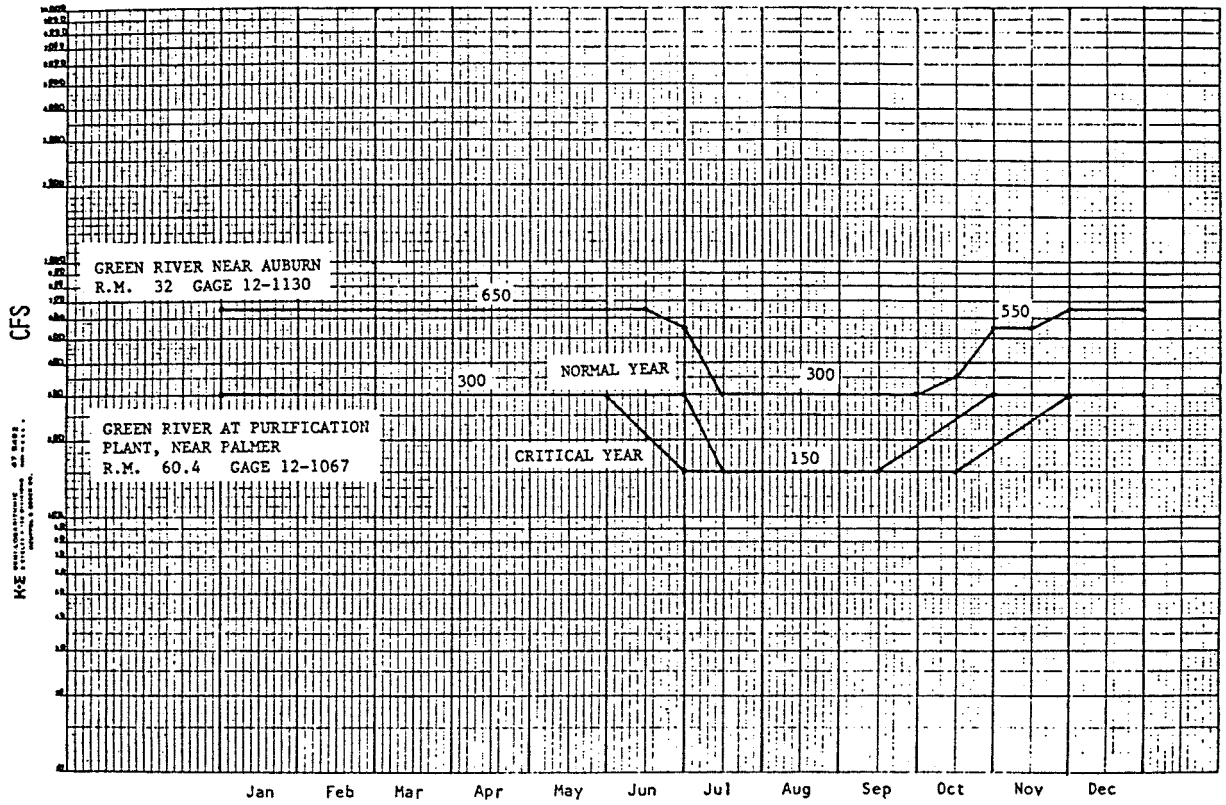
(2) In the summer and fall the sum of the reservoir inflows extrapolated from current observations plus the volume of water in storage at Howard A. Hanson Dam is not adequate to meet the sum of any rights which the city of Tacoma may have established through historical usage prior to the adoption of this regulation plus the normal year instream flows. Within five days the director will inform the major affected water right holders of the extent of the allowed deviation from the normal year instream flows. Once a deviation from normal year instream flows is allowed, the water resources shall be evaluated at least every seven days to see if additional deviation is warranted. Before allowing deviation from the normal year instream flows, water conservation practices and use of other sources shall be considered.

(c) In addition to other necessary provisions, any diversion of the natural flow, including diversion to storage under future water rights shall cease (or be regulated to the extent necessary) when the flow at the applicable control station falls below (or is less than) the instream flows established by this regulation and made a condition of said future water right. Said future water rights are subject to the rights and authority of the Corps of Engineers to utilize for storage and conservation flows, the natural inflow to the Howard A. Hanson reservoir and to all other prior water right holders' authorized use of natural flows, including any rights that the city of Tacoma may have established through historical usage. The use of stored waters is not to be impaired, limited, or diminished by this regulation.

The department recognizes that from time to time the Corps of Engineers may establish a minimum reservoir level which is necessary to provide conservation flows with a high measure of assurance. When the reservoir falls below this level it may be necessary for the Corps of Engineers to replenish conservation storage. When this occurs, water rights subject to the provisions of this chapter may be temporarily regulated or diminished and the actual stream discharge diminished.

(3) Instream flows, as represented in Figure 1, shall be used for definition of instream flows on those days not specifically identified in WAC 173-509-030(2).

FIGURE 1 - PROPOSED INSTREAM FLOWS FOR FUTURE WATER RIGHTS IN THE GREEN-DUWAMISH RIVER BASIN



(4) All consumptive water rights hereafter established shall be expressly subject to the instream flows established in WAC 173-509-030 (1) through (3). However, nothing in this section shall prohibit the release or diversion of stored water or the use of any water course as a means for its conveyance in accordance with RCW 90.03.030.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-509-030, filed 6/9/88. Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-030, filed 6/6/80.]

WAC 173-509-040 Surface water source limitations to further consumptive appropriations. (1) The department, having determined there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the following streams to further consumptive appropriation for the periods indicated. These closures confirm surface water source limitations previously established administratively under authority of chapter 90.03 RCW and RCW 75.20.050.

SURFACE WATER CLOSURES

Stream	Date of Administrative Closure	Period of Administrative Closure
All tributaries of Green River SE1/4SE1/4 sec. 14, T.32 N., R.4E.	8/19/53	All year
Deep Creek (including Hyde Lk.), tributary to Deep Lake NW1/4SE1/4 sec. 18, T.21N., R.7E.	4/17/53	All year
Unnamed stream (Des Moines Creek, Tributary to Puget Sound SW1/4SW1/4 sec. 8, T.22N., R.4E.	8/22/52	All year
Unnamed stream (Garrison Creek), Tributary to Black River (indirect) NW1/4NW1/4NW1/4 sec. 6, T.22N., R.5E.	10/18/51	All year
Unnamed stream (Miller Creek) (Maybrook Creek), Tributary to Puget Sound NE1/4NE1/4 sec. 36, T.23N., R.3E.	1/7/46	All year
Unnamed stream (Springbrook Creek), Tributary to Black River NE1/4SE1/4SW1/4 sec. 13, T.23N., R.4E.	11/14/45	All year

(2) The department, having determined that maximum lake levels have been established by court decree for certain lakes in WRIA 9, adopts the following lake levels. These maximum lake levels confirm lake levels previously established by order of the superior court for King County.

MAXIMUM LAKE LEVELS

Lakes	Lake Level Established	Date of Order
Angle Lake	349.27 ft. at MSL	4/21/75
Star Lake	324.46 ft. at MSL	9/20/50
077		
Lake Sawyer (Tributary to Covington Creek)	518.94 ft. at MSL	8/5/52

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-040, filed 6/6/80.]

WAC 173-509-050 Ground water. Future ground water withdrawal permits will not be affected by this chapter unless such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-050, filed 6/6/80.]

WAC 173-509-060 Future rights. No right to divert or store public waters of the Green-Duwamish River basin, WRIA 9, shall be granted which shall conflict with the purposes of this chapter: Provided however, Withdrawals of water which would conflict with said purposes may be authorized in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-060, filed 6/6/80.]

WAC 173-509-070 Exemptions. (1) Nothing in this chapter shall affect water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities, including but not limited to: (a) Howard Hanson Dam storage and operation as authorized in the Flood Control Act of May 17, 1950; (b) any existing right the city of Tacoma may have.

(2) Domestic inhouse use for a single residence and stock watering, except that related to feed lots, shall be exempt from the provisions of this chapter.

(3) Storage projects may be approved if they are not in conflict with the purposes of this chapter.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-070, filed 6/6/80.]

WAC 173-509-080 Enforcement. In the enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-509-080, filed 6/9/88. Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-080, filed 6/6/80.]

WAC 173-509-085 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-509-085, filed 6/9/88.]

WAC 173-509-090 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions. The director shall initiate a review of the rules by appointing a committee of major affected water right holders, basin resource management interests, and governmental agencies.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-509-090, filed 6/9/88. Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-090, filed 6/6/80.]

WAC 173-509-100 Implementation. In the event the COE is authorized to change the operation of Howard Hanson Dam in order to meet the stream flows established in this chapter and so advises the director, these regulations shall be reviewed by the department within one hundred eighty days of the COE authorization to determine, what, if any, amendments are required to maintain the integrity and purpose of this chapter.

[Statutory Authority: RCW 90.22.020, 90.54.020 and 90.54.040. 80-07-005 (Order DE 79-32), § 173-509-100, filed 6/6/80.]

Chapter 173-510 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—PUYALLUP RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 10

WAC

173-510-010	General provision.
173-510-020	Purpose.
173-510-030	Establishment of instream flows.
173-510-040	Surface water source limitations to further consumptive appropriations.
173-510-050	Ground water.
173-510-060	Lakes.
173-510-070	Exemptions.
173-510-080	Future rights.
173-510-090	Enforcement.
173-510-095	Appeals.
173-510-100	Regulation review.

WAC 173-510-010 General provision. These rules apply to waters within the Puyallup River basin, WRIA 10, as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-010, filed 3/21/80.]

WAC 173-510-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Puyallup River basin with instream flows and levels necessary to provide protection for wildlife, fish, scenic-aesthetic, environmental values, recreation, navigation, and to preserve high water quality standards.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-020, filed 3/21/80.]

WAC 173-510-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township, and Range	Affected Stream Reach(es)
12-0965.00 Upper Puyallup River	12.2 25-20-4E	Confluence with Puyallup River to the headwaters including all tributaries
12-0957.00 Carbon River	0.1 13-19-4E	From the confluence with the White River to the headwaters including all tributaries, excluding the Carbon River.
12-1015.00 Lower Puyallup River	6.6 20-20N-R4E	From the influence of mean annual high tide at low base flow levels to the confluence with the White River including all tributaries and excluding the White River.

(2) Instream flows are established for the stream management units in WAC 173-510-030(1) as follows:

INSTREAM FLOWS IN THE PUYALLUP RIVER BASIN

		(cubic feet per second)		
Month	Day	12-0965.00 Puyallup River (At Alderton)	12-1015.00 Puyallup River	12-0957.00 Carbon River
Jan	1	700	1400	600
	15	700	1400	550
Feb	1	750	1400	550
	15	800	1500	550
Mar	1	800	1600	550
	15	850	1700	550
Apr	1	900	1800	600
	15	950	1900	700
May	1	950	2000	900
	15	1000	2000	900
Jun	1	1050	2000	600
	15	1050	2000	500
Jul	1	1050	2000	450
	15	1050	1750	400
Aug	1	900	1500	350
	15	800	1300	350
Sep	1	600	1150	350
	15	500	1000	350
Oct	1	500	1000	350
	15	500	1000	550
Nov	1	600	1000	550
	15	700	1100	600
Dec	1	700	1200	700
	15	700	1300	700

(3) Instream flow hydrographs, as represented in the document entitled "Puyallup River basin instream resource protection program," shall be used for definition of instream flows on those days not specifically identified in WAC 173-510-030(2).

(4) All consumptive water rights hereafter established shall be expressly, subject to instream flows established in WAC 173-510-030 (1) through (3).

(5) At such time as the department of fisheries and/or department of wildlife and the department of ecology shall agree that additional stream management units should be identified other than those specified in WAC 173-510-030(1), the department of ecology shall identify additional control stations and management units on streams and tributaries within the basin and shall further protect instream flows where possible for those stations as provided in chapters 90.22 and 90.54 RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-510-030, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-030, filed 3/21/80.]

WAC 173-510-040 Surface water source limitations to further consumptive appropriations. (1) The department of ecology, having determined unlimited consumptive appropriations would harmfully impact instream values, adopts instream flows as follows confirming surface water source limitations previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050.

LOW FLOW LIMITATIONS

Stream Number Stream Name Section, Township, Range of Stream Mouth or Lake Outlet	Limitation
10.0594 Unnamed stream, tributary to Puyallup River NE1/4SE1/4, Sec. 8, T.18N, R.5E	No diversion when flow falls to 0.10 cfs.
10.0415 Unnamed stream, (Taylor Creek) tributary of Carbon River NW1/4SW1/4, Sec. 33, T.19N., R.5E	No diversion when flow falls to 1.0 cfs.
10.0402 Unnamed stream, (Van Ogle Creek) tributary to Puyallup River NW1/4SE1/4, Sec. 30, T.20N, R.5E	No diversion when discharge into the Puyallup River drops to 1.0 cfs.
Unnamed stream, (Canyon Creek) tributary to Puyallup River SE1/4NE1/4, Sec. 24, T. 20N, R.3E	No diversion when flow falls to 1.0 cfs.

(2) The following stream and lake closures are adopted confirming surface water source limitations previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050.

EXISTING SURFACE WATER CLOSURES

Stream Number Stream Name Section, Township, Range	Date of Closure	Period of Closure
10.0414 Voight Creek, tributary to Carbon River NW1/4SW1/4, Sec. 33, T.19N., R.5E	2/26/75	All year
10.0589 Unnamed stream (Lawrence Creek), tributary to Puyallup River NW1/4NE1/4, Sec. 25, T.19N, R.4E	2/26/75	All year
Unnamed springs, tributary to Puyallup River SE1/4,NE1/4, Sec. 35, T.20N, R.4E	12/14/64	All year
10. 0006 Hylebos Creek Hylebos Creek, drains into Commencement Bay and Puget Sound NW1/4NE1/4, Sec. 27, T.21N, R.3E	4/26/76	All year
10.0406 Fennel Creek, tributary to Puyallup River SE1/4SE1/4, Sec. 6, T.19N, R.SE	2/26/75	All year
North Lake Sec. 15, T.21N, R.4E	8/19/47	All year

(3) The department, having determined that further consumptive appropriations would harmfully impact instream values, closes the following streams and lakes in WRIA 10 to further consumptive appropriations.

NEW SURFACE WATER CLOSURES

Stream Number Stream or Lake Name Section, Township, Range of Stream Mouth or Lake Outlet	Period of Closure
10.0429 South Prairie Creek and all tributaries, tributary to Carbon River SW1/4SE1/4, Sec. 27, T.19N, R.5E	All year
10.0027 Clarks Creek and all tributaries, tributary to Puyallup River NE1/4NE1/4, Sec. 19, T.20N, R.4E	All year
10.0600 Kapowsin Creek and all tributaries, tributary to Puyallup River SW1/4SW1/4, Sec. 20, T.18N, R.5E	All year
10.0031-.0397 White River and all tributaries SW1/4SE1/4, Sec 23, T.20N, R.4E	All year
Kapowsin Lake SE1/4NE1/4, Sec. 5, T.17N., R.5E	All year
10.0603-.0607 Ohop Creek and all tributaries source of Kapowsin Lake SE1/4NW1/4, Sec. 18, T.17N., R.3E	All year
10.0022 Clear Creek and all tributaries, tributary to Puyallup River NW1/4SW1/4, Sec. 11, T.20N., R.3E	All year
10.0410 Canyon Falls Creek and all tributaries, tributary to Puyallup River Sec. 7, T.19N., R.5E	All year
10.0596 Fiske Creek and all tributaries, tributary to Puyallup River SW1/4SW1/4, Sec. 17, T.18N., R.5E	All year
10.0006 Hylebos Creek and all tributaries, tributary to Commencement Bay NW1/4NE1/4, Sec. 27, T.21N., R.3E	All year
10.0620 Le Dout Creek and all tributaries, tributary to Puyallup River NW1/4NW1/4, Sec. 28, T.17N., R.6E	All year
10.0622 Niesson Creek and all tributaries, tributary to Puyallup River NE1/4SE1/4, Sec. 33, T.17N., R.6E	All year
10.0017 Wapato Creek and all tributaries, tributary to Commencement Bay NW1/4SW1/4, Sec. 27, T.21N., R.3E	All year
10.0035 Unnamed Stream (Strawberry Creek), (Salmon Creek) and all tributaries, tributary to White River NE1/4SE1/4, Sec. 13, T.20N., R.4E	All year
10.0621 Kellogg Creek and all tributaries, tributary to Puyallup River SE1/4SW1/4, Sec. 28, T.17N., R.6E	All year

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-040, filed 3/21/80.]

WAC 173-510-050 Ground water. In future permitting actions relating to ground water withdrawals, particularly from shallow aquifers, a determination shall be made as to whether the proposed withdrawal will have a direct, and measurable, impact on stream flows in streams for which closures and instream flows have been adopted (WAC 173-510-040). If the determination affirms such interrelationship, the provisions of WAC 173-510-040 shall apply.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-050, filed 3/21/80.]

WAC 173-510-060 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-060, filed 3/21/80.]

WAC 173-510-070 Exemptions. (1) Nothing in this chapter shall affect water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Domestic in-house use for a single residence and stock watering shall be exempt except that use related to feedlots.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-070, filed 3/21/80.]

WAC 173-510-080 Future rights. No rights to divert or store public surface waters of the Puyallup WRIA 10 shall hereafter be granted which shall conflict with the purpose of this chapter as stated in WAC 173-510-02 [WAC 173-510-020].

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-080, filed 3/21/80.]

WAC 173-510-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-510-090, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-090, filed 3/21/80.]

WAC 173-510-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-510-095, filed 6/9/88.]

WAC 173-510-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-510-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-100, filed 3/21/80.]

Chapter 173-511 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—NISQUALLY RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 11

WAC

173-511-010	General provision.
173-511-020	Purpose.
173-511-030	Establishment of instream flows.
173-511-040	Surface water source limitations to further consumptive appropriations.
173-511-050	Ground water.
173-511-060	Lakes.
173-511-070	Exemptions.
173-511-080	Future rights.
173-511-090	Enforcement.
173-511-095	Appeals.
173-511-100	Regulation review.

WAC 173-511-010 General provision. These rules apply to waters within the Nisqually River basin, WRIA 11, as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-010, filed 2/2/81.]

WAC 173-511-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Nisqually River basin with instream flows and levels necessary to provide protection for wildlife, fish, scenic, aesthetic, environmental values, recreation, navigation, and to preserve water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-020, filed 2/2/81.]

WAC 173-511-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station Location, River Mile and Section, Township and Range	Affected Stream Reach
New gage Nisqually River	4.3 9, 18N, 1E	From influence of mean annual high tide at low base flow levels to the outlet of the Centralia City Light Power Plant.
12-0895-00 Nisqually River	21.8 28, 17N, 2E	From outlet of the Centralia City Light Power Plant at river mile 12.6 to Centralia City Light Power canal diversion at river mile 26.2, including all tributaries.
12-0884-00 Nisqually River	32.6 21, 16N, 3E	From the Centralia City Light Power canal diversion at river mile 26.2 to gage 12-0865-00 near the La Grande Power Plant, including all tributaries except the Mashel River.
12-0825-00 Nisqually River	57.8 29, 15N, 6E	From gage 12-0865-00 near the La Grande Power Plant to the headwaters including all tributaries.
12-0870.00 Mashel River	3.25 11, 16N, 4E	From mouth upstream to the headwaters including all tributaries.

(2) Instream flows established for the stream management unit described in WAC 173-511-030(1) are as follows:

INSTREAM FLOWS IN THE NISQUALLY RIVER BASIN
(in Cubic Feet per Second)

Month	Day	Lower Reach of the Nisqually River USGS Gage 12-* RM 4.3	Bypass Reach of the Nisqually River USGS Gage 12-0895-00 RM 21.8	Mid Reach of the Nisqually River USGS Gage 12-0884-00 RM 32.6-
January	1	900	600	900
	15	900	600	900
February	1	900	600	900
	15	900	600	900
March	1	900	600	900
	15	900	600	900
April	1	900	600	900
	15	900	600	900
May	1	900	600	900
	15	900	600	900
June	1	900	500(closed)	800(closed)
	15	850	450(closed)	800(closed)
July	1	800	400(closed)	800(closed)
	15	800	400(closed)	800(closed)
August	1	800	370(closed)	800(closed)
	15	800	370(closed)	650(closed)
September	1	600	370(closed)	600(closed)
	15	600	370(closed)	600(closed)
October	1	700	550(closed)	700(closed)
	15	700	550(closed)	700(closed)
November	1	700	600	700
	15	700	600	700
December	1	800	600	800
	15	900	600	900

* New gage to be established.

Month	Day	Upper Reach of the Nisqually River USGS Gage 12-0825-00 RM 57.8	Mashel River USGS Gage 12-0870-00 RM 3.25
January	1	450	100
	15	450	100

Month	Day	Upper Reach of the Nisqually River USGS Gage 12-0825-00 RM 57.8	Mashel River USGS Gage 12-0870-00 RM 3.25
February	1	450	100
	15	450	100
March	1	450	100
	15	450	100
April	1	450	100
	15	450	100
May	1	450	100
	15	450	80
June	1	600	80(closed)
	15	650	70(closed)
July	1	550	50(closed)
	15	500	40(closed)
August	1	450	30(closed)
	15	400	30(closed)
September	1	350	20(closed)
	15	300	20(closed)
October	1	300	20(closed)
	15	300	20(closed)
November	1	350	40
	15	400	70
December	1	450	100
	15	450	100

(3) Instream flow hydrographs, as represented in the document entitled "Nisqually River basin instream resource protection program," shall be used for identification of instream flows on those days not specifically identified in WAC 173-511-030(2).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-030, filed 2/2/81.]

WAC 173-511-040 Surface water source limitations to further consumptive appropriations. (1) The department has determined that (a) certain streams exhibit low summer flows or have a potential for going dry thereby inhibiting anadromous fish passage during critical life stages, and (b) historic flow regimes and current uses of certain other streams indicate that no water is available for additional appropriation. Based upon these determinations the following streams and lakes are closed to further appropriation for the periods indicated:

NEW SURFACE WATER CLOSURES

Stream or Lake Section, Township, and Range of Mouth or Outlet	Tributary to	Period of Closure
Mashel River NE1/4SW1/4 Sec. 29, T16N, R4E and all tributaries	Nisqually River	June 1 - Oct. 31
Red Salmon Creek (Mounts Creek) NE1/4NW1/4 Sec. 33, T19N, R1E and all tributaries	Nisqually River	April 1 - Oct. 31
Clear Creek NE1/4SE1/4 Sec. 21, T18N, R1E and all tributaries	Nisqually River	April 1 - Oct. 31
Tanwax Creek NW1/4NE1/4 Sec.20, T16N, R3E and all tributaries	Nisqually River	April 1 - Oct. 31

NEW SURFACE WATER CLOSURES

Stream or Lake Section, Township, and Range of Mouth or Outlet	Tributary to	Period of Closure
McAllister Creek (except Medicine Creek) NW1/4N1/4 Sec. 6, T18N, R1E and all tributaries	Puget Sound	all year
Lake Saint Clair SE1/4NW1/4 Sec. 6, T17N, R1E		all year
Toboton Creek (above Hopson Road) SW1/4SW1/4 Sec. 19, T16N, R3E and all tributaries	Nisqually River	April 1 - Nov. 30
Lackamas Creek SE1/4SE1/4 Sec. 13, T16N, R2E and all tributaries	Nisqually River	April 1 - Nov. 30
Murray Creek NW1/4NW1/4 Sec. 16, T17N, R2E	Nisqually River	April 1 - Nov. 30
Bypass Reach, Nisqually River NE1/4SE1/4 Sec. 11, T17N, R1E	Puget Sound	June 1 - Oct. 31
Mid Reach, Nisqually River SE1/4NW1/4 Sec. 1, T16N, R2E	Puget Sound	June 1 - Oct. 31

(2) The following stream and lake low flows and closures are adopted confirming surface water source limitations previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050.

EXISTING SURFACE WATER SOURCE LIMITATIONS
CURRENT ADMINISTRATIVE STATUS OF STREAMS AND LAKES
NISQUALLY BASIN, WRIA 11

Stream	Tributary to	Action	Dates
Eaton Creek SE1/4NW1/4 Sec. 6, T17N, R1E	Lake St. Clair	Closure	12/1/53
Harts Lake and outlet streams SW1/4SE1/4 Sec. 1, T16N, R2E	Nisqually River	Low Flow (0.5 cfs bypass)	10/7/44
Horn Creek SW1/4NE1/4 Sec. 1, T16N, R2E	Nisqually River	Closure	7/22/74
Muck Creek and all tributaries SW1/4SW1/4 Sec. 36, T18N, R1E	Nisqually River	Closure	5/26/48
Ohop Creek and all tributaries SW1/4NE1/4 Sec. 25, T16N, R3E	Nisqually River	Closure	2/15/52
Ohop Lake NE1/4SE1/4 Sec. 10, T16N, R1E	Ohop Creek	Lake Level (523 ft)	3/25/66
Thompson Creek and all tributaries SE1/4NE1/4 Sec. 11, T17N, R1E	Nisqually River	Low Flow (1.0 cfs bypass)	11/19/51
Unnamed Stream and all tributaries SW1/4NW1/4 Sec. 11, T15N, R4E	Alder Lake (Nisqually River)	Closure	4/28/64

EXISTING SURFACE WATER SOURCE LIMITATIONS
CURRENT ADMINISTRATIVE STATUS OF STREAMS AND LAKES
NISQUALLY BASIN, WRIA 11

Stream	Tributary to	Action	Dates
Unnamed Stream and all tributaries SW1/4SE1/4 Sec. 17, T17N, R2E	Centralia Canal (Nisqually River)	Low Flow (0.75 cfs bypass)	11/19/51
Unnamed Stream and all tributaries SE1/4SE1/4 Sec. 27, T17N, R2E	Nisqually River	Low Flow (0.50 cfs bypass)	12/6/50
Yelm Creek and all tributaries SW1/4SW1/4 Sec. 12, T.17N, R1E	Nisqually River	Closure	8/7/51

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-040, filed 2/2/81.]

WAC 173-511-050 Ground water. Future ground water withdrawal proposals will not be affected by this chapter unless it is verified that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-050, filed 2/2/81.]

WAC 173-511-060 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-060, filed 2/2/81.]

WAC 173-511-070 Exemptions. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) If, upon detailed analysis, appropriate and environmentally sound proposed storage facilities are found to be compatible with this chapter, such facilities may be approved.

(3) Domestic use for a single residence shall be exempt from the provisions of this chapter; provided that, if the cumulative effects of numerous single domestic diversions and/or withdrawals would seriously affect the quantity of water available for instream uses, then only domestic in-house use shall be exempt if no alternative source is available.

(4) Stock-watering use, except that related to feedlots, shall be exempt from the provisions established in this chapter.

(5) Future rights for nonconsumptive uses may be granted.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-070, filed 2/2/81.]

WAC 173-511-080 Future rights. No rights to divert or store public surface waters of the Nisqually River basin, WRIA 11, shall hereafter be granted, except as provided in WAC 173-511-070, which shall conflict with the purpose of this chapter as stated in WAC 173-511-020.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-080, filed 2/2/81.]

WAC 173-511-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-511-090, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-090, filed 2/2/81.]

WAC 173-511-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-511-095, filed 6/9/88.]

WAC 173-511-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-511-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-100, filed 2/2/81.]

Chapter 173-512 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—CHAMBERS-CLOVER CREEKS BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 12

WAC

173-512-010 Authority.
173-512-020 Purpose.
173-512-030 Surface water closures.
173-512-040 Ground water.
173-512-050 Future rights.
173-512-060 Exemptions.
173-512-070 Enforcement.
173-512-075 Appeals.
173-512-080 Regulation review.

WAC 173-512-010 Authority. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flow and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-010, filed 12/12/79.]

WAC 173-512-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Chambers-Clover creeks drainage basin with instream flows and levels necessary to provide for preservation and protection of wildlife, fish, scenic, aesthetic and other environmen-

tal values, recreational and navigational values, and to preserve water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-020, filed 12/12/79.]

WAC 173-512-030 Surface water closures. The department of ecology, having determined that further consumptive appropriations would harmfully impact instream values closes the following streams and lakes in Water Resource Inventory Area 12 to further consumptive appropriations:

SURFACE WATER CLOSURES

Stream or Lake	Tributary to
Chambers Creek and all tributaries, including among others:	Puget Sound
Leach Creek	Chambers Creek
Flett Creek	Chambers Creek
Steilacoom Lake	Chambers Creek
Ponce De Leon Creek	Steilacoom Lake
Clover Creek and all tributaries, including among others:	
North Fork Clover Creek	Clover Creek
Spanaway Creek	Clover Creek
Morey Creek	Clover Creek
Spanaway Lake	Spanaway Creek
Tule Lake	Spanaway Creek
Unnamed Stream (Crystal Springs Creek)	Puget Sound
including tributaries	Puget Sound
Sequalitchew Creek and all tributaries, including among others:	
Sequalitchew Lake	Sequalitchew Creek
American Lake	Sequalitchew Lake
Murray Creek (and tributaries)	American Lake

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-030, filed 12/12/79.]

WAC 173-512-040 Ground water. In future permitting actions relating to ground water withdrawals, the natural interrelationship of surface and ground waters shall be fully considered in water allocation decisions to assure compliance with the intent of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-040, filed 12/12/79.]

WAC 173-512-050 Future rights. No water rights for consumptive uses of waters from the streams and lakes listed in WAC 173-512-030 shall hereafter be granted. Future rights for nonconsumptive uses may be granted subject to the provisions of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-050, filed 12/12/79.]

WAC 173-512-060 Exemptions. (1) Nothing in this chapter shall affect any existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter; nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) Stock watering use, except that related to feed lots, shall be exempt from the surface water closures established in this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-060, filed 12/12/79.]

WAC 173-512-070 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-512-070, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-070, filed 12/12/79.]

WAC 173-512-075 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-512-075, filed 6/9/88.]

WAC 173-512-080 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-512-080, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-080, filed 12/12/79.]

Chapter 173-513 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—DESCHUTES RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 13

WAC

173-513-010	General provision.
173-513-020	Purpose.
173-513-030	Establishment of instream flows.
173-513-040	Surface water source limitations to further consumptive appropriations.
173-513-050	Ground water.
173-513-060	Lakes.
173-513-070	Exemptions.
173-513-080	Future rights.
173-513-090	Enforcement.
173-513-095	Appeals.
173-513-100	Regulation review.

WAC 173-513-010 General provision. These rules apply to waters within the Deschutes River basin, WRIA 13, as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-010, filed 6/24/80.]

WAC 173-513-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Deschutes River basin with instream flows and levels necessary to provide protection for wildlife, fish, scenic, aesthetic, environmental values, recreation, navigation, and water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-020, filed 6/24/80.]

WAC 173-513-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Control Station No. Stream Management Unit Name	Control Station Location, River Mile and Section, Township and Range	Affected Stream Reach
12.0800-00 Deschutes River	3.4 Sec. 35-18N-2W	From the confluence of the Deschutes River with Capitol Lake upstream to the Deschutes Falls at river mile 41.

(2) Instream flows established for the stream management unit described in WAC 173-513-030(1) are as follows:

INSTREAM FLOWS IN THE DESCHUTES RIVER BASIN
(in Cubic Feet per Second)

Month	Day	USGS Gage 212-0800-00 Deschutes River
Jan.	1	400
	15	400
Feb.	1	400
	15	400
Mar.	1	400
	15	400
Apr.	1	350
	15	(Closed)
May	1	(Closed)
	15	(Closed)
June	1	(Closed)
	15	(Closed)
July	1	(Closed)
	15	(Closed)
Aug.	1	(Closed)
	15	(Closed)
Sept.	1	(Closed)
	15	(Closed)
Oct.	1	(Closed)
	15	(Closed)
Nov.	1	150
	15	200
Dec.	1	300
	15	400

(3) Instream flow hydrograph, as represented in the document entitled "Deschutes River basin instream resource protection program," shall be used for identification of instream flows on those days not specifically identified in WAC 173-513-030(2).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-030, filed 6/24/80.]

WAC 173-513-040 Surface water source limitations to further consumptive appropriations. (1) The department of ecology, having determined that further consumptive appropriations would harmfully impact instream values, closes the following streams and lakes to further consumptive appropriation for the periods indicated.

New Surface Water Closures

Stream or Lake Section, Township and Range of Mouth or Outlet	Tributary to	Period of Closure
Deschutes River below Deschutes Falls (river mile 41)NW1/4SW1/4 Sec. 26, T. 18N.,R. 2W.	Puget Sound (Budd Inlet)	Apr. 15 to Nov. 1
Deschutes River above Deschutes Falls (river mile 41) and all tributaries of Deschutes River E1/2NE1/4 Sec. 10, T. 15N., R. 3E. (Deschutes Falls)		All year
McLane Creek and all tributaries SW1/4NW1/4 Sec. 33, T. 18N., R. 2W.	Puget Sound (Eld Inlet)	All year
Woodland Creek and all tributaries SW1/4NW1/4 Sec. 19, T. 19N., R. 1W.	Puget Sound (Henderson Inlet)	All year
Long Lake SE1/4NE1/4 Sec. 22, T. 18N., R. 1W.	Woodland Creek	All year
Patterson Lake SE1/4SW1/4 Sec. 35, T. 18N., R. 1W.	Woodland Creek	All year
Hicks Lake NE1/4SW1/4 Sec. 27, T. 18N., R. 1W.	Woodland Creek	All year

(2) The following stream and lake low flows and closures are adopted confirming surface water source limitations previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050.

Existing Low Flow Limitations and Closures

Stream Section, Township and Range of Mouth	Tributary to	Action
Percival Creek SW1/4NE1/4 Sec. 22, T. 18N., R. 2W.	Capital Lake	Closure
Unnamed Stream NW1/4NW1/4 Sec. 33, T. 19N., R. 2W.	Puget Sound (Eld Inlet)	Low Flow (1.5 cfs)
Unnamed Stream NW1/4NW1/4 Sec. 25, T. 19N., R. 2W.	Gull Harbor	Low Flow (1.0 cfs)
Woodward Creek SW1/4NW1/4 Sec. 19, T. 19N., R. 1W.	Woodward Bay	Closure

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-040, filed 6/24/80.]

WAC 173-513-050 Ground water. Future ground water withdrawal proposals will not be affected by this chapter unless it is verified that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-050, filed 6/24/80.]

WAC 173-513-060 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-060, filed 6/24/80.]

WAC 173-513-070 Exemptions. (1) Nothing in this chapter shall affect water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Domestic use for a single residence and stock watering, except that use related to feedlots, shall be exempt from the provisions of this chapter if no alternative source is available. If the cumulative effects of numerous single domestic diversions would seriously affect the quantity of water available for instream uses, then only domestic in-house use shall be exempt.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-070, filed 6/24/80.]

WAC 173-513-080 Future rights. No rights to divert or store public surface waters of the Deschutes River basin, WRIA 13, shall hereafter be granted which shall conflict with the purpose of this chapter as stated in WAC 173-513-020.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-080, filed 6/24/80.]

WAC 173-513-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-513-090, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-090, filed 6/24/80.]

WAC 173-513-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-513-095, filed 6/9/88.]

WAC 173-513-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-513-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-08-019 (Order DE 80-11), § 173-513-100, filed 6/24/80.]

Chapter 173-514 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—KENNEDY-GOLDSBOROUGH WATER RESOURCE INVENTORY AREA (WRIA) 14

WAC

173-514-010	General provision.
173-514-020	Purpose.
173-514-030	Establishment of instream flows.
173-514-040	Surface water source limitations to further consumptive appropriation.
173-514-050	Lakes.
173-514-060	Exemptions.
173-514-070	Future rights.
173-514-080	Enforcement.
173-514-085	Appeals.
173-514-090	Regulation review.

WAC 173-514-010 General provision. These rules apply to waters within the Kennedy-Goldsborough water resource inventory area (WRIA 14), as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), chapter 75.20 RCW (State Fisheries Code) and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-010, filed 1/23/84.]

WAC 173-514-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Kennedy-Goldsborough water resource inventory area with instream flows and levels necessary to provide protection for wildlife, fish, scenic, aesthetic, and environmental values, recreation, navigation, and water quality.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-020, filed 1/23/84.]

WAC 173-514-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Control Station No. Stream Management Unit Name	Control Station By River Mile and Sec. Township, & Range	Stream Management Reach
12-0740-00 Shumocher Creek	.02 Sec.7, T.21N., R.2WWM	From Mason Lake to headwaters including all tributaries.
WDOE-0745-50 Sherwood Creek	0.14 Sec.20, T.22N., R.1WWM	From influence of mean annual high tide at low instream flow levels to Mason Lake, including Mason Lake and all tributaries.
12-0750-00 Deer Creek	0.8 Sec.20, T.21N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.

Control Station No. Stream Management Unit Name	Control Station By River Mile and Sec. Township, & Range	Stream Management Reach
12-0755-00 Cranberry Creek	0.5 Sec.36, T.21N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including Cranberry Lake, Lake Limerick and all tributaries.
12-0760-00 Johns Creek	2.5 Sec.3, T.20N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
WDOE-0770-50 Goldsborough Creek	0.23 Sec.20, T.20N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
WDOE-0775-50 Mill Creek	3.1 Sec.25, T.20N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including Lake Isabella and all tributaries.
12-0780-00 Skookum Creek	3.0 Sec.19, T.19N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.
WDOE-0785-50 Kennedy Creek	0.06 Sec.32, T.19N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including Summit Lake and all tributaries.
WDOE-0787-00 Perry Creek	1.06 Sec.13, T.18N., R.3WWM	From influence of mean annual high tide at low instream flow levels to headwaters, including all tributaries.

(2) Instream flows are established for the stream management units in WAC 173-514-030(1) as follows:

Instream Flows in the Kennedy-Goldsborough WRIA
(Instantaneous cubic feet per second)

Month	Day	12-0740-00 Shumocher Creek	WDOE 0745-50 Sherwood Creek	12-0750-00 Deer Creek
Jan	1	20	60	55
	15	20	60	55
Feb	1	20	60	55
	15	20	60	55
Mar	1	20	60	55
	15	20	60	55
Apr	1	20	60	55
	15	20	60	46
May	1	17	48	39
	15	14	37	33
Jun	1	12	29	28
	15	10	23	23.5
Jul	1	8.6	17.5	20
	15	7.2	14	20
Aug	1	6	11	20
	15	6	11	20
Sep	1	6	11	20
	15	6	11	20
Oct	1	6	11*	20*
	15	6	19*	20*
Nov	1	11	34*	33*
	15	20	60*	55*
Dec	1	20	60	55
	15	20	60	55

* Denotes closure period to all consumptive uses

Instream Flows in the Kennedy-Goldsborough WRIA
(Cont'd)
(Instantaneous cubic feet per second)

Month	Day	12-0755-00 Cranberry Creek	12-0760-00 Johns Creek	WDOE-0770-50 Goldsborough Creek
Jan	1	50	45	50
	15	50	45	50
Feb	1	50	45	50
	15	50	45	85
Mar	1	50	45	85
	15	50	45	85
Apr	1	50	45	85
	15	40	45	85
May	1	31	34	85 *
	15	23.5	26	85 *
Jun	1	18	20	85 *
	15	14	15.5	69 *
Jul	1	10.5	12	55 *
	15	8	9	52 *
Aug	1	8	7	48 *
	15	8	7	45 *
Sept	1	8	7	45 *
	15	8	7	45 *
Oct	1	8 *	7 *	45 *
	15	15 *	7 *	50 *
Nov	1	28 *	18 *	50
	15	50 *	45 *	50
Dec	1	50	45	50
	15	50	45	50

* Denotes closure period to all consumptive uses

Instream Flows in the Kennedy-Goldsborough WRIA
(Cont'd)
(Instantaneous cubic feet per second)

Month	Day	WDOE 0775-50 Mill Creek	12-0765-00 Skookum Creek	WDOE-0785-50 Kennedy Creek	WDOE-0787-00 Perry Creek
Jan	1	65	40	60	30
	15	65	40	60	30
Feb	1	65	40	60	30
	15	65	40	60	30
Mar	1	65	40	60	30
	15	65	40	60	30
Apr	1	65	40	60	21
	15	65	40	46	14
May	1	55	26*	35*	10*
	15	46	16.5 *	27*	6.8*
Jun	1	40	11*	20*	4.6*
	15	33	7*	16*	3.2*
Jul	1	28	4.6 *	12*	2.2*
	15	24	3*	9*	1.5*
Aug	1	20	3*	7*	1*
	15	20	3*	7*	1*
Sep	1	20	3*	7*	1*
	15	20	3*	7*	1*
Oct	1	20	3*	7*	1*
	15	20	5.6 *	14*	2.5*
Nov	1	35	15	29*	5.4
	15	65	40	60*	13
Dec	1	65	40	60	30
	15	65	40	60	30

* Denotes closure period to all consumptive uses

(3) Instream flow hydrographs, as represented in the document entitled "Kennedy-Goldsborough instream resources protection program, figs. 2-7, pgs. 26-28," shall be

used for identification of instream flows on those days not specifically identified in WAC 173-514-030(2).

(4) Future consumptive water right permits issued hereafter for diversion of surface water in the Kennedy-Goldsborough WRIA and perennial tributaries shall be expressly subject to instream flows established in WAC 173-514-030 (1) through (3) as measured at the appropriate gage, preferably the nearest one downstream, except from those exempted uses described in WAC 173-514-060 (1) through (3).

(5) Projects that would reduce the flow in a portion of a stream's length (e.g.: Hydroelectric projects that bypass a portion of a stream) will be considered consumptive only with respect to the affected portion of the stream and will be subject to specific instream flow requirements as specified by the department for the bypassed reach notwithstanding WAC 173-514-030 (1) through (3) and 173-514-040 if detailed, project-specific instream flow studies for the bypassed reach, as may be required, demonstrate that a different flow requirement is appropriate. The department may require the project proponent to conduct such studies.

(6) If department investigations determine that withdrawal of ground water from the source aquifers would not interfere significantly with stream flow during the period of stream closure or with maintenance of minimum flows, then applications to appropriate public ground waters may be approved and permits or certificates issued.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-030, filed 1/23/84.]

WAC 173-514-040 Surface water source limitations to further consumptive appropriation. (1) The department, having determined further consumptive appropriation for all uses would harmfully impact instream values, closes the following streams including tributaries for the period indicated:

(a) Stream Name	Tributary to	Closure Period
Alderbrook Creek	Hood Canal	May 1 - October 31
Campbell Creek	Oakland Bay	May 1 - October 31
Elson Creek	Skookum Inlet	May 1 - October 31
Fawn Lake Outlet	Skookum Inlet	May 1 - October 31
Jones Creek	Pickering Passage	May 1 - October 31
Jarrell Creek	Jarrell Cove	May 1 - October 31
Little Creek	Skookum Creek	May 1 - October 31
Melaney Creek	Oakland Bay	May 1 - October 31
Shelton Creek	Oakland Bay	May 1 - October 31
Twahnoh Creek	Hood Canal	May 1 - October 31
Uncle John Creek	Oakland Bay	May 1 - October 31

The minimum flow during the closure period on the streams listed above is the natural flow. Because insufficient flow data is available to develop instream flows outside the closure period, minimum flows for any water right application for consumptive use will be considered on a case by case basis in consultation with the departments of fisheries and game (RCW 75.20.050).

(b) Stream Name	Closure Period
Kennedy Creek	May 1 - November 15
Cranberry Creek	September 16 - November 15
Deer Creek	September 16 - November 15
Johns Creek	September 16 - November 15
Sherwood Creek	September 16 - November 15
Perry Creek	May 1 - October 31

Because sufficient hydrologic data is available for the above streams, a minimum flow is established during the closed and nonclosed period in WAC 173-514-030(2).

(2) Except as noted in the footnotes, the following existing surface water source limitations, previously established administratively under the authority of chapter 90.03 RCW and RCW 75.20.050 are hereby confirmed and adopted for the period indicated:

Stream*/Tributary to	Action	Period
Goldsborough Creek - Oakland Bay	Closure+	May 1 - October 31
Gosnell Creek - Isabella Lake	Low flow (10 cfs)	All year
Jarrell Creek - Jarrell Cove	Low flow@ (.30 cfs)	May 1 - October 31
Johns Creek - Oakland Bay	Low flow@ (4 cfs)	Sept. 16 - November 15
Kennedy Creek - Totten Inlet	Low flow@ (3 cfs)	May 1 - November 15
Schneider Creek - Totten Inlet	Closure#	May 1 - October 31
Skookum Creek - Skookum Inlet	Closure+	May 1 - October 31
Summit Lake - Kennedy Creek	Lake level	All year
Unnamed Stream - Mill Creek Sec.34, T.20N R.3 EWM	Low flow (2 cfs)	All year

*Closures and low flow limitations also apply to tributaries of these streams.
@Superseded by a new action in this section.
#The minimum flow during the closure period is the natural flow.
+Minimum flows are specified in WAC 173-514-030(2).

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-040, filed 1/23/84.]

WAC 173-514-050 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-050, filed 1/23/84.]

WAC 173-514-060 Exemptions. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Single domestic and stockwatering use, except that related to feedlots, shall be exempt from the provisions established in this chapter. If the cumulative impacts of numerous single domestic diversions would significantly affect the quantity of water available for instream uses, then only single domestic in-house use shall be exempt if no alternative source is available.

(3) Nonconsumptive uses which are compatible with the intent of the chapter may be approved.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-060, filed 1/23/84.]

WAC 173-514-070 Future rights. No rights to divert or store public surface waters of the Kennedy-Goldsborough WRIA 14, shall hereafter be granted which shall conflict with the purpose of this chapter.

[Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-070, filed 1/23/84.]

WAC 173-514-080 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-514-080, filed 6/9/88. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-080, filed 1/23/84.]

WAC 173-514-085 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-514-085, filed 6/9/88.]

WAC 173-514-090 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-514-090, filed 6/9/88. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-090, filed 1/23/84.]

Chapter 173-515 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—KITSAP WATER RESOURCE INVENTORY AREA (WRIA) 15

WAC

173-515-010	General provision.
173-515-020	Purpose.
173-515-030	Establishment of instream flows.
173-515-040	Surface water closures.
173-515-050	Ground water.
173-515-060	Lakes.
173-515-070	Exemptions.
173-515-080	Future rights.
173-515-090	Enforcement.
173-515-095	Appeals.
173-515-100	Regulation review.

WAC 173-515-010 General provision. These rules apply to waters within the Kitsap water resource inventory area (WRIA) 15 as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-010, filed 7/24/81.]

WAC 173-515-020 Purpose. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Kitsap water resource inventory area (WRIA) 15 with instream flows and levels necessary to provide for preservation and protection of wildlife, fish, scenic, aesthetic and other environmental values, recreational and navigational values, and to preserve water quality.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-020, filed 7/24/81.]

WAC 173-515-030 Establishment of instream flows. (1) The following instream flows are established for each stream listed, from the point of influence of mean high tide at low flow to the stream's headwaters including tributaries except where indicated otherwise. Monitoring will take place at the control locations indicated.

INSTREAM FLOWS IN THE KITSAP WATER RESOURCE INVENTORY AREA (WRIA) 15

*WAC 173-515-040(2) closes certain streams to additional consumptive appropriations during specific time periods. These closures are indicated by asterisks in the following table. Such closures supersede the indicated instream flow. The Union River closure extends upstream to McKenna Falls (RM 6.7).

**Stream numbers correlate with Plate I, instream resources protection program, Kitsap water resource inventory area (WRIA) 15.

Stream Number**		#7	#44	#60
Stream Name		Union River	Tahuya River	Rendsland Cr.
Gage Number		12-0635.00	12-0680.00	
River Mile		2	2.5	near mouth
Sec., Twp., Rge.		20,23N.,1W.	12,22N.,3W.	19,22N.,3W.
Month	Day	cfs	cfs	cfs
Jan.	1	65*	90	18
	15	65*	90	18
Feb.	1	65*	90	18
	15	65*	90	18
Mar.	1	59*	90	18
	15	53*	90	18
Apr.	1	48*	72	18
	15	44*	58	16
May	1	40*	47	13.5
	15	36*	38	12
June	1	33*	31	10*
	15	29*	25*	9*
July	1	27*	18*	8*
	15	24*	12*	7*
Aug.	1	22*	8.5*	6*
	15	20*	5.5*	5*
Sept.	1	20*	5.5*	5*
	15	20*	5.5*	5*
Oct.	1	20*	7*	5*
	15	20*	13*	7*
Nov.	1	27*	25	9.5
	15	35*	48	13
Dec.	1	47*	90	18
	15	65*	90	18

Stream Number**		#70	#96	#113
Stream Name		Dewatto River	Anderson Cr.	Stavis Cr.
Gage Number		12-0685.00		12-0695.00
River Mile		1.5	0.1	0.75
Sec., Twp., Rge.		23,23N.,3W.	17,24N.,2W.	25,25N.,2W.
Month	Day	cfs	cfs	cfs
Jan.	1	75	10.5	15
	15	75	10.5	15

Stream Number**		#70	#96	#113
Stream Name		Dewatto River	Anderson Cr.	Stavis Cr.
Gage Number		12-0685.00		12-0695.00
River Mile		1.5	0.1	0.75
Sec., Twp., Rge.		23,23N.,3W.	17,24N.,2W.	25,25N.,2W.
Month	Day	cfs	cfs	cfs
Feb.	1	75	10.5	15
	15	75	10.5	15
Mar.	1	75	10.5	15
	15	75	10.5	15
Apr.	1	60	10.5	14
	15	49	10	13
May	1	39	9	12
	15	32	8.5	11
June	1	25	8	10
	15	22*	7.5	9.5
July	1	20*	7	9
	15	17.5*	6.5	8
Aug.	1	15.5*	6	7.5
	15	13.5*	6	7
Sept.	1	13.5*	6	7
	15	13.5*	6	7
Oct.	1	13.5*	6.5	7
	15	17*	7	8.5
Nov.	1	21	8	10.5
	15	39	8.5	12.5
Dec.	1	75	9.5	15
	15	75	10.5	15

Stream Number**		#121	#124	#192
Stream Name		Big Beef Cr.	Anderson Cr.	Grover's Cr.
Gage Number		12-0695.50		
River Mile		0.25	near mouth	near mouth
Sec., Twp., Rge.		22,25N.,1W.	13,25N.,1W.	4,26N.,2E.
Month	Day	cfs	cfs	cfs
Jan.	1	40	8	5.5
	15	40	8	5.5
Feb.	1	40	8	5.5
	15	40	8	5.5
Mar.	1	40	8	5.5
	15	40	8	5.5
Apr.	1	31	8	5.5
	15	24	6	4.5
May	1	18	4.5	4
	15	14*	3.5	3.5
June	1	11*	3*	3*
	15	8.5*	2*	2.5*
July	1	6.5*	1.5*	2.5*
	15	5*	1.5*	2*
Aug.	1	4*	1*	2*
	15	4*	1*	2*
Sept.	1	4*	1*	2*
	15	4.5*	1*	2.5*
Oct.	1	5.5*	1.5*	3*
	15	6*	1.5*	3.5*
Nov.	1	7*	2.5*	4
	15	12	4.5	4.5
Dec.	1	22	8	5.5
	15	40	8	5.5

Stream Number**		#223	#248	#259
Stream Name		Steel Creek	Strawberry/ Kochs/Cooks	Dickerson Cr.
Gage Number				
River Mile		near mouth	near mouth	Confluence with Chico Cr.
Sec., Twp., Rge.		14,25N.,1E.	20,25N.,1E.	8,24N.,1E.
Month	Day	cfs	cfs	cfs
Jan.	1	6	7	3*
	15	6	7	3*
Feb.	1	6	7	3*
	15	6	7	3*
Mar.	1	6	7	3*
	15	6	7	3*
Apr.	1	6	7	2.5*
	15	5	5.5	2.5*

Stream Number**		#223	#248	#259
Stream Name		Steel Creek	Strawberry/ Kochs/Cooks	Dickerson Cr.
Gage Number				
River Mile		near mouth	near mouth	Confluence with Chico Cr.
Sec., Twp., Rge.		14,25N.,1E.	20,25N.,1E.	8,24N.,1E.
Month	Day	cfs	cfs	cfs
May	1	4.5	4.5	2*
	15	4	3.5	2*
June	1	3.5*	2.5*	1.5*
	15	3*	2*	1.5*
July	1	3*	1.5*	1.5*
	15	2.5*	1.5*	1.5*
Aug.	1	2.5*	1*	1*
	15	2.5*	1*	1*
Sept.	1	2.5*	1*	1*
	15	3*	1*	1*
Oct.	1	3.5*	1*	1*
	15	4*	1.5*	1.5*
Nov.	1	4.5	2.5	1.5*
	15	5	4	1.5*
Dec.	1	6	7	3*
	15	6	7	3*

Stream Number**		#259	#268	#294
Stream Name		Chico Cr.	Gorst Cr.	Curley Cr.
Gage Number				
River Mile		near mouth	0.1	0.1
Sec., Twp., Rge.		5,24N.,1E.	32,24N.,1E.	4,23N.,2E.
Month	Day	cfs	cfs	cfs
Jan.	1	15*	25	40
	15	15*	25	40
Feb.	1	15*	25	40
	15	15*	25	40
Mar.	1	15*	25	40
	15	15*	21	40
Apr.	1	15*	18	31
	15	13.5*	15	25
May	1	12*	13	20
	15	11*	11	16
June	1	10*	10.5	12.5
	15	9*	10	10*
July	1	8.5*	9	8*
	15	8*	8.5	6.5*
Aug.	1	7.5*	8	5*
	15	7*	7.5	5*
Sept.	1	7*	7.5	5*
	15	7*	7.5	5*
Oct.	1	7*	8	5*
	15	8*	8.5	8*
Nov.	1	9*	9	14
	15	11.5*	15	23
Dec.	1	15*	25	40
	15	15*	25	40

Stream Number**		#313	#321	#354
Stream Name		Ollala Cr.	Crescent Cr.	Purdy Cr.
Gage Number				12-0728.00
River Mile		near mouth	near mouth	0.1
Sec., Twp., Rge.		4,22N.,2E	32,22N.,2E.	24,22N.,1E.
Month	Day	cfs	cfs	cfs
Jan.	1	13	9	7
	15	13	9	7
Feb.	1	13	9	7
	15	13	9	7
Mar.	1	13	9	7
	15	13	9	6
Apr.	1	13	9	5.5
	15	11	7.5	5
May	1	9.5	7	4.5
	15	8.5	6	4
June	1	7.5*	5*	3.5*
	15	6.5*	4.5*	3*
July	1	5.5*	4*	3*
	15	5*	3.5*	2.5*

Stream Number**		#313	#321	#354
Stream Name		Ollala Cr.	Crescent Cr.	Purdy Cr.
Gage Number				12-0728.00
River Mile		near mouth	near mouth	0.1
Sec., Twp., Rge.		4,22N.,2E	32,22N.,2E.	24,22N.,1E.
Month	Day	cfs	cfs	cfs
Aug.	1	5*	3.5*	2.5*
	15	5*	3.5*	2.5*
Sept.	1	5*	3.5*	2.5*
	15	6*	4*	3*
Oct.	1	7*	5*	3*
	15	8*	5.5*	3.5*
Nov.	1	9	6.5	4.5
	15	11	7.5	5.5
Dec.	1	13	9	7
	15	13	9	7

Stream Number**		#369	#415	#425
Stream Name		Lackey Cr.	Rocky Cr.	Coulter Cr.a/
Gage Number				
River Mile		near mouth	0.1	0.1
Sec., Twp., Rge.		31,21N.,1E.	27,22N.,1W	9,22N.,1W.
Month	Day	cfs	cfs	cfs
Jan.	1	5	18	18
	15	5	18	18
Feb.	1	5	18	18
	15	5	18	18
Mar.	1	5	18	18
	15	4.5	18	18
Apr.	1	4	14.5	18
	15	3.5	11.5	17
May	1	3	9	16.5
	15	2.5	7.5	15.5
June	1	2.5*	6*	15
	15	2*	5.5*	14.5
July	1	2*	5*	13.5
	15	2*	4.5*	13
Aug.	1	1.5*	4.5*	13
	15	1.5*	4*	13
Sept.	1	1.5*	4*	13
	15	1.5*	4*	13
Oct.	1	2*	4*	13
	15	2*	5*	14
Nov.	1	2*	6	15
	15	2.5*	7	16.5
Dec.	1	3	18	18
	15	4	18	18

a/ Relating to the waters of Coulter Creek, the department is cognizant of a settlement agreement resulting from Cause No. 14262, in the superior court of the state of Washington for Mason County, "*Peter E. Overton, et al., v. Washington Department of Fisheries, et al.*"
Although the department of ecology was not a party in this litigation, the department will, to the extent possible, give full consideration to the intent of the settlement agreement in any future water right actions involving said parties: Provided, That, said actions must be consistent with the requirements of chapters 90.03 and 90.44 RCW, and satisfy the general intent of chapter 173-515 WAC.

(2) Instream flow hydrographs, as represented in the document entitled "instream resources protection program," shall be used for definition of instream flows on those days not specifically identified in WAC 173-515-030(1).

(3) All consumptive water rights hereafter established shall be expressly subject to instream flows and closures established in WAC 173-515-030(1) and 173-515-040 (1) through (3). Closures override the instream flows where both are shown except as provided in WAC 173-515-070.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-030, filed 7/24/81.]

WAC 173-515-040 Surface water closures. (1) The department, having determined there are no waters available for further appropriation, closes the following streams to further consumptive appropriation. These closures confirm surface water source limitations previously established administratively under authority of chapter 90.03 RCW and RCW 75.20.050.

Surface Water Closures

**Stream numbers correlate with Plate I, instream resources protection program, Kitsap water resource inventory area (WRIA) 15.

Stream Number** Stream or Lake Name Sec., Twp., Rge. at Mouth	Tributary to	Date of Original Closure
Stansberry Lake and tributaries Sec. 19, T.22N., R.1E.	Carr Inlet	5-17-66
Mission Lake and tributaries Outlet: NE1/4NW1/4 Sec. 32, T.24N.,R.1W.	Mission Creek	7-19-78
#12 Mission Creek and tributaries NW1/4NE1/4 Sec. 1, T.22N., R.2W.	Hood Canal	12-5-51
#57 Unnamed Stream and tributaries Sec. 20, T.21N., R.4W.	Hood Canal	11-3-48
#117 Seabeck Creek and tributaries SE1/4SW1/4 Sec. 20, T.25N., R.1W.	Seabeck Bay	8-27-54
#158 Unnamed Stream (Gamble Creek, Christianson Creek) and tributaries SW1/4SW1/4 Sec. 20, T.27N., R.2E.	Port Gamble	8-15-75
#207 Unnamed Stream (Dogfish Creek, Harding Creek) and tributaries NE1/4NE1/4 Sec. 15, T.26N., R.1E.	Liberty Bay	8-21-75
#245 Barker Creek and tributaries SW1/4SW1/4 Sec. 22, T.25N., R.1E.	Dyes Inlet	2-21-61
#246 Clear Creek and tributaries SE1/4SW1/4 Sec. 16, T.25N., R.1E.	Dyes Inlet	7-27-53
#259 Chico Creek and tributaries above confluence of Dickerson Creek, (excluding Wildcat Lake). Sec. 5, T.24N., R.1E.	Chico Bay	11-3-52
#259 Kitsap Creek and tributaries Sec. 5, T.24N., R.1E.	Chico Creek	7-2-42
#259 Unnamed Stream and tributaries SE1/4SW1/4 Sec. 17, T.24N., R.1E.	Kitsap Lake	12-8-52
#279 Blackjack Creek and tributaries NE1/4SE1/4 Sec. 25, T.24N., R.1E.	Sinclair Inlet	4-5-60
#285 Unnamed Stream (Sullivan Creek) and tributaries NE1/4SW1/4 Sec.19, T.24N., R.2E	Sinclair Inlet	5-9-75
#294 Salmonberry Creek and tributaries NW1/4SE1/4 Sec. 18, T.23N., R.2E.	Long Lake	1-7-48

Stream Number** Stream or Lake Name Sec., Twp., Rge. at Mouth	Tributary to	Date of Original Closure
#356 Burley Creek and tributaries, SW1/4NW1/4 Sec. 12, T.22N., R.1E.	Burley Lagoon	5-10-51
#367 Minter Creek and tributaries SW1/4NE1/4 Sec. 29, T.22N., R.1E.	Henderson Bay	12-28-73
#402 Unnamed Stream (Dutcher Creek) and tributaries NE1/4NE1/4 Sec. 15, T.21N., R.1W.	Dutcher Cove	3-10-54
#510 Judd Creek and tributaries NE1/4NE1/4 Sec. 18, T.22N., R.3E.	Quartermaster Harbor	5-10-51

(2) The department has determined that (a) certain streams exhibit low summer flows and have a potential for drying up or inhibiting anadromous fish passage during critical life stages, and (b) historic flow regimes and current uses of certain other streams indicate that no water is available for additional appropriation. Based upon these determinations and in accordance with the general intent of RCW 75.20.050, the following streams are closed to further appropriation for the periods indicated:

New Surface Water Closures

**Stream numbers correlate with Plate I, instream resources protection program, Kitsap water resource inventory area (WRIA) 15.

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to	Period of Closure
#7 Union River and tributaries from the mouth to McKenna Falls (R.M. 6.7) SE1/4SW1/4 Sec. 29, T.23N., R.1W.	Hood Canal	All year
#44 Tahuya River and tributaries SE1/4SE1/4 Sec. 22, T.22N., R.3W.	Hood Canal	June 15-Oct. 15
#60 Rendsland Creek and tributaries NW1/4NW1/4 Sec. 19, T.22N., R.3W.	Hood Canal	June 1-Oct. 31
#70 Dewatto River and tributaries NW1/4SE1/4 Sec. 27, T.22N., R.3W.	Hood Canal	June 15-Oct. 31
#121 Big Beef Creek and tributaries SW1/4SE1/4 Sec. 15, T.25N., R.1W.	Hood Canal	May 15-Oct. 31
#124 Anderson Creek and tributaries NW1/4NW1/4 Sec. 13, T.26N., R.1W.	Hood Canal	June 1-Oct. 31
#192 Grover's Creek and tributaries NW1/4SW1/4 Sec. 4, T.26N., R.2E.	Puget Sound	June 1-Oct. 15
#223 Unnamed Stream (Steel Creek) and tributaries SE1/4SE1/4 Sec. 14, T.25N., R.1E.	Port Orchard	June 1-Oct. 15
#248 Unnamed Stream and tributaries (Strawberry/Cook's/Koch's Creek) SE1/4NE1/4 Sec. 20, T.25N., R.1E.	Dyes Inlet	June 1-Oct. 31
#259 Dickerson Creek and tributaries SW1/4NW1/4 Sec. 7, T.24N., R.1E.	Chico Creek	All year
#259 Chico Creek and tributaries below confluence of Dickerson Creek SW1/4SW1/4 Sec. 5, T.25N., R.1E.	Chico Bay	All year
#294 Curley Creek and tributaries NE1/4NE1/4 Sec. 18, T.23N., R.2E.	Yukon Harbor	June 15-Oct. 15
#313 Olalla Creek and tributaries SE1/4NE1/4 Sec. 4, T.22N., R.2E.	Colvos Passage	June 1-Oct. 15
#321 Crescent Creek and tributaries SE1/4SW1/4 Sec. 32, T. 22N., R.2E.	Gig Harbor	June 1-Oct. 15
#354 Purdy Creek and tributaries NE1/4NW1/4 Sec. 12, T.22N., R.1E.	Henderson Bay	June 1-Oct. 31
#369 Lackey Creek and tributaries SE1/4SW1/4 Sec. 31, T.21N., R.1E.	Carr Inlet	June 1-Nov. 15
#415 Rocky Creek and tributaries SE1/4SE1/4 Sec. 27, T.22N., R.1E.	Case Inlet	June 1-Oct. 31

(3) In the Kitsap basin numerous small streams with estimated mean annual flow of 5 cfs or less have been identified as having high instream values for anadromous fish, aesthetics, water quality, and/or recreation. In accordance with the general intent of RCW 75.20.050 the department has determined that the total natural flow of these streams is required for protection and preservation of instream resources, and that no water is available for additional consumptive appropriation. The natural flow, in effect, constitutes the minimum flow for protection of the instream resources. The following streams possess such characteristics and are therefore closed year-round to further consumptive appropriation.

New Surface Water Closures

**Stream numbers correlate with Plate I, instream resources protection program, Kitsap water resource inventory area (WRIA) 15.

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to
#13 Little Mission Creek and tributaries SE1/4NW1/4 Sec. 1, T.22N., R.2W.	Hood Canal
#18 Stimson Creek and tributaries NW1/4NW1/4 Sec. 11, T.22N., R.2W.	Hood Canal
#31 Unnamed Stream (Little Shoefly Creek) and tributaries SW1/4NW1/4 Sec. 17, T.22N., R.2W.	Hood Canal
#34 Shoefly Creek and tributaries SE1/4SW1/4 Sec. 18, T.22N., R.2W.	Hood Canal
#46 Caldervin Creek and tributaries NE1/4NE1/4 Sec. 28, T.21N., R.3W.	Hood Canal

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to
#50 Hall Creek and tributaries Sec. 20, T.21N., R.3W.	Hood Canal
#52 Hoddy Creek and tributaries Sec. 20, T.21N., R.3W.	Hood Canal
#54 Fay Creek and tributaries Sec. 21, T.20N., R.3W.	Hood Canal
#55 Brown Creek and tributaries Sec. 21, T.20N., R.3W.	Hood Canal
#56 Unnamed Stream (West Creek) and tributaries Sec. 20, T.22N., R.3W.	Hood Canal
#101 Harding Creek and tributaries NW1/4SW1/4 Sec. 9, T.24N., R.2W.	Hood Canal
#164 Unnamed Stream (Little Boston Creek) and tributaries SW1/4SW1/4 Sec. 5, T.27N., R.2E.	Port Gamble
#181 Unnamed Stream and tributaries SE1/4SW1/4 Sec. 26, T.27N., R.2E.	Apple Tree Cove
#184 Unnamed Stream and tributaries NE1/4SW1/4 Sec. 36, T.27N., R.2E.	Apple Tree Cove
#190 Unnamed Stream and tributaries Sec. 9, T.26N., R.2E.	Puget Sound
#196 Cowling Creek and tributaries NW1/4NW1/4 Sec. 16, T.26N., R.2E.	Miller Bay
#198 Thompson Creek and tributaries SW1/4SE1/4 Sec. 29, T.26N., R.2E.	Port Orchard
#208 Johnson Creek and tributaries SE1/4NW1/4 Sec. 22, T.26N., R.1E.	Liberty Bay
#213 Scandia Creek and tributaries SW1/4NE1/4 Sec. 27, T.26N., R.1E.	Liberty Bay
#241 Mosher Creek and tributaries SW1/4NE1/4 Sec. 34, T.25N., R.1E.	Dyes Inlet
#272 Anderson Creek and tributaries SE1/4NE1/4 Sec. 33, T.24N., R.1E.	Sinclair Inlet
#275 Ross Creek and tributaries SE1/4SE1/4 Sec. 27, T.24N., R.1E.	Sinclair Inlet
#289 Beaver Creek and tributaries NW1/4SE1/4 Sec. 16, T.24N., R.2E.	Rich Passage
#322 North Creek and tributaries NE1/4SE1/4 Sec. 6, T.21N., R.2E.	Gig Harbor
#342 Unnamed Stream and tributaries NW1/4SE1/4 Sec. 10, T.21N., R.1E.	Henderson Bay
#343 Unnamed Stream (Meyer Creek) and tributaries SW1/4SW1/4 Sec. 2, T.21N., R.1E.	Hood Canal
#407 Unnamed Stream and tributaries SE1/4NW1/4 Sec. 2, T.21N., R.1W.	Vaughn Bay
#434 Unnamed stream and tributaries SE1/4SE1/4 Sec. 15, T.25N., R.2E.	Murden Cove
#461 Unnamed Stream and tributaries SE1/4NE1/4 Sec. 20, T.25N., R.2E.	Fletcher Bay
#514 Unnamed Stream (Fisher Creek) and tributaries SW1/4NW1/4 Sec. 19, T.22N., R.3E.	Quartermaster Harbor
#530 Jod Creek and tributaries NW1/4NW1/4 Sec. 14, T.22N., R.2E.	Colvos Passage
#540 Needle Creek and tributaries NE1/4SE1/4 Sec. 13, T.23N., R.3E.	Colvos Passage

(4) Closures listed in WAC 173-515-040 (2) and (3) will supersede low flow surface water source limitations previously imposed by administrative authority pursuant to chapter 75.20 RCW.

(5) Lakes perennially tributary to closed streams are closed to further consumptive appropriation.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-040, filed 7/24/81.]

WAC 173-515-050 Ground water. Future ground water withdrawal proposals will not be affected by this chapter unless it is determined that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-050, filed 7/24/81.]

WAC 173-515-060 Lakes. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-060, filed 7/24/81.]

WAC 173-515-070 Exemptions. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) If, upon detailed analysis, appropriate and environmentally sound proposed storage facilities are found to be compatible with this chapter, such facilities may be approved but will be subject to the establishment of appropriate protection flows for drought or low runoff periods.

(3) Domestic use for a single residence shall be exempt from the provisions of this chapter. If the cumulative effects

of numerous single domestic diversions would seriously affect the quantity of water available for instream uses, then domestic in-house use shall be exempt if no alternative source is available.

(4) Stockwatering use, except that related to feedlots, shall be exempt from the provisions established in this chapter.

(5) Future rights for nonconsumptive uses may be granted.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-070, filed 7/24/81.]

WAC 173-515-080 Future rights. No right to divert or store public surface waters of the Kitsap water resource inventory area (WRIA) 15 shall hereafter be granted which shall conflict with the purpose of this chapter.

[Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-080, filed 7/24/81.]

WAC 173-515-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-515-090, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-090, filed 7/24/81.]

WAC 173-515-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-515-095, filed 6/9/88.]

WAC 173-515-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-515-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 80-45), § 173-515-100, filed 7/24/81.]

Chapter 173-522 WAC

WATER RESOURCES PROGRAM IN THE CHEHALIS RIVER BASIN, WRIA-22 AND 23

WAC

173-522-010	General provision.
173-522-020	Establishment of base flows.
173-522-030	Future allocation of surface water for beneficial uses.
173-522-040	Priority of future rights during times of water shortage.
173-522-050	Streams closed to further consumptive appropriations.
173-522-060	Effect on prior rights.
173-522-070	Enforcement.
173-522-080	Appeals.
173-522-090	Regulation review.

WAC 173-522-010 General provision. These rules, including any subsequent additions and amendments, apply to waters within and contributing to the Chehalis River basin, WRIA-22 and 23 (see WAC 173-500-040). Chapter 173-500 WAC, the general rules of the department of ecology for the implementation of the comprehensive water resources program, applies to this chapter 173-522 WAC.

[Order 75-31, § 173-522-010, filed 3/10/76.]

WAC 173-522-020 Establishment of base flows. (1) Base flows are established for stream management units with monitoring to take place at certain control stations as follows:

STREAM MANAGEMENT UNIT INFORMATION

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Affected Stream Reach Including Tributaries
12.0200.00 Chehalis River Conf. w/Elk Creek	101.8 14-13-5W	From confluence with Elk Creek to headwaters except Elk Cr.
12.0205.00 Elk Creek	2.5 18-13-5W	From confluence with Chehalis River to headwaters.
12.0216.30 So. Fork Chehalis R.	0.3 24-13-4W	From mouth to headwaters.
12.0235.00 Chehalis River	77.6 2-13-3W	From confluence with Newaukum River to confluence with Elk Cr., excluding Elk Creek, and Newaukum Rivers.
12.0240.00 S. Fork Newaukum R.	22.8 28-13-1E	From confluence with Lost Creek to headwaters, excluding Lost Creek.
12.0245.00 N. Fork Newaukum River	6.6 35-14-1W	From mouth to headwaters.
12.0250.00 Newaukum River	4.1 9-13-2W	From mouth to confluence with Lost Cr. on S. Fork Newaukum River, excluding N. Fork Newaukum River.
12.0253.00 Salzer Creek	3.8 22-14-2W	From mouth to headwaters.
12.0264.00 Skookumchuck River	6.4 12-15-2W	From mouth to headwaters.
12.0275.00 Chehalis River at Grand Mound	59.9 22-15-3W	From confluence with Newaukum River to confluence with Prairie Creek.
12.0292.00 Black River	4.1 33-16-4W	From mouth to headwaters.
12.0305.00 Cedar Creek	1.1 14-16-5W	From mouth to headwaters.
12.0309.00 Porter Creek	1.3 22-17-5W	From mouth to headwaters.

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township and Range	Affected Stream Reach Including Tributaries
12.0310.00 Chehalis River at Porter	33.3 28-17-5W	From confluence with Prairie Creek near Grand Mound to confluence with Porter Creek including Prairie Creek.
12.0325.00 Cloquallum Creek	1.9 36-18-6W	From mouth to headwaters.
12.0342.00 East Fk. Satsop R.	15.9 15-19-6W	From confluence with Dry Run Cr. to headwaters excluding Dry Run Cr.
12.0343.00 Decker Creek	0.3 31-19-6W	From mouth to headwaters.
12.0345.00 Middle Fk. Satsop R.	0.4 36-19-7W	From mouth to headwaters.
12.0350.00 Satsop River	2.3 36-18-7W	From mouth to confl. with Dry Run Cr. on East Fk. Satsop R.
12.0350.02 Chehalis R. below confl. w/Satsop R.	20.0 7-17-6W	From confluence with Porter Ck. to just below confl. with Satsop River.
12.0374.00 Wynoochee River	5.9 27-18-8W	From mouth to headwaters.
12.0380.00 Wishkah River	16.2 22-19-9W .	From influence of mean annual high tide at low base flow levels to headwaters. Excluding E. Fk. Wishkah River.
12.0382.90 E. Fk., Wishkah R.	0.9 36-19-9W	From mouth to headwaters.
12.0385.00 W. Fk. Hoquiam River	9.4 14-18-10W	From mouth to headwaters.
12.0385.80 Middle Fk. Hoquiam R.	1.6 4-18-10W	From mouth to headwaters.
12.0386.60 East Fork Hoquiam	7.1 8-18-9W	From mouth to headwaters.
12.0390.00 Humptulips River	24.8 17-20-10W	From influence of mean annual high tide at low base flow levels to headwaters.
12.0174.00 Elk River	3.0 3-16-11W	From influence of mean annual high tide at low base flow levels to headwaters.
12.0175.00 Johns River	6.0 21-16-10W	From influence of mean annual high tide at low base flow levels to headwaters.
12.0180.00 Newskah Creek	3.5 32-17-9W	From influence of mean annual high tide at low base flow levels to headwaters.
12.0185.00 Charley Creek	2.0 21-17-9W	From influence of mean annual high tide at low base flow levels to headwaters.

(2) Base flows established for the stream management units in WAC 173-522-020(1) are as follows:

BASE FLOWS IN THE CHEHALIS RIVER BASIN

(In Cubic Feet per Second)

Month	Day	12.0200.00 Chehalis R. nr. Elk Cr.	12.0205.00 Elk Cr.	12.0216.30 So. Fk. Chehalis R.	12.0235.00 Chehalis R.
Jan.	1	260	100	200	700
	15	260	100	200	700
Feb.	1	260	100	200	700
	15	260	100	200	700
Mar.	1	260	100	200	700
	15	260	100	200	700
Apr.	1	260	100	200	700
	15	260	100	200	700
May	1	195	76	145	525
	15	146	57	105	400
June	1	108	43	75	300
	15	82	32	55	230
July	1	62	25	40	175
	15	46	19	29	130
Aug.	1	37	16	21	98
	15	31	14	15	75
Sep.	1	31	14	15	75
	15	31	14	15	75
Oct.	1	39	15	21	92
	15	49	17	28	115
Nov.	1	88	31	56	215
	15	150	56	105	390
Dec.	1	260	100	200	700
	15	260	100	200	700

Month	Day	12.0240.00 Newaukum R. S. Fork	12.0245.00 Newaukum R. N. Fork	12.0250.00 Newaukum R.	12.0253.00 Salzer Cr.
Jan.	1	125	62	250	11
	15	125	62	250	11
Feb.	1	125	62	250	11
	15	125	62	250	11
Mar.	1	125	62	250	11
	15	125	62	250	11
Apr.	1	125	62	250	11
	15	125	62	250	11
May	1	110	47	210	5.8
	15	88	36	160	2.8
June	1	70	27	118	1.4
	15	56	21	90	.73
July	1	45	16	68	.38
	15	36	12	52	.20
Aug.	1	29	9	38	.10
	15	27	7	35	.05
Sep.	1	27	7	35	.05
	15	27	7	35	.05
Oct.	1	33	8.4	43	.14
	15	40	10	54	.40
Nov.	1	58	19	91	1.35
	15	85	34	150	3.9
Dec.	1	125	62	250	11
	15	125	62	250	11

Month	Day	12.0264.00 Skookumchuck River	12.0275.00 Chehalis R. at Grand M.	12.0292.00 Black R.	12.0305.00 Cedar Cr.
Jan.	1	160	1300	200	90
	15	160	1300	200	90
Feb.	1	160	1300	200	90
	15	160	1300	200	90
Mar.	1	160	1300	200	90
	15	160	1300	200	90
Apr.	1	160	1300	200	90
	15	160	1300	200	90
May	1	160	1000	170	70
	15	130	780	145	54

Month	Day	12.0264.00 Skookumchuck River	12.0275.00 Chehalis R. at Grand M.	12.0292.00 Black R.	12.0305.00 Cedar Cr.
June	1	103	600	120	40
	15	83	460	104	31
July	1	67	355	88	24
	15	54	275	75	19
Aug.	1	43	210	70	14
	15	35	165	66	11
Sep.	1	35	165	66	11
	15	35	165	66	11
Oct.	1	35	200	68	13.8
	15	35	250	70	17
Nov.	1	59	440	100	30
	15	96	760	140	52
Dec.	1	160	1300	200	90
	15	160	1300	200	90

Month	Day	12.0309.00 Porter Cr.	12.0310.00 Chehalis R. at Porter	12.0325.00 Cloquallum Creek	12.0342.00 Satsop R. E. Fork
Jan.	1	90	2500	150	280
	15	90	2500	150	280
Feb.	1	90	2500	150	280
	15	90	2500	150	280
Mar.	1	90	2500	150	280
	15	90	2500	150	280
Apr.	1	90	2500	150	280
	15	90	2500	150	280
May	1	56	1900	118	240
	15	35	1420	92	210
June	1	29	1060	70	175
	15	24	800	55	152
July	1	21	610	43	130
	15	17	460	34	112
Aug.	1	14.2	340	29	104
	15	12	260	24	95
Sep.	1	12	260	24	86
	15	12	260	24	80
Oct.	1	13.3	320	27	80
	15	15	400	30	80
Nov.	1	28	760	52	125
	15	50	1380	88	185
Dec.	1	90	2500	150	280
	15	90	2500	150	280

Month	Day	12.0343.00 Decker Cr.	12.0345.00 Satsop R. M. Fork	12.0350.00 Satsop R. nr.	12.0350.02 Chehalis R. Satsop
Jan.	1	130	260	1100	3800
	15	130	260	1100	3800
Feb.	1	130	260	1100	3800
	15	130	260	1100	3800
Mar.	1	130	260	1100	3800
	15	130	260	1100	3800
Apr.	1	130	260	1100	3800
	15	130	260	1100	3800
May	1	115	203	910	2910
	15	103	160	750	2300
June	1	91	125	600	1750
	15	81	98	500	1360
July	1	72	78	425	1085
	15	64	61	360	860
Aug.	1	56	48	300	680
	15	50	38	260	550
Sep.	1	50	38	260	550
	15	50	38	260	550
Oct.	1	54	41	280	640
	15	58	45	300	750
Nov.	1	77	83	475	1305
	15	100	145	720	2220
Dec.	1	130	260	1100	3800
	15	130	260	1100	3800

Month	Day	12-0374.00 Wynoochee River	12-0380.00 Wishkah R.	12-0382.90 Wishkah R. E. Fk.	12-0385.00 Hoquiam R. W. Fk.
Jan.	1	560	135	33	32
	15	560	135	33	32
Feb.	1	560	135	33	32
	15	560	135	33	32
Mar.	1	560	135	33	32
	15	560	135	33	32
Apr.	1	560	135	33	32
	15	560	135	33	32
May	1	560	135	33	32
	15	560	113	27	26
June	1	450	95	21	20
	15	360	80	17	16
July	1	290	68	14	12.8
	15	230	57	11.3	10
Aug.	1	185	47	9	8
	15	150	47	9	8
Sep.	1	150	47	9	8
	15	150	47	9	8
Oct.	1	150	53	10.4	9.4
	15	230	60	12	11
Nov.	1	360	91	20	19
	15	560	135	33	32
Dec.	1	560	135	33	32
	15	560	135	33	32

Month	Day	12-0385.80 Hoquiam R. M. Fk.	12-0386.60 Hoquiam R. E. Fk.	12-0390.00 Humptulips River	12-0174.00 Elk River
Jan.	1	27	44	600	50
	15	27	44	600	50
Feb.	1	27	44	600	50
	15	27	44	600	50
Mar.	1	27	44	600	50
	15	27	44	600	50
Apr.	1	27	44	600	50
	15	27	44	600	50
May	1	27	44	600	43
	15	21	38	500	37
June	1	16	33	400	31
	15	12.2	29	325	26
July	1	9.5	25	265	22
	15	7.4	22	215	19
Aug.	1	5.6	19	170	16
	15	5.6	19	170	16
Sep.	1	5.6	19	170	16
	15	5.6	19	170	16
Oct.	1	6.7	19	205	20
	15	8.0	25	250	25
Nov.	1	15	34	390	32
	15	27	44	600	40
Dec.	1	27	44	600	50
	15	27	44	600	50

Month	Day	12-0175.00 Johns River	12-0180.00 Newskah Creek	12-0185.00 Charley Creek
Jan.	1	70	17	14
	15	70	17	14
Feb.	1	70	17	14
	15	70	17	14
Mar.	1	70	17	14
	15	70	17	14
Apr.	1	70	17	14
	15	50	17	14
May	1	50	13.4	11
	15	42	10.7	8.6
June	1	35	8.3	6.7
	15	29	6.5	5.4
July	1	24	5.2	4.2
	15	21	4.1	3.3
Aug.	1	17	3.2	2.5
	15	17	2.5	2
Sep.	1	17	2.5	2
	15	17	2.5	2

Month	Day	12-0175.00 Johns River	12-0180.00 Newskah Creek	12-0185.00 Charley Creek
Oct.	1	17	3.2	2.6
	15	24	4	3.5
Nov.	1	35	8.4	7.1
	15	49	17	14
Dec.	1	70	17	14
	15	70	17	14

(3) Base flow hydrographs, Appendix 1, pages 19-23 in the document entitled "water resources management program in the Chehalis River basin" dated November, 1975 shall be used for definition of base flows on those days not specifically identified in WAC 173-522-020(2).

(4) All rights hereafter established shall be expressly subject to the base flows established in WAC 173-522-020 (1) through (3).

(5) At such time as the departments of fisheries and/or wildlife provide specific information substantiating the need for flows higher than the flows set forth in WAC 173-522-020(2), the department of ecology agrees to proceed with setting minimum flows as provided under chapter 90.22 RCW within one year from the time of said request, unless agreement to another time frame is reached between parties.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-522-020, filed 6/9/88; Order 75-31, § 173-522-020, filed 3/10/76.]

WAC 173-522-030 Future allocation of surface water for beneficial uses. The department has determined that there are public waters available, subject to base flow, for allocation to beneficial uses from all streams within the Chehalis basin; except for those streams and times declared closed in WAC 173-522-050. The department shall maintain a current tabulation of the amount of water that is available for appropriation at each stream management unit specified under WAC 173-522-020(1).

[Order 75-31, § 173-522-030, filed 3/10/76.]

WAC 173-522-040 Priority of future rights during times of water shortage. (1) Rights established in the future pertaining to waters available for allocation in WAC 173-522-030 shall be subject to a priority of use. Rights for domestic use, including irrigation of lawn and noncommercial garden not to exceed one-half acre, and livestock use excluding feedlot operation, shall be superior to all other consumptive and nonconsumptive uses.

(2) As between rights established in the future within a priority of use, the date of priority shall control with an earlier-dated right being superior to those rights with later dates.

(3) Additional water use priorities may be promulgated, when required, in the future.

[Order 75-31, § 173-522-040, filed 3/10/76.]

WAC 173-522-050 Streams closed to further consumptive appropriations. The department, having determined there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the following streams to further consumptive appropriation. An exception is made for domestic and normal stockwatering where there is no alternative source of water supply.

Surface Water Closures

STREAM	DATE OF CLOSURE	PERIOD OF CLOSURE
Beaver Creek, tributary to S. Fk., Newaukum River	12-5-52	1 May-31 Oct.
Beaver Creek, tributary to Black River	10-28-52	" "
Bunker Creek	1-17-50	" "
Dempsey Creek	11-15-74	" "
Dillenbaugh Creek	8-21-72	" "
Hanaford Creek	5-7-52	" "
Hope Creek & Garrard Creek	8-28-73	" "
Kearney Creek	10-27-52	" "
Lincoln Creek	11-5-48	" "
Middle Fork, Newaukum R.	4-7-50	" "
Mill Creek	3-21-52	" "
Mox Chehalis	4-25-57	" "
Salmon Creek	12-18-56	" "
Rock Creek	4-11-73	" "
Scatter Creek	7-20-50	" "
Stearns Creek	4-28-53	" "
Wildcat Creek	10-28-52	" "
Williams Creek	5-6-52	" "
Wynoochee River	3-9-62	" "
Black River	Date of Adoption	1 July-30 Sept.
Skookumchuck River	" "	" "
S. Fk. Chehalis river	" "	" "
Salzer Creek	" "	1 June-30 Sept.

Note: Affected reach is from mouth to headwaters and includes all tributaries in the contributing drainage area unless specifically excluded.

[Order 75-31, § 173-522-050, filed 3/10/76.]

WAC 173-522-060 Effect on prior rights. Nothing in this chapter shall be construed to lessen, enlarge, or modify the existing rights acquired by appropriation or otherwise.

[Order 75-31, § 173-522-060, filed 3/10/76.]

WAC 173-522-070 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-522-070, filed 6/9/88.]

WAC 173-522-080 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-522-080, filed 6/9/88.]

WAC 173-522-090 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-522-090, filed 6/9/88.]

Chapter 173-527 WAC

WATER RESOURCES MANAGEMENT PROGRAM FOR THE LEWIS BASIN, WRIA 27

WAC

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INSTREAM FLOWS AND CLOSURES

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PART A
GENERAL

WAC 173-527-010 Authority and purpose. (1) The department of ecology (ecology) adopts this chapter under the Watershed Planning Act (chapter 90.82 RCW), Water Resources Act of 1971 (chapter 90.54 RCW), Minimum Water Flows and Levels Act (chapter 90.22 RCW), Water code (chapter 90.03 RCW), Regulation of public ground waters (chapter 90.44 RCW), RCW 43.21A.064(9), and 43.21A.080.

(2) This chapter shall not affect existing water rights, unless otherwise stated in the conditions of the water right in question. It shall also not affect federal Indian and non-Indian reserved rights.

(3) This chapter does not limit ecology's authority to establish flow requirements or conditions under other laws, including hydropower licensing under RCW 90.48.260.

(4) The Salmon-Washougal and Lewis watershed management plan (plan) recommendations were approved in 2006 by the Salmon-Washougal and Lewis planning unit (planning unit) in accord with RCW 90.82.130. The planning unit is a group made up of Clark, Skamania, and Cowlitz county commissioners and a broad range of water use interests. Ecology shall use the plan as the framework for making future water resource decisions in the Lewis watershed. Ecology shall rely upon the plan as a primary consideration in determining the public interest related to such decisions, including this rule adoption.

(5) Ecology shall initiate a review of this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions. Ecology and the planning unit should periodically evaluate the effectiveness of this chapter.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-010, filed 12/19/08, effective 1/19/09.]

WAC 173-527-020 Definitions. For purposes of this chapter, the following definitions shall be used:

"Allocation" means the designation of specific amounts of water for specific beneficial uses.

"Appropriation" means a beneficial use of waters of the state, authorized by and consistent with all applicable laws and regulations.

"Community water supplier" means an entity that supplies water for fifteen or more residential service connections or for providing residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year.

"Consumptive use" means a use of water whereby there is diminishment of the amount or quality of the water source.

"Ecology" means the Washington state department of ecology.

"Environmental restoration project" or "ERP" means a project with a primary purpose of restoring salmonids, requiring a temporary use of water.

"Habitat-forming function" means a physical, chemical, or biological function that is necessary to create and maintain natural or desired habitat conditions that benefit fish and other aquatic life. Habitat forming functions include but are not limited to creating and maintaining the following: Channel migration, gravel and sediment transport, water quality, nutrients, large woody material recruitment, flood plain flows, and riparian habitat.

"Habitat-related action" means reestablishment of predisturbance or other desirable riparian, stream, wetland, or flood plain functions and related biological, chemical, and physical processes.

"Instream flow" means a level of stream flow, established under chapters 90.03, 90.22, 90.54 and 90.82 RCW, needed in perennial streams to preserve wildlife, fish, scenic, aesthetic, and other environmental and navigational values. The term instream flow is synonymous with "minimum flow" as used in chapters 90.03 and 90.22 RCW, "base flow" as used in chapter 90.54 RCW, and "minimum instream flow" as used in chapter 90.82 RCW.

"Interruptible use" means a type of water use that relies upon withdrawals on a periodic or seasonal basis that if interrupted would not cause substantial hardship or health or safety concerns, or that is highly unlikely to be interrupted during the expected period of use. For the purposes of this chapter, interruptible uses are subject to the instream flows set in WAC 173-527-060.

"Net stream flow depletion" means the total depletion of water from a subbasin that may be available for future use under the reservation set in this chapter. The net stream flow depletion equals the flow depletion that remains after performance of offsetting actions, and is available for use only after applicable conditions in WAC 173-527-110 have been met.

"Nonconsumptive use" means a type of water use where either there is no diversion or withdrawal from a source or where there is no diminishment of the amount or quality of the water source.

"Permit-exempt withdrawal" or "permit exemption" means a ground water withdrawal exempted from permit

requirements under RCW 90.44.050, but otherwise subject to the surface and ground water statutes and other applicable laws. For the purpose of this chapter, stockwater use does not include feedlots or other activities not related to normal grazing land uses.

"Planning unit" means the Salmon-Washougal and Lewis watershed planning unit, established under chapter 90.82 RCW, and all successors, formally designated by the Salmon-Washougal and Lewis watershed planning initiating governments.

"Public water system" means any system, excluding a system serving only one single-family residence and a system with four or fewer connections all of which serve residences on the same farm, providing piped water for human consumption, including any collection, treatment, storage, or distribution facilities under control of the purveyor and used primarily in connection with the system; and collection or pretreatment storage facilities not under control of the purveyor but primarily used in connection with the system.

"Regional supply area" means a defined area where ecology finds water to be available for future ground water withdrawal. Regional supply areas are designated by WAC 173-527-090 or by public order of ecology.

"Reservation" means a one time, finite allocation of water for future beneficial uses. For the purposes of this chapter, the reservation is not subject to instream flows set in WAC 173-527-060, nor to closures set in WAC 173-527-070. The reservation is senior to the instream flow water rights set in WAC 173-527-060.

"Water-related action" means an offsetting activity that provides a quantity of water during certain times and at certain places that essentially replaces water at or upstream of where a proposed water right would impact surface flow. Water-related actions include but are not limited to acquiring an active water right or donating a water right to the trust water right program under chapter 90.42 RCW.

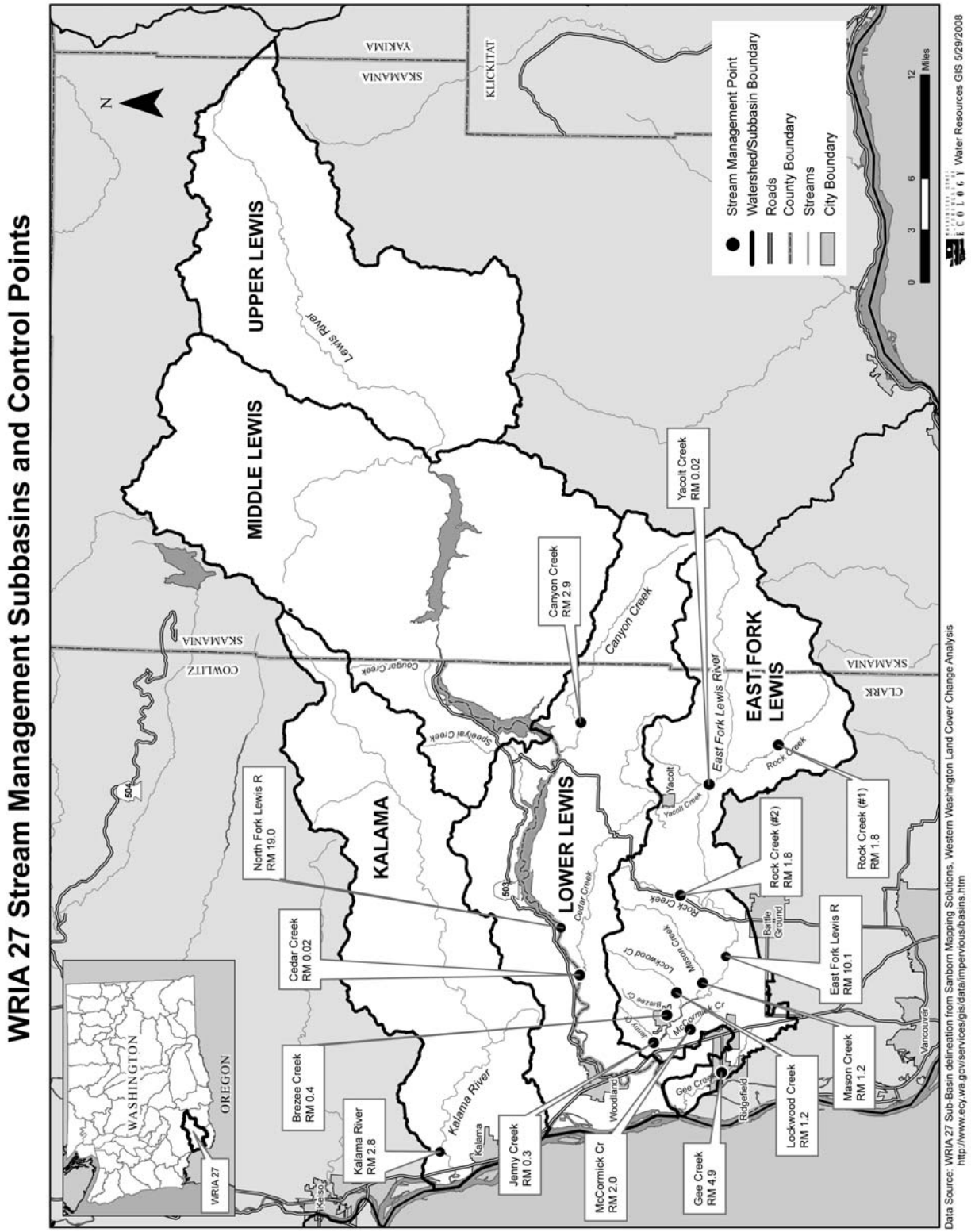
"Water right" means a right to make beneficial use of public waters of the state, including any water right established for instream flow purposes or a permit-exempt ground water withdrawal.

"Watershed plan" means the Salmon-Washougal and Lewis watershed management plan, adopted on July 21, 2006, by the Clark, Cowlitz, and Skamania county commissioners.

"Withdrawal" means the extraction of ground water, or the diversion of surface water for a beneficial use.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-020, filed 12/19/08, effective 1/19/09.]

WAC 173-527-030 Map.



[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-030, filed 12/19/08, effective 1/19/09.]

WAC 173-527-040 Compliance and enforcement. (1) Ecology shall prepare and make available to the public, technical and educational information regarding the scope and requirements of this chapter. This is intended to assist the public in complying with the requirements of their water rights and applicable water laws and rules.

(2) When ecology determines that a violation of this chapter has occurred, it shall:

(a) First attempt to achieve voluntary compliance, except in appropriate cases involving potential harm to other water rights or the environment. An approach to achieving voluntary compliance is to offer information and technical assistance to a violator. The information or technical assistance identifies, in writing, one or more means to accomplish the person's purposes within the framework of the law.

(b) If education and technical assistance do not achieve compliance, ecology has the authority to issue a notice of violation, a formal administrative order under RCW 43.27A.190, or assess penalties under RCW 43.83B.336 and 90.03.600, or may seek criminal enforcement under RCW 90.03.400, 90.03.410, and 90.44.120.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-040, filed 12/19/08, effective 1/19/09.]

PART B
INSTREAM FLOWS AND CLOSURES

WAC 173-527-050 Stream management control points. Ecology hereby establishes the following stream management control points shown in Table I. Management point locations are shown in WAC 173-527-030.

Table I
Stream Management Control Point Information

Stream Management Point Name	Control Station by River Mile (RM); Latitude (Lat.), Longitude (Long.)
Kalama River (at USGS gage #14223500)	RM 2.8; 46°02'51"N, 122°50'10"W
Cedar Creek (near Lewis River Hatchery)	RM 0.02; 45°56'09"N, 122°37'09"W
North Fork Lewis River (at USGS gage #14220500)	RM 19.0; 45°57'07"N,122°33'46"W
Canyon Creek (at NE Healy Road)	RM 2.9; 45°56'24"N, 122°18'58"W
Jenny Creek (at Pacific Highway/Clark Co. Road)	RM 0.3; 45°52'22"N, 122°41'53"W
McCormick Creek (at 11th Ave. crossing)	RM 2.0; 45°50'34"N, 122°40'51"W
Brezee Creek (at La Center, Co. Rd. 42 crossing)	RM 0.4; 45°51'45"N, 122°39'52"W
Lockwood Creek (at Co. Rd. 42)	RM 1.2; 45°51'17"N, 122°38'14"W
Mason Creek (at J.A. Moore Rd. crossing)	RM 1.2; 45°50'00"N, 122°37'30"W
East Fork Lewis River (at Ecology gage 27D090)	RM 10.1; 45°48'51"N, 122°35'30"W
Rock Creek #2 (at 319th St. Bridge off Highway 503)	RM 1.8; 45°51'13"N, 122°31'14"W
Yacolt Creek (at confluence at Moulton Falls)	RM 0.02; 45°49'56"N, 122°23'13"W
Rock Creek #1 (1/2 mile south of Dole)	RM 1.8; 45°46'31"N, 122°20'16"W
Gee Creek (at Ridgefield, Highway 501 crossing)	RM 4.9; 45°48'55"N, 122°43'52"W

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-050, filed 12/19/08, effective 1/19/09.]

WAC 173-527-060 Instream flows. (1) The instream flows established in this chapter are based on the recommendations of the planning unit; consultation with the department of fish and wildlife, department of agriculture, and department of community, trade, and economic development; and public input received during the rule-making process. The planning unit recommended these instream flow levels by unanimous vote.

(2) Instream flows established in this chapter are water rights, which protect instream values and functions from future appropriations. The priority date of the instream flows is the effective date of this chapter. In accordance with RCW 90.82.080, this priority date received unanimous approval from the planning unit.

(3) Instream flow rights shall be protected from impairment by any new water rights commenced after the effective date of this chapter and by all future changes and transfers of senior and junior water rights, including both surface and ground water rights. The following water rights are not subject to the instream flows:

(a) A water right put to beneficial use before the effective date of this chapter, unless otherwise stated in the conditions of the water right or change authorization.

(b) Water rights appropriated from the reservation of water established in WAC 173-527-110.

(c) Future withdrawals for environmental restoration purposes under WAC 173-527-140 unless included as a permit condition.

(4) Instream flows, expressed in cubic feet per second (cfs), are measured at the stream management control points in WAC 173-527-050. Instream flows apply to all stream reaches that contribute to flow at stream management control points, as shown in Table II of this section. For reaches that are downstream of all management points, the flows set for the nearest upstream management control point shall apply to those reaches. However, if a point of withdrawal is downstream of the confluence of two or more branches, each having a designated management point, the combined flows of the management points shall apply to that withdrawal.

Table II
Instream Flows in the Lewis Basin
(cubic feet per second)

Month	Stream Management Control Point				
	Kalama River, RM 2.8	Cedar Creek, RM 0.02	Lower Lewis River, RM 19.0	Canyon Creek, RM 2.9	Gee Creek, RM 4.9
January	950	125	2000	66	23
February	950	156	2000	66	42
March	950	156	2000 for Mar. 1, 2200 from Mar. 2 to Mar. 15, 2500 from Mar. 16 to Mar. 30, 2700 for Mar. 31	208	42
April	950	156	2700	208	42
May	950	156	2700	208	42
June	900	104	2700	139	28
July	616	104	2300 from July 1 to July 10, 1900 from July 11 to July 20, 1500 from July 21 to July 30, 1200 for July 31	139	28
August	434 from Aug. 1 to Aug. 15, 400 from Aug. 16 to Aug. 31	46	1200	66	9
September	589	188	1200	66	9
October	1050	188	1200 from Oct. 1 to Oct. 15, 2500 from Oct. 16 to Oct. 31	66	23
November	1050	188	4200	66	23
December	1050	125	4200 from Dec. 1 to Dec. 15, 2000 from Dec. 16 to Dec. 31	66	23

Month	Stream Management Control Point								
	Jenny Creek, RM 0.3	McCormick Creek, RM 2.0	Brezee Creek, RM 0.4	Lockwood Creek, RM 1.2	Mason Creek, RM 1.2	East Fork Lewis River, RM 10.1	Rock Creek #2, RM 1.8	Yacolt Creek, RM 0.02	Rock Creek #1, RM 1.8
January	19	15	31	30	23	500	23	59	75
February	36	28	39	54	42	500	43	97	121
March	36	28	39	54	42	460	43	97	121
April	36	28	39	54	42	460	43	97	121
May	36	28	39	54	42	460	43	97	121
June	24	28	39	36	28	420	29	66	80
July	24	28	39	36	28	233	29	66	80
August	8	6	8	13	9	122	10	26	34
September	8	6	8	13	9	175 from Sep. 1 to Sep. 15, 295 from Sep. 16 to Sep. 30	10	26	34
October	19	15	21	30	23	500	23	59	75
November	19	15	21	30	23	500	23	59	75
December	19	15	21	30	23	500	23	59	75

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-060, filed 12/19/08, effective 1/19/09.]

WAC 173-527-070 Surface and ground water closed to further consumptive appropriations. (1) Based on historical and current low flows and the water withdrawals by existing water right holders, ecology has determined that no waters are reliably available for new consumptive uses from certain surface water sources in the basin. Therefore, all surface waters listed in Table III are closed to any further consumptive appropriation, except as provided in WAC 173-527-080.

Table III
Surface Water Closures

Subbasin Name*	Affected Reach
Kalama River	Kalama River from mouth to headwaters, including tributaries.
Middle Lewis River	Lewis River from Forest Road 90 bridge (46°1'13"N, 122°1'13"W) to headwaters, including tributaries.
Upper Lewis River	All surface waters in the subbasin.
Lower Lewis River	Lewis River from RM 7.1 (45°54'53"N, 122°44'12"W) to Merwin Dam outflow (45°33'21"N, 122°33'21"W), including tributaries.
East Fork Lewis River	East Fork Lewis River from Interstate Highway 5 bridge crossing (45°52'23"N, 122°42'42"W) to headwaters, including tributaries. Gee Creek from mouth at Columbia River to headwaters, including tributaries.
*Subbasin boundaries are shown in WAC 173-527-030, and are consistent with the boundary descriptions used in the watershed plan.	

(2) Based on the hydrogeology of the basin, and the location and depth where ground water withdrawals generally occur, there is a high likelihood that future ground water withdrawals would capture water that affects closed surface waters. Therefore, the basin is closed to new withdrawals of ground water (including any new permit-exempt withdrawals) that would affect closed surface waters, except as provided in WAC 173-527-080.

(3) Applications for a withdrawal that would not affect the closed reaches, listed in Table III, shall be evaluated on a case-by-case basis under applicable law.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-070, filed 12/19/08, effective 1/19/09.]

PART C
FUTURE WATER RIGHTS

WAC 173-527-080 Future water rights—Generally. A new surface or ground water appropriation (including any permit-exempt withdrawal) may be commenced only if consistent with the surface and ground water statutes and other applicable requirements of law and if any one of the following seven conditions (subsections (1) through (7) of this section) apply:

(1) The proposed water use is nonconsumptive.

(2) The proposed surface water diversion is not located on any of the surface waters closed in WAC 173-527-070, Table III.

(3) The proposed ground water withdrawal is located where it would not affect any of the surface waters closed in WAC 173-527-070, Table III by either meeting condition (a) or (b) of this subsection:

(a) The person or entity seeking to commence a proposed ground water use shows, through scientifically sound studies and technical analysis, that the ground water use would not affect any of the closed surface waters identified in WAC 173-527-070, Table III.

(b) The proposed ground water withdrawal occurs in a regional supply area designated in WAC 173-527-090 or by order of ecology.

(4) The person or entity seeking to commence the new appropriation submits a scientifically sound mitigation plan, and such plan is approved by ecology. A mitigation plan may be approved if the proponent can demonstrate to ecology's satisfaction that when the mitigation is implemented the proposed withdrawal(s) will not impair senior water rights, including instream flow rights, adversely impact instream resources, or diminish water quality. A mitigation plan can be submitted to mitigate for an individual withdrawal or to mitigate for multiple withdrawals in a defined region.

An approved mitigation plan shall include a monitoring and reporting plan. It shall also include conditions that the plan be implemented as long as the associated water right is used and that any water provided for mitigation purposes be prohibited from being applied to any other purpose. If monitoring of a mitigation plan shows the mitigation is not effective, departmental approval of the mitigation plan shall be suspended and the water use shall cease until the department approves a new or revised mitigation plan.

(5) The proposed water use qualifies as an interruptible use as defined in WAC 173-527-020, and meets the criteria in WAC 173-527-100.

(6) The proposed water use qualifies for the reservation established and as conditioned in WAC 173-527-110.

(7) The proposed use is for an environmental restoration project and meets the criteria in WAC 173-527-140.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-080, filed 12/19/08, effective 1/19/09.]

WAC 173-527-090 Regional supply areas for future ground water withdrawals. (1) Ecology finds there to be certain locations where water is potentially available on a year-round basis for future ground water withdrawals. Ecology further finds that withdrawals in these areas are unlikely to affect surface waters closed in WAC 173-527-070, Table III or instream flow values protected under RCW 90.54.020 (3). Such regional supply areas are recognized in the watershed plan and supported by the public interest as preferred locations for developing future water supply. Ground water withdrawals (including permit-exempt withdrawals) may be commenced in the designated regional supply areas to the extent such withdrawals are consistent with chapters 90.03 and 90.44 RCW, and any other applicable requirements of law.

(2) Based on local hydrology, ecology finds that ground water withdrawals made in areas designated below meet the conditions for regional supply areas in subsection (1) of this section and are so designated:

(a) All lands west of Interstate Highway 5, north of the East Fork Lewis River, and east of the Lewis River mainstem;

(b) All lands west of Interstate Highway 5, north of Lewis River mainstem, and within the Lower Lewis subbasin.

(3) Ecology, in consultation with the department of fish and wildlife, may by order designate other regional supply areas that meet the criteria in subsection (1) of this section.

(4) In order to protect instream values of surface waters in regional supply areas, ecology reserves the right to deny any withdrawals whereby drawdown effects from pumping would create a significant impact to local surface waters. For the purposes of this section, significant impact includes but is not limited to a noticeable reduction in lake level or flow in local streams.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-090, filed 12/19/08, effective 1/19/09.]

WAC 173-527-100 Future appropriations for interruptible use. (1) Ecology finds there may be water available above existing water rights and instream flows, which may be captured for interruptible use. This water is only available from November 16 to May 14 and may only be withdrawn from the Kalama, North Fork Lewis (below Merwin Dam), and East Fork Lewis rivers.

(2) Prior to commencement, the person or entity seeking a new interruptible appropriation must demonstrate a seasonal need and provide assurances that any effects on surface water that may result from withdrawals will be limited to the above time period and locations.

(3) Ecology shall deny an appropriation for interruptible use if such use, or the cumulative effects of such uses, would compromise habitat-forming functions provided by high flows. In no case shall new individual or cumulative allocations exceed the values indicated in Table IV as specified for each river. However, these allocation limits may be lowered on a case-by-case basis whenever more protection of habitat-forming functions is needed.

(4) Interruptible uses are subject to existing water rights and instream flows set in WAC 173-527-060.

Table IV
Limits on Future Allocation for Interruptible Uses

River Name	Allocation Limit* (cubic feet per second)
Kalama River	150
Lewis River (from river mile 7.1 to Merwin Dam)	200
East Fork Lewis	90
*The allocation limits in this table are based upon an allowance for ten percent of the average historic flow. Due to case-by-case determinations of flow for habitat-forming function needs, the maximum allocation may be less.	

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-100, filed 12/19/08, effective 1/19/09.]

WAC 173-527-110 Reservation of surface and ground water for future uses. (1) Ecology has weighed the public interest that supports the reservation of a limited amount of water for future consumptive uses against the potential for negative impact to instream resources. Ecology finds that the public interest advanced by a limited reservation clearly overrides the small potential for negative impacts on instream resources.

Based on this finding, ecology hereby allocates an amount and rate of use of water for specific water users and subbasins, as indicated under the subtitle "Net streamflow depletion" in Table V. The reservations are a one time, finite resource. When and if water is fully appropriated from the reservation, all remaining waters in closed areas are hereby appropriated for instream flow use.

This reservation is available to a user only if the conditions set forth in subsection (2) or (6) of this section are met, as well as any applicable requirements of law, including but not limited to all water resource laws and regulations.

(2) Ecology may approve a water right application for water from the reservation if all of the following conditions in (a), (b), (c), and (d) of this subsection are met:

Alternatives analysis

(a) The applicant demonstrates that no practicable supply alternatives to the reservation are available. In order to satisfy this condition, an applicant must demonstrate consideration of other regional water sources to supply water for the same use now being proposed, including:

(i) Existing public water system supply;

(ii) Water from a ground or surface water source, which may be withdrawn without affecting any of the surface waters closed in WAC 173-527-070, such as water from a hydraulically disconnected deep aquifer source;

(iii) Supply options from surface and ground water storage;

(iv) Water savings from conservation techniques, such as reuse of waste water; and

(v) Mitigation and minimization considerations to the extent required in (d) of this subsection, impact analysis.

Water-related offset

(b) The applicant demonstrates it will offset the overall streamflow depletion(s) through water-related actions to the maximum extent practicable. Applicants should offset at least one-half of the overall streamflow depletion(s) through water-related actions.

(i) In evaluating the adequacy of water-related actions to offset depletions, ecology will evaluate the action based on the degree of aquatic benefit it would provide. A water-related offset may have a greater or lesser benefit due to the seasonality, location, or quality of water provided. The level of benefit will be used to determine if any additional offsets will be required of the applicant.

(ii) Ecology will consider water-related offsets only to the extent that reasonable assurance exists that such offsets will be successfully delivered or donated to the trust water right program under chapter 90.42 RCW where delivery is legally guaranteed.

Habitat-related offset

(c) After satisfying the water-related offset requirement in (b) of this subsection, an applicant must offset any remaining streamflow depletion through habitat-related actions that

create or enhance habitat. Habitat-related offsets must compensate for the habitat loss or degradation that will result from the net streamflow depletion.

An applicant must provide adequate assurances that a habitat-related action in fact occurs. Ecology, as appropriate, shall condition use of the reservation with performance standards and monitoring requirements, or require financial assurance mechanisms prior to reservation use.

Impact analysis

(d) In keeping with the findings of the watershed plan, ecology finds that the public interest supports avoidance and minimizing impacts to tributaries. The applicant must demonstrate one of the following:

(i) The proposed withdrawal does not impact tributaries to subbasin mainstems; or

(ii) An impact to a tributary to a subbasin mainstem is unavoidable, as demonstrated by an impact analysis, included as part of the alternatives analysis under (a) of this subsection. In addition to demonstrating the necessary considerations under (a) of this subsection, the impact analysis must demonstrate consideration of water supply options that avoid the impact to the tributary as well as supply options that may minimize such impact.

Ecology, in consultation with the department of fish and wildlife, may require an applicant to monitor affects of a ground water withdrawal as a condition of water use.

Application review and permitting

(3) In determining practicability in subsection (2) of this section, ecology will consider both economic and logistic considerations, as well as guidance from the watershed plan.

(4) Ecology, in consultation with the department of fish and wildlife, will evaluate the adequacy of proposed offsets and alternatives analysis in subsection (2) of this section. The evaluation shall be consistent with the watershed plan and guidance documents approved by ecology. Ecology will also consider recommendations and technical advice received from the planning unit or by an advisory committee, formally designated by the planning unit.

(5) Ecology will issue a permit for use of water equal to the amount it determines appropriate to allocate from the reservation, and such amount will be debited from the total reservation amount. The total quantity of water appropriated shall not exceed the amount and rate listed under the subtitle "Net streamflow depletion" in Table V. However, ecology will issue a permit for a quantity beyond the amount debited from the reservation for the following:

(a) Water-related offsets to the extent such offsets are water-for-water, to the satisfaction of RCW 90.03.380 or 90.44.100, any other applicable laws, and terms of an approved mitigation plan under WAC 173-527-080(4); and

(b) Water use to the extent closed water sources are not affected and to the satisfaction of applicable requirements of law, including but not limited to all water resource laws and regulations.

Permit-exempt ground water use

(6) The requirements in subsection (2) of this section do not apply to permit-exempt withdrawals. However, permit-exempt withdrawals under RCW 90.44.050 are subject to both of the following conditions in order to occur under the reservation:

(a) Future permit-exempt well use may not occur where connection to an existing community water supplier can be provided in a timely and reasonable manner. Determinations of timely and reasonable shall be consistent with public water system plans, local laws, and state laws, including but not limited to Clark County Code 40.370.020 and chapter 246-290 WAC.

(b) Water use from a permit-exempt ground water well must be consistent with the allocation limits of this reservation and the Clark, Cowlitz, and Skamania County code and other applicable laws, including the statute on permit exemptions, RCW 90.44.050. Single or group domestic uses under the permit exemption shall not exceed five thousand gallons per day. Irrigation of lawn and noncommercial garden under the permit exemption shall not exceed one-half acre.

Table V
Allocation of Reservation

Subbasin Name*	Water User**	Expected Streamflow Depletion without Offset (overall depletion) cubic feet per second (cfs)	Expected Water-related Offset Requirement (cfs)	Net Streamflow Depletion*** (cfs)
Kalama River	City of Kalama	1.92	0.00	1.92
	Other public water systems	0.37	0.19	0.19
	Permit-exempt ground water wells	0.16	0.00	0.16
Lower Lewis River, Middle Lewis, and Upper Lewis Rivers	Public water systems in Cowlitz County	0.37	0.19	0.19
	Public water systems in Clark County	0.75	0.37	0.37
	Public water systems in Skamania County	0.40	0.00	0.40

Subbasin Name*	Water User**	Expected Streamflow Depletion without Offset (overall depletion) cubic feet per second (cfs)	Expected Water-related Offset Requirement (cfs)	Net Streamflow Depletion*** (cfs)
	Permit-exempt ground water wells in Cowlitz County	0.07	0.00	0.07
	Permit-exempt ground water wells in Clark County	0.12	0.00	0.12
	Permit-exempt ground water wells in Skamania County	0.40	0.00	0.40
	Commercial use in Skamania County****	0.21	0.00	0.21
East Fork Lewis River Subbasin	Clark Public Utility, City of Battle Ground and Ridgefield	4.40	2.20	2.20
	Other public water systems in Clark County	0.37	0.19	0.19
	Permit-exempt ground water wells in Clark County	0.47	0.00	0.47
	Permit-exempt ground water wells in Skamania County	0.02	0.00	0.02

*Subbasin boundaries are shown in WAC 173-527-030, and are consistent with the boundary descriptions used in the watershed plan.
**In the watershed plan, the term "domestic wells" has the same meaning as "permit-exempt ground water wells" and the term "small community water systems" has the same meaning as "public water systems."
*** If conditions in subsections (2) and (6) of this section are satisfied, the net depletion of a closed water source, set in WAC 173-527-070, shall not exceed the quantities listed for specific users.
****Withdrawal impacts shall be limited to segments of the mainstem North Fork Lewis River that are located upstream of the Forest Road 90 bridge crossing (46°1'13"N, 122°1'13"W).

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-110, filed 12/19/08, effective 1/19/09.]

WAC 173-527-120 Priority dates of reservation and repeal of chapter 173-592 WAC. (1) The reservation created in WAC 173-527-110 is not subject to the instream flows or closures set in this chapter, and the priority date of the reservation for all areas outside Clark County is the effective date of this chapter.

(2) Ecology hereby transfers unappropriated water from the existing reservation for Clark County in WAC 173-592-070 in such quantities and to the users and areas of use in Clark County as set forth in WAC 173-527-110, Table V and WAC 173-528-110, Table IV. Pursuant to this transfer, the priority date of withdrawals from all Clark County portions of the reservation in WAC 173-527-110 is August 13, 1986. However, the designation of specific municipal suppliers in this reservation does not create a right for these entities to use such water. Such a right will arise only if a permit is applied for by such municipal suppliers to use water under the reservation and approved by ecology after applying the legal tests for a new appropriation. With respect to any water for which a permit has not been granted, ecology reserves the right to modify in all respects or rescind the reservation by future rule making.

(3) Based on new information made available through the local watershed planning process and hydrologic conditions as of the time of this rule making, ecology has determined that the remaining water reserved under WAC 173-592-070, which was not transferred in subsection (2) of this section or previously appropriated is no longer supported by available information and science. Therefore, chapter 173-592 WAC is hereby repealed in its entirety and all water reserved under that rule that has not been transferred or appropriated is hereby returned to the state. This repeal is not intended to affect any existing water rights issued under the reservation.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-120, filed 12/19/08, effective 1/19/09.]

WAC 173-527-130 Accounting for use under the reservation. (1) A record of all appropriations from the reservation shall be maintained by ecology.

(2) For an appropriation under a permit, ecology will account for water use under the reservation based on authorized quantities under water right permits or certificates, and according to WAC 173-527-110(5).

(3) For permit-exempt ground water appropriations, ecology will deduct a standard amount of two hundred forty gallons per day for each well. For a group domestic water system under the permit-exemption, the standard amount will be applied for each domestic or residential service connection. The standard amount will be adjusted periodically to reflect actual use during low flow conditions. The standard amount assumes a rate of septic recharge from an on-site septic system. In the event that on-site septic recharge is known not to occur, ecology will deduct an additional five hundred and sixty gallons per day. Additionally, ecology reserves the right to account for water use based on the best available information contained in well logs, approvals issued by local jurisdictions, or other documents.

(4) If a water user under the reservation subsequently abandons or relinquishes the withdrawal, ecology will credit back to the reservation the actual amount of water used and/or debited from the reservation, upon demonstration to ecology that the well or surface water diversion has been decommissioned through written certification.

(5) Ecology shall notify either Clark, Skamania, or Cowlitz County and the planning unit; when it determines that fifty percent, seventy-five percent, and one hundred percent, respectively, of the reservation is appropriated for a water user in Table V.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-130, filed 12/19/08, effective 1/19/09.]

WAC 173-527-140 Future surface water withdrawals for environmental restoration. In keeping with the findings of the watershed plan, ecology finds that the public interest advanced by future withdrawals for ERPs, as defined and conditioned in this section, clearly overrides the minimal negative impacts on instream flows.

(1) A future withdrawal for an ERP may be approved only if it meets all the following:

(a) The proposed water use is for a bypass flow for salmonid restoration or riparian planting project, and the primary purpose of the project is restoration of salmonids.

(b) The proposed project will result in aquatic habitat benefits, and such benefits will exceed any detriment to aquatic habitat that may be caused by reductions in flow at specific locations and times of withdrawal.

(c) The proposed use qualifies for a temporary permit.

(2) Ecology, in consultation with the department of fish and wildlife, will evaluate proposed ERPs. ERPs approved by ecology are not subject to closures or instream flows set in this chapter, unless otherwise conditioned by the permit.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-126 (Order 08-02), § 173-527-140, filed 12/19/08, effective 1/19/09.]

Chapter 173-528 WAC

WATER RESOURCES MANAGEMENT PROGRAM FOR THE SALMON-WASHOUGAL BASIN, WRIA 28

WAC

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PART A
GENERAL

WAC 173-528-010 Authority and purpose. (1) The department of ecology (ecology) adopts this chapter under the Watershed Planning Act (chapter 90.82 RCW), Water Resources Act of 1971 (chapter 90.54 RCW), Minimum Water Flows and Levels Act (chapter 90.22 RCW), Water code (chapter 90.03 RCW), Regulation of public ground waters (chapter 90.44 RCW), RCW 43.21A.064(9), and 43.21A.080.

(2) This chapter shall not affect existing water rights, unless otherwise stated in the conditions of the water right in question. It shall also not affect federal Indian and non-Indian reserved rights.

(3) This chapter does not limit ecology's authority to establish flow requirements or conditions under other laws, including hydropower licensing under RCW 90.48.260.

(4) The Salmon-Washougal and Lewis watershed management plan (plan) recommendations were approved in 2006 by the Salmon-Washougal and Lewis planning unit (planning unit) in accord with RCW 90.82.130. The planning unit is a group made up of Clark, Skamania, and Cowlitz county commissioners and a broad range of water use interests. Ecology shall use the plan as the framework for making future water resource decisions in the Salmon-Washougal watershed. Ecology shall rely upon the plan as a primary consideration in determining the public interest related to such decisions, including this rule adoption.

(5) Ecology shall initiate a review of this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions. Ecology and the planning unit should periodically evaluate the effectiveness of this chapter.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-010, filed 12/19/08, effective 1/19/09.]

WAC 173-528-020 Definitions. For purposes of this chapter, the following definitions shall be used:

"Allocation" means the designation of specific amounts of water for specific beneficial uses.

"Appropriation" means a beneficial use of waters of the state, authorized by and consistent with all applicable laws and regulations.

"Community water supplier" means an entity that supplies water for fifteen or more residential service connections or for providing residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year.

"Consumptive use" means a use of water whereby there is diminishment of the amount or quality of the water source.

"Ecology" means the Washington state department of ecology.

"Environmental restoration project" or "ERP" means a project with a primary purpose of restoring salmonids, requiring a temporary use of water.

"Habitat-forming function" means a physical, chemical, or biological function that is necessary to create and maintain natural or desired habitat conditions that benefit fish and other aquatic life. Habitat forming functions include but are not limited to creating and maintaining the following: Channel migration, gravel and sediment transport, water quality, nutrients, large woody material recruitment, flood plain flows, and riparian habitat.

"Habitat-related action" means enhancing desirable riparian, stream, wetland, or flood plain functions and related biological, chemical, and physical processes.

"Instream flow" means a level of stream flow, established under chapters 90.03, 90.22, 90.54 and 90.82 RCW, necessary in perennial streams to preserve wildlife, fish, scenic, aesthetic, and other environmental and navigational values. The term instream flow is synonymous with "minimum flow" as used in chapters 90.03 and 90.22 RCW, "base flow" as used in chapter 90.54 RCW, and "minimum instream flow" as used in chapter 90.82 RCW.

"Interruptible use" means a type of water use that relies upon withdrawals on a periodic or seasonal basis that if interrupted would not cause substantial hardship or health or safety concerns, or that is highly unlikely to be interrupted during the expected period of use. For the purposes of this chapter, interruptible uses are subject to the instream flows set in WAC 173-528-060.

"Net stream flow depletion" means the total depletion of water from a subbasin that may be available for future use under the reservation set in this chapter. The net stream flow depletion equals the flow depletion that remains after performance of offsetting actions, and is available for use only after applicable conditions in WAC 173-528-110 have been met.

"Nonconsumptive use" means a type of water use where either there is no diversion or withdrawal from a source or where there is no diminishment of the amount or quality of the water source.

"Permit-exempt withdrawal" or "permit exemption" means a ground water withdrawal exempted from permit requirements under RCW 90.44.050, but otherwise subject to surface and ground water statutes and other applicable laws. For the purpose of this chapter, stockwater use does not include feedlots or other activities not related to normal grazing land uses.

"Planning unit" means the Salmon-Washougal and Lewis watershed planning unit, established under chapter 90.82 RCW, and all successors, formally designated by the Salmon-Washougal and Lewis watershed planning initiating governments.

"Public water system" means any system, excluding a system serving only one single-family residence and a system with four or fewer connections all of which serve residences on the same farm, providing piped water for human consumption, including any collection, treatment, storage, or distribution facilities under control of the purveyor and used primarily in connection with the system; and collection or pretreatment storage facilities not under control of the purveyor but primarily used in connection with the system.

"Regional supply area" means a defined area where ecology finds water to be available for future ground water withdrawal. Regional supply areas are designated by WAC 173-528-090 or by order of ecology.

"Reservation" means a one time, finite allocation of water for future beneficial uses. For the purposes of this chapter, the reservation is not subject to instream flows set in WAC 173-528-060, nor to closures set in WAC 173-528-070. The reservation is senior to the instream flow water rights set in WAC 173-528-060.

"Water-related action" means an offsetting activity that provides a quantity of water during certain times and at certain places that essentially replaces water at or upstream of where a proposed water right would impact surface flow. Water-related actions include but are not limited to acquiring an active water right or donation of a water right to the trust water right program under chapter 90.42 WAC.

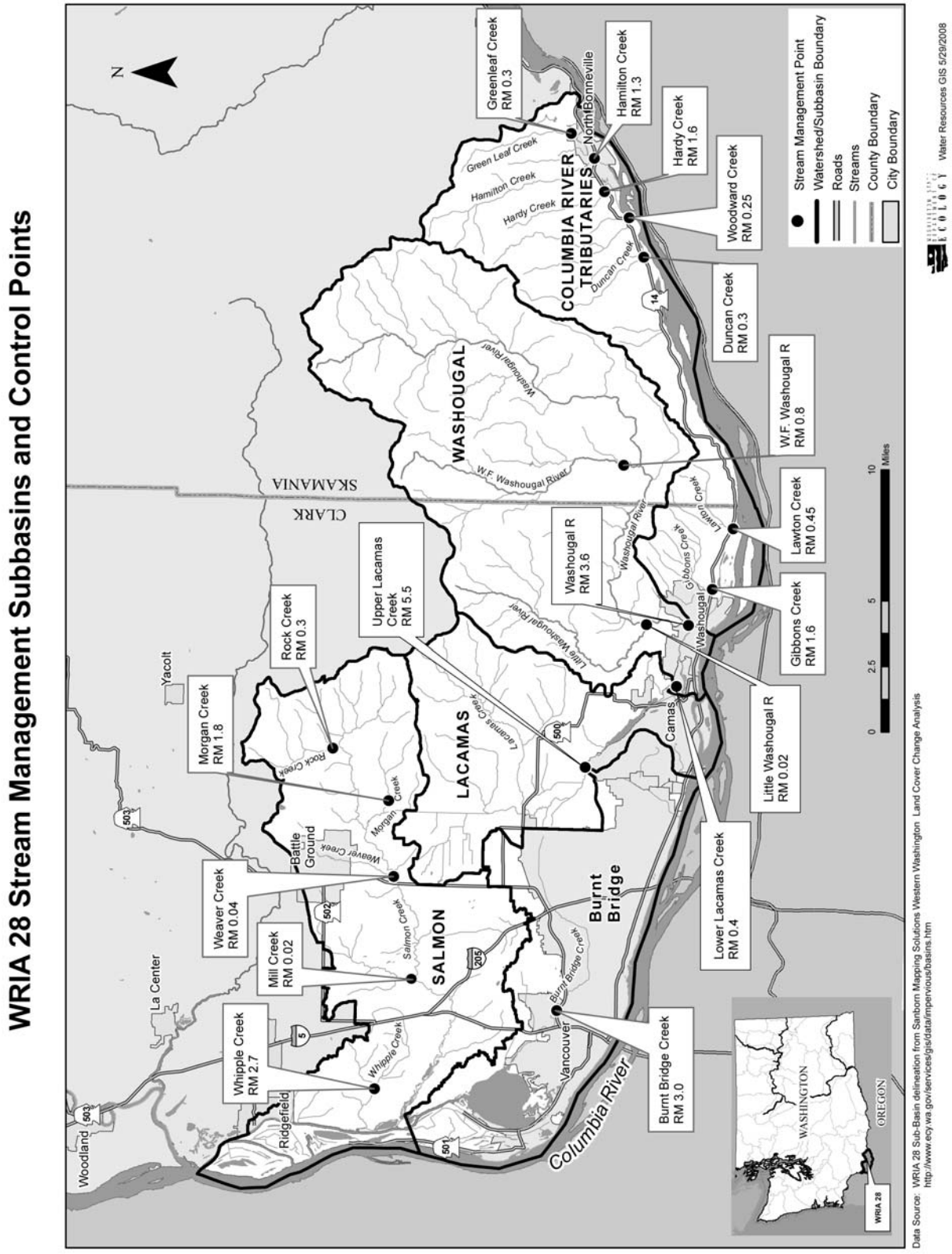
"Water right" means a right to make beneficial use of public waters of the state, including any water right established for instream flow purposes or a permit-exempt ground water withdrawal.

"Watershed plan" means the Salmon-Washougal and Lewis watershed management plan, adopted on July 21, 2006, by the Clark, Cowlitz, and Skamania county commissioners.

"Withdrawal" means the extraction of ground water, or the diversion of surface water for a beneficial use.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-020, filed 12/19/08, effective 1/19/09.]

WAC 173-528-030 Map.



[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-030, filed 12/19/08, effective 1/19/09.]

WAC 173-528-040 Compliance and enforcement. (1) Ecology shall prepare and make available to the public, technical and educational information regarding the scope and requirements of this chapter. This is intended to assist the public in complying with the requirements of their water rights and applicable water laws and rules.

(2) When ecology determines that a violation of this chapter has occurred, it shall:

(a) First attempt to achieve voluntary compliance, except in appropriate cases involving potential harm to other water rights or the environment. An approach to achieving voluntary compliance is to offer information and technical assistance to a violator. The information or technical assistance identifies, in writing, one or more means to accomplish the person's purposes within the framework of the law.

(b) If education and technical assistance do not achieve compliance, ecology has the authority to issue a notice of violation, a formal administrative order under RCW 43.27A.-190, assess penalties under RCW 43.83B.336 and 90.03.600, or may seek criminal enforcement under RCW 90.03.400, 90.03.410, and 90.44.120.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-040, filed 12/19/08, effective 1/19/09.]

PART B
INSTREAM FLOWS AND CLOSURES

WAC 173-528-050 Stream management control points. Ecology hereby establishes the following stream management control points shown in Table I. Management point locations are shown in WAC 173-528-030.

Table I
Stream Management Control Point Information

Stream Management Point Name	Control Station by River Mile (RM); Latitude (Lat.), Longitude (Long.)
Whipple Creek (at 179th St. crossing)	RM 2.7; 45°45'00"N, 122°42'52"W
Mill Creek (at North Salmon Creek Rd.)	RM 0.02; 45°43'50"N, 122°37'39"W
Weaver Creek (at 199th Rd. crossing)	RM 0.04; 45°44'33"N, 122°32'48"W
Morgan Creek (at 182nd St. crossing)	RM 1.8; 45°44'47"N, 122°29'13"W
Rock Creek (near 213th Rd.)	RM 0.3; 45°46'40"N, 122°26'47"W
Little Washougal River (at Highway 140 crossing)	RM 0.02; 45°36'26"N, 122°20'37"W
Washougal River (at Hathaway Park, Ecology gage 28B090)	RM 3.6; 45°35'02"N, 122°20'36"W
West Fork Washougal River (at Skamania Hatchery)	RM 0.8; 45°37'18"N, 122°13'07"W
Gibbons Creek (at Frontage Rd. crossing)	RM 1.6; 45°34'31"N, 122°18'53"W
Lawton Creek (at Highway 14 crossing)	RM 0.45; 45°33'39"N, 122°16'00"W
Duncan Creek (at Highway 14 crossing)	RM 0.3; 45°36'47"N, 122°03'16"W
Woodward Creek (at Beacon Rock State Park Rd. crossing)	RM 0.25; 45°37'17"N, 122°01'25"W
Hardy Creek (at Highway 14 crossing)	RM 1.6; 45°38'07"N, 122°00'13"W
Hamilton Creek (near North Bonneville)	RM 1.3; 45°38'28"N, 121°58'39"W
Greenleaf Creek (at Cascade Drive crossing)	RM 0.3; 45°39'15"N, 121°57'29"W
Upper Lacamas Creek (at NE Goodwin Rd. crossing)	RM 5.5; 45°38'20"N, 122°27'25"W
Lower Lacamas Creek (NE 3rd Ave. crossing)	RM 0.4; 45°35'26"N, 122°23'28"W
Burnt Bridge Creek (at Arnold Park)	RM 3.0; 45°39'05"N, 122°38'57"W

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-050, filed 12/19/08, effective 1/19/09.]

WAC 173-528-060 Establishment of instream flows. (1) The instream flows established in this chapter are based on the recommendations of the planning unit; consultation with the department of fish and wildlife, department of agriculture, and department of community, trade, and economic development; and public input received during the rule-making process. The planning unit recommended these instream flow levels by unanimous vote.

(2) Instream flows established in this chapter are water rights, which protect instream values and functions from future appropriations. The priority date of the instream flows is the effective date of this chapter. In accordance with RCW 90.82.080, this priority date received unanimous approval from the planning unit.

(3) Instream flow rights shall be protected from impairment by any new water rights commenced after the effective date of this chapter and by all future changes and transfers of senior and junior water rights, including both surface and ground water rights. The following water rights are not subject to the instream flows:

(a) A water right put to beneficial use before the effective date of this chapter, unless stated in the conditions of the water right or change authorization.

(b) Water rights appropriated from the reservation of water established in WAC 173-528-110.

(c) Water rights for environmental restoration purposes under WAC 173-528-140, unless included as a permit condition.

(4) Instream flows, expressed in cubic feet per second (cfs), are measured at the stream management control points in WAC 173-528-050. Instream flows apply to all stream reaches that contribute to flow at stream management control points, as shown in Table II of this section. For reaches that are downstream of all management points, the flows established for the nearest upstream management control point shall apply to those reaches. However, if a point of with-

drawal is downstream of the confluence of two or more branches, each having a designated management point, the combined flows of the management points shall apply to that withdrawal.

Table II
Instream Flows in the Salmon/Washougal Basin (cubic feet per second)

Month	Stream Management Control Point						
	Whipple Creek, RM 2.7	Mill Creek, RM 0.02	Weaver Creek, RM 0.04	Morgan Creek, RM 1.8	Rock Creek, RM 0.3	Burnt Bridge Creek, RM 3.0	Lower Lacamas Creek, RM 0.4
January	28	27	12	17	36	20	112
February	51	50	23	33	63	38	112
March	51	50	23	33	63	38	96
April	51	50	23	33	63	38	96
May	51	50	23	33	63	38	96
June	34	33	15	22	42	25	64
July	34	33	15	22	42	25	64
August	12	11	4	7	15	8	27
September	12	11	4	7	15	8	112
October	28	27	12	17	36	20	112
November	28	27	12	17	36	20	112
December	28	27	12	17	36	20	112

Month	Stream Management Control Point						
	Upper Lacamas Creek, RM 5.5	Washougal River, RM 3.6	Little Washougal River, RM 0.02	W.F. Washougal River, RM 0.8	Gibbons Creek, RM 1.6	Lawton Creek, RM 0.45	Duncan Creek, RM 0.3
January	39	425	193	205	27	24	21
February	39	425	193	205	49	44	39
March	39	375	160	169	49	44	39
April	39	375	160	169	49	44	39
May	39	375	160	169	49	44	39
June	39	525	107	112	33	29	26
July	39	240	107	112	33	29	26
August	39	168	48	51	11	10	8
September	39	264/425*	193	205	11	10	8
October	39	425	193	205	27	24	21
November	39	425	193	205	27	24	21
December	39	425	193	205	27	24	21

*The Washougal River, RM 3.6, instream flow right is for 264 cubic feet per second from September 1 to September 15, and 425 cubic feet per second from September 16 to September 30.

Month	Stream Management Control Point			
	Woodward Creek, RM 0.25	Hardy Creek, RM 1.6	Hamilton Creek, RM 1.3	Greenleaf Creek, RM 0.3
January	42	40	72	31
February	72	69	117	55
March	72	69	117	55
April	72	69	117	55
May	72	69	117	55
June	48	46	78	37
July	48	46	78	37
August	18	17	33	13
September	18	17	33	13
October	42	40	72	31
November	42	40	72	31
December	42	40	72	31

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-060, filed 12/19/08, effective 1/19/09.]

WAC 173-528-070 Surface and ground water closed to further consumptive appropriations. (1) Based on historical and current low flows and the water withdrawals by existing water right holders, ecology has determined that no waters are reliably available for new consumptive uses from certain surface water sources in the basin. Therefore, all surface waters listed in Table III are closed to any further consumptive appropriation, except as provided in WAC 173-528-080.

Table III
Surface Water Closures

Subbasin Name*	Affected Reach
Salmon Creek	Salmon Creek from confluence with Lake River (45°43'32"N, 122°44'07"W) to headwaters, including tributaries. Whipple Creek from confluence with Lake River (45°45'30"N, 122°44'57"W) to headwaters, including tributaries.
Burnt Bridge Creek	Burnt Bridge Creek from mouth at Vancouver Lake to headwaters, including tributaries.
Lacamas Creek	Lacamas Creek from confluence with Washougal River (45°35'13"N, 122°23'40"W) to headwaters, including tributaries.
Washougal River	Washougal River from mouth at Columbia River to headwaters, including tributaries.
Columbia River Tributaries	All surface waters in the Columbia River tributaries subbasin from mouth at Columbia River to headwaters, including tributaries.
*Subbasin boundaries are shown in WAC 173-528-030, and are consistent with the boundary descriptions used in the watershed plan.	

(2) Based on the hydrogeology of the basin, and the location and depth where ground water withdrawals generally occur, there is a high likelihood that future ground water withdrawals would capture water that affects closed surface waters. Therefore, the basin is closed to new withdrawals of ground water (including any new permit-exempt withdrawals) that would affect closed surface waters, except as provided in WAC 173-528-080.

(3) Applications for a withdrawal that would not affect the closed reaches, listed in Table III, shall be evaluated on a case-by-case basis under applicable law.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-070, filed 12/19/08, effective 1/19/09.]

PART C
FUTURE WATER RIGHTS

WAC 173-528-080 Future water rights, generally. A new surface or ground water appropriation (including any permit-exempt withdrawal) may be commenced only if consistent with the surface and ground water statutes and other applicable requirements of law and if any one of the following seven conditions (subsections (1) through (7) of this section) apply:

(1) The proposed water use is nonconsumptive.

(2) The proposed surface water diversion is not located on any of the surface waters closed in WAC 173-528-070, Table III.

(3) The proposed ground water withdrawal is located where it would not affect any of the surface waters closed in WAC 173-528-070, Table III by either meeting condition (a) or (b) of this subsection:

(a) The person or entity seeking to commence a proposed ground water use shows, through scientifically sound studies and technical analysis, that the ground water use would not affect any of the closed surface waters identified in WAC 173-528-070, Table III.

(b) The proposed ground water withdrawal occurs in a regional supply area designated in WAC 173-528-090 or by order of ecology.

(4) The person or entity seeking to commence the new appropriation submits a scientifically sound mitigation plan, and such plan is approved by ecology. A mitigation plan may be approved if the proponent can demonstrate to ecology's satisfaction that when the mitigation is implemented the proposed withdrawal(s) will not impair senior water rights, including instream flow rights, adversely impact instream resources, or diminish water quality. A mitigation plan can be submitted to mitigate for an individual withdrawal or to mitigate for multiple withdrawals in a defined region.

An approved mitigation plan shall include a monitoring and reporting plan. It shall also include conditions that the plan be implemented as long as the associated water right is used and that any water provided for mitigation purposes be prohibited from being applied to any other purpose. If monitoring of a mitigation plan shows the mitigation is not effective, departmental approval of the mitigation plan shall be suspended and the water use shall cease until the department approves a new or revised mitigation plan.

(5) The proposed water use qualifies as an interruptible use as defined in WAC 173-528-020, and meets the criteria in WAC 173-528-100.

(6) The proposed water use qualifies for the reservation established and as conditioned in WAC 173-528-110.

(7) The proposed use is for an environmental restoration project and meets the criteria in WAC 173-528-140.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-080, filed 12/19/08, effective 1/19/09.]

WAC 173-528-090 Regional supply areas for future ground water withdrawals. (1) Ecology finds there to be certain locations where water is potentially available on a year-round basis for future ground water withdrawals. Ecology further finds that withdrawals in these areas are unlikely to affect surface waters closed in WAC 173-528-070, Table

III or instream flow values protected under RCW 90.54.020 (3). Such regional supply areas are recognized in the watershed plan and supported by the public interest as preferred locations for developing future water supply. Ground water withdrawals (including permit-exempt withdrawals) may be commenced in the designated regional supply areas to the extent such withdrawals are consistent with chapters 90.03 and 90.44 RCW, and any other applicable requirements of law.

(2) Based on local hydrology, ecology finds that ground water withdrawals made in areas designated below meet the conditions for regional supply areas in subsection (1) of this section and are so designated:

(a) The Vancouver Lake Lowlands Area, defined as all lands located west of the Burlington Northern Santa Fe Railroad right of way that are within Water Resource Inventory Area 28; and

(b) The Steigerwald Wildlife Refuge Area, defined as all lands located east of 15th Street in the city of Washougal, south of Washington State Highway 14, and west of Lawton Creek.

(3) Ecology, in consultation with the department of fish and wildlife, may by order designate other regional supply areas that meet the criteria in subsection (1) of this section.

(4) In order to protect instream values of surface waters in regional supply areas, ecology reserves the right to deny any withdrawals whereby drawdown effects from pumping would create a significant impact to local surface waters. For the purposes of this section, significant impact includes but is not limited to a noticeable reduction in lake level or flow in local streams.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-090, filed 12/19/08, effective 1/19/09.]

WAC 173-528-100 Future appropriations for interruptible use from the Washougal River. (1) Ecology finds there may be water available in the Washougal River, above existing water rights and instream flows, which could be captured for interruptible use. This water is only available from November 16 to May 14.

(2) Prior to commencement, the person or entity seeking a new interruptible appropriation must demonstrate a seasonal need and provide assurances that any effects on surface waters that may result from withdrawals will be limited from November 16 to May 14 and only from the Washougal River.

(3) Ecology shall deny an appropriation for interruptible use if such use, or the cumulative effects of such uses, would compromise habitat-forming functions provided by high flows. In no case shall new individual or cumulative allocations exceed one hundred cubic feet per second. This allocation limit is based upon an allowance for ten percent of the average historic flow. The allocation limit may be lowered on a case-by-case basis whenever more protection of habitat-forming functions is needed.

(4) Interruptible uses are subject to existing water rights and instream flows set in WAC 173-528-060.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-100, filed 12/19/08, effective 1/19/09.]

WAC 173-528-110 Reservation of surface and ground water for future uses. (1) Ecology has weighed the public interest that supports the reservation of a limited amount of water for future consumptive uses against the potential for negative impact to instream resources. Ecology finds that the public interest advanced by a limited reservation clearly overrides the small potential for negative impacts on instream resources.

Based on this finding, ecology hereby allocates an amount and rate of use of water for specific water users and subbasins, as indicated under the subtitle "Net streamflow depletion" in Table IV. The reservations are a one time, finite resource. When and if water is fully appropriated from the reservation, all remaining waters in closed areas are hereby appropriated for instream flow use.

This reservation is available to a user only if the conditions set forth in subsection (2) or (6) of this section are met, as well as any applicable requirements of law, including but not limited to all water resource laws and regulations.

(2) Ecology may approve a water right application for water from the reservation if all of the following conditions in (a), (b), (c), and (d) of this subsection are met:

Alternatives analysis

(a) The applicant demonstrates that no practicable supply alternatives to the reservation are available. In order to satisfy this condition, an applicant must demonstrate consideration of other regional water sources to supply water for the same use now being proposed, including:

(i) Existing public water system supply;

(ii) Water from a ground or surface water source, which may be withdrawn without affecting any of the surface waters closed in WAC 173-528-070, such as water from a hydraulically disconnected deep aquifer source or regional supply area;

(iii) Supply options from surface and ground water storage;

(iv) Water savings from conservation techniques, such as reuse of waste water; and

(v) Mitigation and minimization considerations to the extent required in (d) of this subsection, impact analysis.

Water-related offset

(b) The applicant demonstrates it will offset the overall streamflow depletion(s) through water-related actions to the maximum extent practicable. Applicants should offset at least one-half of the overall streamflow depletion(s) through water-related actions.

(i) In evaluating the adequacy of water-related actions to offset depletions, ecology will evaluate the action based on the degree of aquatic benefit it would provide. A water-related offset may have a greater or lesser benefit due to the seasonality, location, or quality of water provided. The level of benefit will be used to determine if any additional offsets will be required of the applicant.

(ii) Ecology will consider water-related offsets only to the extent that reasonable assurance exists that such offsets will be successfully delivered or donated to the trust water right program under chapter 90.42 RCW where delivery is legally guaranteed.

Habitat-related offset

(c) After satisfying the water-related offset requirement in (b) of this subsection, an applicant must offset any remaining streamflow depletion through habitat-related actions that create or enhance habitat. Habitat-related offsets must com-

pensate for the habitat loss or degradation that will result from the net streamflow depletion.

An applicant must provide adequate assurances that a habitat-related action in fact occurs. Ecology, as appropriate, shall condition use of the reservation with performance standards and monitoring requirements, or require financial assurance mechanisms prior to reservation use.

Impact analysis

(d) In keeping with the findings of the watershed plan, ecology finds that the public interest supports avoidance and minimizing impacts to tributaries. The applicant must demonstrate one of the following:

(i) The proposed withdrawal does not impact tributaries to subbasin mainstems; or

(ii) An impact to a tributary to a subbasin mainstem is unavoidable, as demonstrated by an impact analysis, included as part of the alternatives analysis under (a) of this subsection. In addition to demonstrating the necessary considerations under (a) of this subsection, the impact analysis must demonstrate consideration of water supply options that avoid the impact to the tributary as well as supply options that may minimize such impact.

Ecology, in consultation with the department of fish and wildlife, may require an applicant to monitor affects of a ground water withdrawal as a condition of water use.

Application review and permitting

(3) In determining practicability in subsection (2) of this section, ecology will consider both economic and logistic considerations, as well as guidance from the watershed plan.

(4) Ecology, in consultation with the department of fish and wildlife, will evaluate the adequacy of proposed offsets and alternatives analysis in subsection (2) of this section. The evaluation shall be consistent with the watershed plan and guidance documents approved by ecology. Ecology will also consider recommendations and technical advice received from the planning unit or by an advisory committee, formally designated by the planning unit.

(5) Ecology will issue a permit for use of water equal to the amount it determines appropriate to allocate from the reservation, and such amount will be debited from the total reservation amount. The total quantity of water appropriated shall not exceed the amount and rate listed under the subtitle "Net streamflow depletion" in Table IV. However, ecology will issue a permit for a quantity beyond the amount debited from the reservation for the following:

(a) Water-related offsets to the extent such offsets are water-for-water, to the satisfaction of RCW 90.03.380 or 90.44.100, any other applicable laws, and terms of an approved mitigation plan under WAC 173-528-080(4); and

(b) Water use to the extent closed water sources are not affected and to the satisfaction of applicable requirements of law, including but not limited to all water resource laws and regulations.

Permit-exempt ground water use

(6) The requirements in subsection (2) of this section do not apply to permit-exempt withdrawals. However, permit-exempt withdrawals under RCW 90.44.050 are subject to both of the following conditions in order to occur under the reservation:

(a) Future permit-exempt well use may not occur where connection to an existing community water supplier can be provided in a timely and reasonable manner. Determinations of timely and reasonable shall be consistent with public water system plans, local laws, and state laws, including but not limited to Clark County Code 40.370.020 and chapter 246-290 WAC.

(b) Water use from a permit-exempt ground water well must be consistent with the allocation limits of this reservation and the Clark and Skamania County code and other applicable laws, including the statute on permit exemptions, RCW 90.44.050. Single or group domestic uses under the permit exemption shall not exceed five thousand gallons per day. Irrigation of lawn and noncommercial garden under the permit exemption shall not exceed one-half acre.

Table IV
Allocation of Reservation

Subbasin Name*	Water User**	Expected Streamflow Depletion without Offset (overall depletion) cubic feet per second (cfs)	Expected Water-related Offset Requirement (cfs)	Net Streamflow Depletion*** (cfs)
Salmon Creek	Clark Public Utility, Battle Ground and Ridgefield	0.25	0.13	0.13
	Permit-exempt ground water wells	0.12	0.00	0.12
Burnt Bridge	City of Vancouver	0.04	0.02	0.02
Lacamas Creek	City of Camas	1.00	0.50	0.50****
	Clark Public Utility	0.60	0.30	0.30
	Other public water systems	0.37	0.19	0.19
	Permit-exempt ground water wells	0.17	0.00	0.17
Washougal River	City of Camas	1.00	0.50	0.50****

Subbasin Name*	Water User**	Expected Streamflow Depletion without Offset (overall depletion) cubic feet per second (cfs)	Expected Water-related Offset Requirement (cfs)	Net Streamflow Depletion*** (cfs)
	Other public water systems in Clark County	0.37	0.19	0.19
	Permit-exempt ground water wells in Clark County	0.17	0.00	0.17
	Other public water systems in Skamania County	0.20	0.10	0.10
	Permit-exempt ground water wells in Skamania County	0.64	0.00	0.64
Columbia River Tributaries	Public water systems in Clark County	0.21	0.10	0.10
	Permit-exempt ground water wells in Clark County	0.12	0.00	0.12
	Public water systems in Skamania County	0.21	0.10	0.10
	Permit-exempt ground water wells in Skamania County	0.12	0.00	0.12

*Subbasin boundaries are shown in WAC 173-528-030, and are consistent with the boundary descriptions used in the watershed plan.
** In the Salmon-Washougal and Lewis watershed management plan, the term "domestic wells" has the same meaning as "permit-exempt ground water wells" and the term "small community water systems" has the same meaning as "public water systems."
*** If conditions in subsections (2) and (6) of this section are satisfied, the net depletion of a closed water source, set in WAC 173-528-070, shall not exceed the quantities listed for specific users.
****The total net stream flow depletion for the city of Camas from both Lacamas and Washougal river subbasins shall not exceed 0.50 cfs.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-110, filed 12/19/08, effective 1/19/09.]

WAC 173-528-120 Priority dates of reservation and repeal of chapter 173-592 WAC. (1) The reservation created in WAC 173-528-110 is not subject to the instream flows or closures set in this chapter, and the priority date of the reservation for all areas outside Clark County is the effective date of this chapter.

(2) Ecology hereby transfers unappropriated water from the existing reservation for Clark County in WAC 173-592-070 in such quantities and to the users and areas of use in Clark County as set forth in WAC 173-528-110, Table IV and WAC 173-527-110, Table V. Pursuant to this transfer, the priority date of withdrawals from all Clark County portions of the reservation in WAC 173-528-110 is August 13, 1986. However, the designation of specific municipal suppliers in this reservation does not create a right for these entities to use such water. Such a right will arise only if a permit is applied for by such municipal suppliers to use water under the reservation and approved by ecology after applying the legal tests for a new appropriation. With respect to any water for which a permit has not been granted, ecology reserves the right to modify in all respects or rescind the reservation by future rule making.

(3) Based on new information made available through the local watershed planning process and hydrologic conditions as of the time of this rule making, ecology has determined that the remaining water reserved under WAC 173-592-070, which was not transferred in subsection (2) of this section or previously appropriated is no longer supported by available information and science. Therefore, chapter 173-592 WAC is hereby repealed in its entirety and all water reserved under that rule that has not been transferred or appropriated is hereby returned to the state. This repeal is not intended to affect any existing water rights issued under the reservation.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-120, filed 12/19/08, effective 1/19/09.]

WAC 173-528-130 Accounting for use under the reservation. (1) A record of all appropriations from the reservation shall be maintained by ecology.

(2) For an appropriation under a permit, ecology will account for water use under the reservation based on authorized quantities under water right permits or certificates, and according to WAC 173-528-110(5).

(3) For permit-exempt ground water appropriations, ecology will deduct a standard amount of two hundred forty gallons per day for each well. For a group domestic water system under the permit-exemption, the standard amount will be applied for each domestic or residential service connection. The standard amount will be adjusted periodically to reflect actual use during low flow conditions. The standard amount assumes a rate of septic recharge from an on-site septic system. In the event that on-site septic recharge is known not to occur, ecology will deduct an additional five hundred sixty gallons per day. Additionally, ecology reserves the right to account for water use based on the best available information contained in well logs, approvals issued by local jurisdictions, or other documents.

(4) If a water user under the reservation subsequently abandons or relinquishes the withdrawal, ecology will credit back to the reservation the actual amount of water used and/or debited from the reservation, upon demonstration to ecology that the well or surface water diversion has been decommissioned through written certification.

(5) Ecology shall notify either Clark or Skamania County and the planning unit, when it determines that fifty percent, seventy-five percent, and one hundred percent, respectively, of the reservation is appropriated for a water user in Table IV.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-130, filed 12/19/08, effective 1/19/09.]

WAC 173-528-140 Future surface water withdrawals for environmental restoration. In keeping with the findings of the watershed plan, ecology finds that the public interest advanced by future withdrawals for ERPs, as defined and conditioned in this section, clearly overrides the minimal negative impacts on instream flows.

(1) A future withdrawal for an ERP may be approved only if it meets all the following:

(a) The proposed water use is for a bypass flow for salmonid restoration or riparian planting project, and the primary purpose of the project is restoration of salmonids.

(b) The proposed project will result in aquatic habitat benefits, and such benefits will exceed any detriment to aquatic habitat that may be caused by reductions in flow at specific locations and times of withdrawal.

(c) The proposed use qualifies for a temporary permit.

(2) Ecology, in consultation with the department of fish and wildlife, will evaluate proposed ERPs. ERPs approved by ecology are not subject to closures or instream flows set in this chapter, unless otherwise conditioned by the permit.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 09-01-127 (Order 08-03), § 173-528-140, filed 12/19/08, effective 1/19/09.]

Chapter 173-531A WAC

WATER RESOURCES PROGRAM FOR THE JOHN DAY-MCNARY POOLS REACH OF THE COLUMBIA RIVER, WRIA 31 AND PARTS OF WRIAS 32, 33, 36, AND 37

WAC

173-531A-010 Purpose.
173-531A-020 Definitions.
173-531A-030 Existing water rights protected.
173-531A-040 Reservation for future irrigation use.
173-531A-050 Reservation for municipal use.
173-531A-060 Permit conditions.
173-531A-070 Department to review regulation.
173-531A-080 Enforcement.
173-531A-090 Appeals.

WAC 173-531A-010 Purpose. This chapter is adopted in accordance with the water resources management regulation, chapter 173-500 WAC, which was promulgated under the authority of the Water Resources Act of 1971, chapter 90.54 RCW. This chapter applies to the surface waters of the John Day and McNary Pools of the Columbia River and the Lower Snake River.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-010, filed 6/24/80. Formerly WAC 173-531-010.]

WAC 173-531A-020 Definitions. For the purposes of this chapter, the following definitions shall be used.

(1) "Department" means the Washington state department of ecology.

(2) "Reservation" means the designation of specific amounts of the water resources for specific future beneficial uses.

(3) "John Day/McNary Pools Reach," means that part of the Columbia River from John Day Dam upstream to the upper limits of McNary Pool including the upper limits of the pool in the Snake River, the Yakima River, and the Walla Walla River. This reach extends from river mile 216 to river mile 352 of the Columbia River, and includes the lower 10 miles of the Snake River, the lower 6 miles of the Yakima River, and the lower 9 miles of the Walla Walla River.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-020, filed 6/24/80. Formerly WAC 173-531-020.]

WAC 173-531A-030 Existing water rights protected. Nothing in the chapter shall be construed to lessen, enlarge, or modify existing rights acquired by appropriation or by other means, including federal reserved rights.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-030, filed 6/24/80. Formerly WAC 173-531-030.]

WAC 173-531A-040 Reservation for future irrigation use. (1) One million three hundred twenty thousand acre-feet per year are hereby reserved from the John Day/McNary Pools reach to provide a water supply for the 330,000 acres of irrigation projected to be developed by the year 2020. The 330,000 acres includes lands under existing water right permits, pending applications and land for which appropriation applications have not yet been filed.

(2) The priority dates of existing permits and applications already on file covered by the reservation are the dates of filing with the department. The priority dates of permits issued under applications filed in the future under the reservation shall be the effective date of this regulation (see RCW 90.03.345).

(3) Waters represented by canceled or relinquished applications and permits will still be considered reserved and may be subsequently filed on by interested appropriators.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-040, filed 6/24/80. Formerly WAC 173-531-040.]

WAC 173-531A-050 Reservation for municipal use. (1) Twenty-six thousand acre-feet of water per year is reserved from the John Day/McNary Pools reach to provide for future municipal supply to the year 2020.

(2) The reservation for municipal use does not guarantee any existing or future supply entity a specific quantity of water. Municipal water supply utilities must petition the department for reservation of water, for their particular needs, according to procedures of chapter 173-590 WAC.

(3) The priority dates of water right filings under the municipal reservation shall be the effective date of this regulation.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-050, filed 6/24/80. Formerly WAC 173-531-050.]

WAC 173-531A-060 Permit conditions. All permits issued for waters reserved under WAC 173-531A-040 or 173-531A-050 after the effective date of this chapter and prior to July 27, 1997, shall be subject to the provisions of chapter 173-563 WAC - instream resources protection program for the main stem Columbia River in Washington state. Any application for waters reserved under WAC 173-531A-040 or 173-531A-050 which is considered for approval or denial after July 27, 1997, will be evaluated for possible impacts on fish and existing water rights. The department will consult with appropriate local, state, and federal agencies and Indian tribes in making this evaluation. Any permit which is then approved for the use of such waters will be, if deemed necessary, subjected to instream flow protection or mitigation conditions determined on a case-by-case basis through the evaluation conducted with the agencies and tribes.

[Statutory Authority: Chapter 90.54 RCW, WAC 173-563-090 and ESHB 1110 (1997). 98-08-062 (Order 97-15), § 173-531A-060, filed 3/30/98, effective 4/30/98. Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-060, filed 6/24/80. Formerly WAC 173-531-060.]

WAC 173-531A-070 Department to review regulation. (1) The department, in accordance with applicable statutory provisions, shall review the reservations for future irrigation use and future municipal use at least every five years after adoption of this management regulation.

(2) In reviewing the reservations, the department will evaluate the account of water rights established under the reservations as provided in WAC 173-531A-040(3) and 173-531A-050(2). The department will also evaluate and update the accounts of ground water development and use on lands relating to the reserved waters and reduce the reserved amounts of surface water.

[Statutory Authority: Chapter 90.54 RCW. 80-08-022 (Order DE 80-19), § 173-531A-070, filed 6/24/80.]

WAC 173-531A-080 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-531A-080, filed 6/9/88.]

WAC 173-531A-090 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-531A-090, filed 6/9/88.]

Chapter 173-532 WAC

WATER RESOURCES PROGRAM FOR THE WALLA WALLA RIVER BASIN, WRIA-32

WAC

173-532-010	Authority and purpose.
173-532-020	Definitions.
173-532-025	Establishment of stream management units.
173-532-030	Establishment of instream flows.
173-532-040	Surface and ground water closed to further consumptive appropriations.
173-532-045	Future permitting actions.
173-532-050	Protection of surface water rights from future permit-exempt ground water appropriations from the gravel aquifer.
173-532-055	Future surface water withdrawals for environmental enhancement projects.
173-532-090	Compliance and enforcement.
173-532-100	Appeals.
173-532-120	Map.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-532-060	Designation of ground water areas for specific uses. [Statutory Authority: RCW 90.54.050. 83-02-039 (Order DE 82-46), § 173-532-060, filed 12/30/82; Order DE 77-30, § 173-532-060, filed 12/14/77.] Repealed by 07-17-007 (Order 04-08), filed 8/2/07, effective 9/5/07. Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW.
173-532-070	Closure of ground water aquifer to further appropriation. [Order DE 77-30, § 173-532-070, filed 12/14/77.] Repealed by 07-17-007 (Order 04-08), filed 8/2/07, effective 9/5/07. Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW.
173-532-080	Evaluation of ground water applications. [Order DE 77-30, § 173-532-080, filed 12/14/77.] Repealed by 07-17-007 (Order 04-08), filed 8/2/07, effective 9/5/07. Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW.
173-532-085	Prioritizing change and transfer applications. [Statutory Authority: Chapters 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW. 99-13-093 (Order 9823), § 173-532-085, filed 6/14/99, effective 7/15/99.] Repealed by 01-21-056 (Order 01-06), filed 10/16/01, effective 11/16/01. Statutory Authority: RCW 43.21A.080.
173-532-110	Regulation review. [Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-532-110, filed 6/9/88.] Repealed by 07-17-007 (Order 04-08), filed 8/2/07, effective 9/5/07. Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW.

WAC 173-532-010 Authority and purpose. (1) This chapter is adopted in accordance with the Watershed Planning Act (chapter 90.82 RCW), Water Resources Act of 1971 (chapter 90.54 RCW), Minimum Water Flows and Levels Act (chapter 90.22 RCW), Regulation of public ground waters (chapter 90.44 RCW), Water code (chapter 90.03 RCW), and the water resources management regulation, chapter 173-500 WAC, which was adopted under the authority of the Water Resources Act of 1971, chapter 90.54 RCW.

(2) This chapter applies to the management of all waters within the Walla Walla River drainage basin located in Washington state.

(3) This chapter shall not affect existing water rights, unless otherwise provided for in the conditions of the water right in question. It shall also not affect federal Indian and non-Indian reserved rights.

(4) The department shall initiate a review of this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-010, filed 8/2/07, effective 9/5/07; Order DE 77-30, § 173-532-010, filed 12/14/77.]

WAC 173-532-020 Definitions. For purposes of this chapter, the following definitions shall be used.

(1) "Allocation" means the designating of specific amounts of the water resource for specific beneficial uses.

(2) "Appropriation" means the process of legally acquiring the right to specific amounts of the public water resource for application to beneficial uses.

(3) "Consumptive use" means use of water whereby there is diminishment of the amount or quality of the water source.

(4) "Department" means the Washington state department of ecology.

(5) "Director" means the director of the department of ecology.

(6) "Domestic use" means use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, and other incidental household uses. Irrigation of lawn and noncommercial garden under the permit exemption in RCW 90.44.050 shall not exceed one-half acre.

(7) "Environmental enhancement project" means a water storage project, above or below ground, that would provide net environmental benefits, with particular emphasis on enhancing salmonids production. Projects that enhance instream flows directly or indirectly qualify under the definition. Projects proposed as mitigation for new consumptive water rights do not qualify under this definition.

(8) "Gravel aquifer" means any geologic formation generally under unconfined, or water table, conditions which consist of sand and gravel and may contain interbedded layers of silt and clay.

(9) "Instream flow" means a level of stream flow, established under chapters 90.54, 90.03, 90.22, and 90.82 RCW, required in perennial streams to preserve wildlife, fish, scenic, aesthetic, and other environmental and navigational values. The term means "base flow" under chapter 90.54 RCW, a "minimum flow" under chapters 90.03 and 90.22 RCW, and "minimum instream flow" under chapter 90.82 RCW. In the *Walla Walla Watershed Plan*, adopted in June 2005 by Walla Walla and Columbia counties, the term "new appropriation flows" has the same meaning as instream flows under this chapter.

(10) "Municipal water supplier" and "municipal water supply purposes" are defined in RCW 90.03.015.

(11) "Nonconsumptive use" means a type of water use where either there is no diversion or withdrawal from a source, or where there is no diminishment of the amount or quality of the water source.

(12) "Perennial stream" means a stream that normally flows year-round.

(13) "Planning unit" means the Walla Walla watershed planning unit, established under chapter 90.82 RCW, and all successors, formally designated by the Walla Walla watershed planning initiating governments. The initiating governments are Columbia and Walla Walla counties, city of Walla Walla, and Gardena Farms Irrigation District No. 13.

(14) "Water right" means a right to make beneficial use of public waters of the state, including any water right established for instream flow purposes.

(15) "Withdrawal" means the extraction of ground water, or the diversion of surface water for a beneficial use.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-020, filed 8/2/07, effective 9/5/07; Order DE 77-30, § 173-532-020, filed 12/14/77.]

WAC 173-532-025 Establishment of stream management units. The department hereby establishes the following stream management units (Table I). The boundaries of the management units are shown in WAC 173-532-120.

Table I
Stream Management Unit Information

Stream Management Unit Name; Management Point (MP) No.; Control Station Gage No.	Control Station by River Mile (RM); Section; Township and Range; Latitude (Lat.) and Longitude (Long.)	Stream Management Reach Description
Mill Creek MP 1 (Mill Creek at Kooskooskie) USGS Gage No. 14013000	RM 21.2; Section 12; T6N, R37E; 46°00'29"N, 118°07'03"W	Mill Creek at confluence with Walla Walla River (Walla Walla River, RM 33) to headwaters, including tributaries.
Walla Walla River MP 5a (Walla Walla River at Detour Road) Department Gage No. 32A100	RM 32.4; Section 31; T7N, R35E; 46°02'36"N, 118°29'24"W	Walla Walla River, RM 32.4 (below confluence of Walla Walla River and Mill Creek) to state line at Walla Walla, including tributaries.

Stream Management Unit Name; Management Point (MP) No.; Control Station Gage No.	Control Station by River Mile (RM); Section; Township and Range; Latitude (Lat.) and Longitude (Long.)	Stream Management Reach Description
North Fork Touchet River MP 6a (North Fork Touchet above Dayton) Department Gage No. 32E050	RM 0.5; Section 32; T10N, R39E; 46°17'50"N, 117°57'04"W	Mouth of North Fork Touchet River to headwaters, including tributaries.
Touchet River MP 11 (Touchet River at Bolles) Department Gage No. 32B100	RM 40.4; Section 7; T9N, R37E; 46°16'27"N, 118°13'12"W	Touchet River, RM 40.1 to RM 54.9 (confluence of North Fork Touchet River and South Fork Touchet River), including tributaries, excluding North Fork Touchet River and its tributaries.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-025, filed 8/2/07, effective 9/5/07.]

WAC 173-532-030 Establishment of instream flows. (1) The instream flows established in this chapter are based on the recommendations of the planning unit; consultation with the departments of fish and wildlife, agriculture, and community, trade, and economic development; the Confederated Tribes of the Umatilla Indian Reservation; and public input received during the rule-making process.

(2) Instream flows established here are water rights, which protect stream flows from future consumptive appropriations. The instream flow recommendations submitted by the planning unit received the unanimous vote of the planning unit. In accordance with RCW 90.82.080 (2)(a), and unanimous vote of the planning unit, the priority date of the instream flows is the effective date of this chapter.

(3) Instream flow rights shall be protected from impairment by junior water rights and by all future changes and transfers of senior and junior water rights.

(4) Instream flows, expressed in cubic feet per second (cfs), are measured at the management points identified in WAC 173-532-025. For reaches that do not have management points, the flows established for the nearest management point or points (where a tributary with a management point contributes to such flow) apply to those reaches.

(5) Instream flows are established for the stream management units in WAC 173-532-025, as indicated in Table II.

Table II
Instream Flows in the Walla Walla River Basin
(cubic feet per second)

	Stream Management Unit			
Month	Mill Creek MP 1 (Mill Creek at Kooskooskie),USGS Gage No. 14013000	Walla Walla River MP 5a (Walla Walla River at Detour Road), Department Gage No. 32A100	North Fork Touchet River, MP 6a (North Fork Touchet above Dayton), Department Gage No. 32E050	Touchet River MP 11 (Touchet River at Bolles), Department Gage No. 32B100
January	110	250	95	150
February	125	250	95	150
March	150	350	125	200
April	150	350	125	200
May	125	250	125 Closure	200 Closure
June	100 Closure	Closure	95 Closure	125 Closure
July	53 Closure	Closure	65 Closure	74 Closure
August	41 Closure	Closure	53 Closure	48 Closure
September	41 Closure	Closure	51 Closure	56 Closure
October	48 Closure	Closure	63 Closure	82 Closure
November	100 Closure	Closure	95 Closure	150 Closure
December	110	250	95	150

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-030, filed 8/2/07, effective 9/5/07; Order DE 77-30, § 173-532-030, filed 12/14/77.]

WAC 173-532-040 Surface and ground water closed to further consumptive appropriations. (1) Based on historical and current low flows and water withdrawals by existing water right holders, the department has determined that no waters are available for new consumptive uses during periods of low surface water flows. Therefore, all rivers and streams in the basin are seasonally closed to any further consumptive appropriation from May 1 to November 30 with the exception that the Walla Walla River and all of its tributaries between Stateline and Detour Road at MP 5a, and Mill Creek

and all of its tributaries from the confluence with the Walla Walla to the headwaters shall be closed from June 1 to November 30.

(2) Based on the hydrogeology of the basin, the department finds that gravel aquifers in the basin are hydraulically connected to surface waters in the basin. Therefore, the gravel aquifers are closed. Exception to this closure is provided for future permit-exempt ground water withdrawals as prescribed in WAC 173-532-050 and for nonconsumptive ground water use as prescribed in WAC 173-532-045. The closure does not affect the construction of a replacement well or new additional well or wells consistent with the conditions set in RCW 90.44.100.

(3) Future permits to withdraw surface water during nonclosure periods, shall be limited to environmental enhancement projects as described in WAC 173-532-055.

(4) All unappropriated surface waters and ground water from the gravel aquifer for which an exception to the closure does not apply, are hereby appropriated during the above periods of closure for purposes of protecting and preserving fish and wildlife and other instream values.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-040, filed 8/2/07, effective 9/5/07; Order DE 77-30, § 173-532-040, filed 12/14/77.]

WAC 173-532-045 Future permitting actions. Surface and ground water permits may be issued only if consistent with the requirements of the surface and ground water statutes and other applicable requirements of law and if any one of the following conditions apply:

(1) The proposed water use is nonconsumptive.

(2) The proposed ground water use is from the basalt aquifer and will not:

(a) Impair existing water rights;

(b) Affect any closed surface source where instream flows have not been established; and

(c) Affect any closed gravel aquifer.

(3) The proposed surface water use would occur only during nonclosure periods and is intended for an environmental enhancement project, as defined in WAC 173-532-020(6) and meeting the criteria listed in WAC 173-532-055.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-045, filed 8/2/07, effective 9/5/07.]

WAC 173-532-050 Protection of surface water rights from future permit-exempt ground water appropriations from the gravel aquifer. Where connection to an existing municipal water supply cannot be provided in a timely and reasonable manner, the following exceptions to the gravel aquifer closures in WAC 173-532-040 shall apply:

(1) Permit exempt withdrawals for purposes other than stockwatering may occur in the area that drains to the Snake and Columbia rivers (Burbank area), consistent with the requirements set in RCW 90.44.050.

(2) Permit exempt withdrawals may occur in areas with a zoned density equal to or more dense than one residence per ten acres (high density areas). However, future withdrawals from the gravel aquifer in the high density areas shall be limited to only domestic uses and outdoor uses, such as irrigation of lawn and noncommercial garden, outdoor washing, etc. Outdoor uses for the purposes of this subsection do not include stockwatering. The total amount of water that may be withdrawn shall not exceed the amounts specified in (a) and (b) of this subsection.

(a) For any one residence, one thousand two hundred fifty gallons a day (1,250 gpd).

(b) For multiple residences that are part of a group use in addition to the limitations in (a) of this subsection, the combined maximum water withdrawal for the development shall not exceed five thousand gallons per day (5,000 gpd).

(3) Permit exempt withdrawals for purposes other than stockwatering may occur in areas where the zoned density is less than one residence per ten acres, but must be consistent with the requirements set in RCW 90.44.050.

(4) Permit exempt withdrawals for stockwatering may occur as long as the water use from an exempt well in the gravel aquifer does not exceed: Seven hundred gallons per day (700 gpd) on a legal lot of record size of ten acres or less; two thousand five hundred gallons per day (2,500 gpd) on a legal lot of record size between ten and twenty acres; or five thousand gallons per day (5,000 gpd) on a legal lot of record size twenty acres and greater. Feedlots or other activities not related to normal grazing land uses are not considered stockwatering for the purpose of this chapter.

(5) All future appropriation from the gravel aquifer in the high density areas, including for stockwatering, shall be required to install and maintain a water measuring device (water source meters) meeting specifications provided by the department. The user must report to the department, by December 31 of each year, monthly water use from May 1 to November 30.

(6) To avoid and/or mitigate cumulative impacts on existing water rights (which for purposes of this chapter are considered to include the instream flows established herein and the seasonally closed water sources), new permit-exempt users from the gravel aquifer in the high density areas must provide water-for-water mitigation, meaning equivalent quantities of water, for any outdoor water use from May 1 to November 30. The effect of this mitigation requirement shall be delayed until May 1, 2008; however, if the ecology director finds that despite diligent and committed efforts, mitigation arrangements for new users cannot be reasonably obtained by that date, the director may grant an extension of up to one year. After May 1, 2008, any such withdrawal for outdoor uses commenced after the effective date of this rule must have mitigation in place during all times that the withdrawal occurs. This means that even if a withdrawal for outdoor uses commenced before May 1, 2008, that withdrawal is subject to the outdoor mitigation requirement after that date. Any such outdoor water use that occurs prior to mitigation being in place is deemed illegal and the department may order the water user to cease and desist outdoor water use immediately as well as seek any other available administrative or judicial remedies.

(7) The department will keep records of all future permit-exempt ground water appropriations from the gravel and basalt aquifers.

(8) In consultation with Walla Walla and Columbia counties, the planning unit and the Confederated Tribes of the Umatilla Indian Reservation, the department will develop a mitigation plan identifying methods and means, such as the use of the trust water right program under chapter 90.42

RCW, to assist future permit-exempt users to offset the impacts of their proposed water use, either individually or jointly.

(9) If the department determines, in consultation with Walla Walla and Columbia counties, the planning unit and the Confederated Tribes of the Umatilla Indian Reservation, that the impacts of outdoor water use from new permit-exempt wells in the gravel aquifer are not fully mitigated as required in WAC 173-532-050(6) and may impair existing rights, the department shall issue an order and public notice stopping all such use. The order and notice shall define the area for which the stoppage applies. The order shall continue until such time that adequate and reliable mitigation is in place.

(10) For purposes of this chapter the priority date of a withdrawal under the permit exemption in RCW 90.44.050, shall be the date upon which water is put to actual beneficial use on the subject property for the purpose of use in question. For domestic use, actual beneficial use shall not be considered to occur until water is used within a residential structure.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-050, filed 8/2/07, effective 9/5/07; Order DE 77-30, § 173-532-050, filed 12/14/77.]

WAC 173-532-055 Future surface water withdrawals for environmental enhancement projects. The department finds there may be water available above existing water rights and instream flows that could be captured for environmental enhancement projects. This water is only available at specific locations where instream flows are established and during the nonclosure periods, as specified in Table III. A surface water withdrawal for an environmental enhancement project ("EEP") may be approved if it meets all of the following:

(1) EEP may be sponsored only by:

(a) The Confederated Tribes of the Umatilla Indian Reservation;

(b) A municipal governments located within Walla Walla or Columbia counties;

(c) An irrigation district or ditch company within the watershed;

(d) The Washington department of fish and wildlife;

(e) A conservation district within the watershed;

(f) A quasi-governmental organization within the watershed; or

(g) A nonprofit organization within the watershed.

(h) Individual landowners may qualify as a sponsor only when the said landowner is a participant in a project sponsored by one or more of the aforementioned qualifying sponsors.

(2) A proposed project may only qualify as an EEP after the project has received a consensus recommendation from the Confederated Tribes of the Umatilla Indian Reservation, the Planning Unit, Washington department of fish and wildlife, and planning unit initiating governments.

(a) The consensus recommendation shall occur after receiving technical advice and recommendations from the technical advisory group with representatives from:

(i) The Confederated Tribes of the Umatilla Indian Reservation;

(ii) The governor's salmon recovery office;

(iii) The Walla Walla basin watershed council;

(iv) The Washington department of fish and wildlife; and

(v) The department of ecology.

(vi) The United States Army Corps of Engineers, United States Forest Service, United States Fish and Wildlife Service, and National Marine Fisheries Service may be invited to participate in the technical review.

(b) Technical evaluation shall consider:

(i) The specific management objectives for the stream management reaches affected by the EEP;

(ii) Effects of the project on inward and outward migration of salmonids and ecological function provided by high stream flows; and

(iii) Cumulative effects of all environmental enhancement projects.

(c) The technical evaluation shall also weigh any detriment caused by storing some seasonal stream flows (e.g., high winter flows and flood flows) against any benefit the stored water would provide.

(3) An application for EEP must include a monitoring and adaptive management program and show ability to implement such a program. Applicants will define how they will measure and evaluate the project's effectiveness in achieving environmental enhancement goals. The technical advisory group may assist in developing the criteria for evaluating project effectiveness.

(4) Initial water use authorization for EEP will be for short-term. No appropriative right shall develop out of this authorization. The department may only issue a permanent water right if the project's intended benefits are being realized, on the advice of the technical group and if consistent with the requirements for new appropriations under RCW 90.03.290.

(5) All other applicable permits must be obtained from the department, Washington department of fish and wildlife, and other agencies, prior to construction or water use.

(6) Water right permits for EEP shall be subject to existing water rights and instream flows as established under this chapter.

(7) In consideration of the recommendations of the technical advisory group, the withdrawals shall be managed consistent with salmonid migration needs and with the protection of high flow functions.

(8) Monitoring and sampling shall be consistent with the monitoring plan developed and approved for the project. Daily records shall be kept of the quantity of water diverted to the project. Such records shall be made available to the department upon request.

(9) The department will maintain a record of all diversion for EEP approved in each stream management unit.

(10) The maximum allocation for EEP within a stream management unit shall not exceed the values indicated in Table III.

Table III
Maximum Allocation for Environmental Enhancement Projects
(cubic feet per second)

Stream Location	EEP Diversion Period	Maximum Allocation*
Mill Creek at confluence with Walla Walla River (Walla Walla River, RM 33) to headwaters.	Dec. 1 to May 31	125
Walla Walla River below confluence of Walla Walla River and Mill Creek (RM 32.4) to state line.	Dec. 1 to May 31	300
North Fork Touchet at mouth of North Fork Touchet River to headwaters.	Dec. 1 to April 30	110
Touchet River at Bolles to headwaters, excluding North Fork Touchet.	Dec. 1 to April 30	175

*The total allocation on the Touchet River and North Fork Touchet River shall not exceed 175 cfs. The total maximum allocation on the Walla Walla River and Mill Creek shall not exceed 300 cfs. Due to concerns over potential impacts on inward and outward migration of salmonids and ecological function of high flows the maximum allocation may be considerably less.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-055, filed 8/2/07, effective 9/5/07.]

WAC 173-532-090 Compliance and enforcement. (1) The department shall prepare and make available to the public, technical and educational information regarding the scope and requirements of this chapter. This is intended to assist the public in complying with the requirements of their water rights and applicable water laws and rules.

(2) When the department determines that a violation of this chapter has occurred, it shall:

(a) First attempt to achieve voluntary compliance, except in appropriate cases involving potential harm to other water rights or the environment. An approach to achieving voluntary compliance is to offer information and technical assistance to a violator. The information or technical assistance identifies, in writing, one or more means to accomplish the person's purposes within the framework of the law.

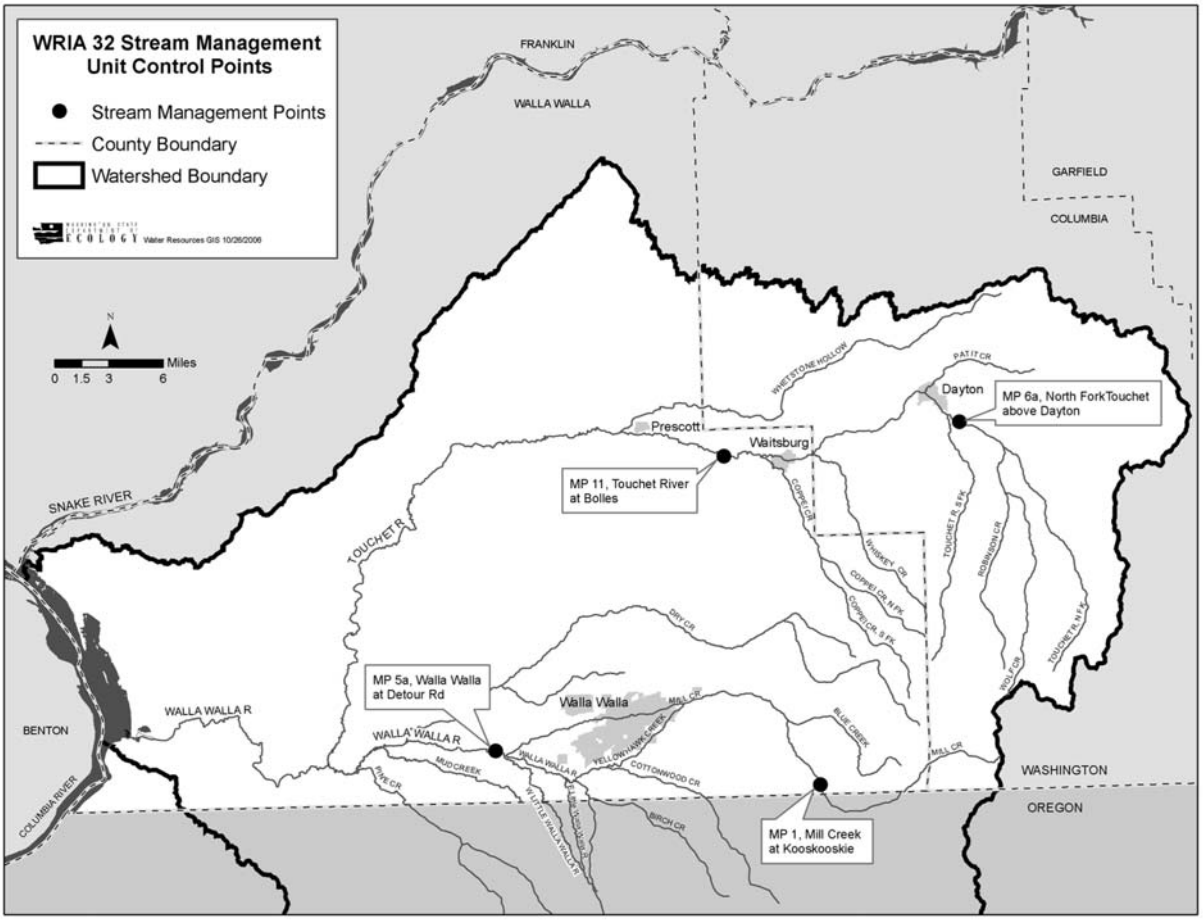
(b) If education and technical assistance do not achieve compliance, the department has the authority to issue a notice of violation, a formal administrative order under RCW 43.27A.190, or assess penalties under RCW 43.83B.336, 90.03.400, 90.03.410, 90.03.600, 90.44.120 and 90.44.130.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-090, filed 8/2/07, effective 9/5/07. Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-532-090, filed 6/9/88.]

WAC 173-532-100 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-532-100, filed 6/9/88.]

WAC 173-532-120 Map. For the purpose of administering this chapter, the boundaries of the Walla Walla River basin identified in the figure below are presumed to accurately reflect the basin located within Washington state.



[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 07-17-007 (Order 04-08), § 173-532-120, filed 8/2/07, effective 9/5/07.]

Chapter 173-545 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—WENATCHEE RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 45

WAC

173-545-010	General.
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173-545-110	Permitting actions.
173-545-120	Changes and transfers.
173-545-130	Compliance and enforcement.
173-545-140	Appeals.
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173-545-160	Map.
173-545-170	Appendix 1: Hydrographs.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-545-095 Appeals. [Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-545-095, filed 6/9/88.] Repealed by 08-01-045 (Order 07-06), filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW.

WAC 173-545-010 General. These rules apply to waters within the Wenatchee River basin, WRIA 45, as defined in WAC 173-500-040. This chapter is adopted under chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (minimum water flows and levels), chapter 77.57 RCW (state fisheries code), chapter 90.82 RCW (Watershed Planning Act), and in accordance with chapter 173-500 WAC (water resources management program).

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-010, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-010, filed 6/3/83.]

WAC 173-545-020 Purpose. The purposes of this chapter are to retain perennial rivers, streams, and lakes in the Wenatchee River basin with instream flows and levels necessary to protect water quality, wildlife, fish, and other environmental values, as well as aesthetics, recreation, navigation; and to meet certain future out-of-stream water needs identified in the Wenatchee watershed management plan.

(1) The Wenatchee watershed management plan approved by the Wenatchee planning unit and the Chelan

County commission under RCW 90.82.130 is the basis for amendments to the June 3, 1983 rule. The plan recommendations were approved on April 26, 2006, by the Wenatchee watershed planning unit, a group composed of a broad base of water use interests, and on June 26, 2006, by the Chelan County commission. The plan recommendations are therefore considered an expression of the public interest.

(2) This chapter sets forth the department's policies to guide the protection, use and management of Wenatchee River basin surface water and interrelated ground water resources. It protects existing water rights, establishes instream flows, and sets forth a program for the administration of future water allocation and use.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-020, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-020, filed 6/3/83.]

WAC 173-545-030 Definitions. For the purposes of this chapter, the following definitions shall be used:

(1) **"Allocation"** means the designation of specific amounts of water for specific beneficial uses.

(2) **"Appropriation"** means the process of legally acquiring the right to specific amounts of water for beneficial uses, as consistent with the requirements of the ground and surface water codes and other applicable water resource statutes.

(3) **"Beneficial uses"** means uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, thermal power production, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

(4) **"Consumptive use"** means a use of water whereby there is a diminishment of the overall amount or quality of water in the water source.

(5) **"Closure"** means a finding by the department that no water is available for future appropriations. WAC 173-545-100 identifies the periods when, and in what quantities, water may be available for future appropriation. If the maximum allocation is zero, no water is available. Practically, it means a permit to appropriate water for a beneficial use will not be approved from a stream or aquifer that results in a diminishment of the stream or aquifer during any period of time that water is unavailable and, unless otherwise excepted, no water is available for new or expanded exempt withdrawals under RCW 90.44.050.

(6) **"Department"** means the Washington state department of ecology.

(7) **"Domestic water use"** means, for the purposes of the reservation of water in this chapter, use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, and other incidental household uses.

(8) **"Existing water right"** includes perfected riparian rights, federal Indian and non-Indian reserved rights or other perfected and inchoate appropriative rights.

(9) **"Hydraulic continuity"** means the interrelation between ground water (water beneath land surfaces or surface water bodies) and surface water (water above ground, such as lakes and streams).

(10) **"Instream flow"** as used in this chapter, has the same meaning as a minimum instream flow under chapter 90.82 RCW, a base flow under chapter 90.54 RCW, a minimum flow under chapter 90.03 or 90.22 RCW, or management flow in the Wenatchee watershed plan. The instream flow constitutes a water right under chapter 90.03 RCW.

(11) **"Irrigation associated with a residence"** means irrigation of not more than one-half acre of lawn or garden per dwelling.

(12) **"Nonconsumptive use"** means a type of water use where either there is no withdrawal from a water source or there is no diminishment in the overall amount or quality of water in the water source.

(13) **"Plan"** or **"watershed plan"** means the Wenatchee watershed management plan, approved by the Wenatchee watershed planning unit on April 26, 2006, and by the Chelan County commissioners on June 26, 2006.

(14) **"Planning unit"** means the Wenatchee watershed planning unit (WWPU), or a successor approved by the WWPU. The WWPU was established in 1999 in accordance with chapter 90.82 RCW, Watershed Planning Act. The WWPU presently consists of the main planning unit, the steering committee, several technical subcommittees (e.g., water quantity/instream flow, habitat, water quality, growth and land use, outreach), and other interested stakeholders.

(15) **"Public water system"** means any system providing water for human consumption through pipes or other constructed conveyances, excluding a system serving only one single-family residence and a system with four or fewer connections all of which serve residences on the same farm. Water use shall be consistent with WAC 246-290-020 or as it may be recodified.

(16) **"Reservation"** means an allocation of water set aside for future domestic use, municipal use, and stock water use (except feedlots). For the purposes of this chapter, the reservation is not subject to the instream flows set in WAC 173-545-050 and 173-545-060. "Reservation" is the same as "reserve" and "reserved water" in the Wenatchee watershed management plan.

(17) **"Stock water"** means the use of water by animals consistent with the Chelan County Code, Section 11.88.030. It does not apply to feedlots and other activities which are not related to normal grazing land uses.

(18) **"Stream management unit"** means a stream segment, reach, or tributary used to describe the part of the relevant stream to which a particular use, action, instream flow level or reservation of water applies. Each of these units contains a control station. A map of the control points is included in this chapter (WAC 173-545-170).

(19) **"Withdrawal"** means the extraction of ground water or diversion of surface water.

(20) **"WRIA"** means water resource inventory area. This term can be used interchangeably with "basin" and "watershed."

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-030, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-030, filed 6/3/83.]

WAC 173-545-040 Stream management units. Stream management units and associated control stations are established as follows:

Stream Management Unit Information

Control Station No. Stream Management Unit Name	Control Station by River Mile and Section, Township, and Range	Affected Stream Reach(es) including Tributaries
12-4570.00 Wenatchee River at Plain	46.2 Sec. 12, T. 26N., R. 17E. W.M.	From Beaver Valley Hwy, R.M. 46.2, to headwaters
12-4585.00 Icicle Cr. near Leavenworth	2.6 Sec. 23, T. 24N., R. 17E. W.M.	Headwaters of Icicle Creek to its mouth
12-4590.00 Wenatchee River at Peshastin	21.5 Sec. 8, T. 24N., R. 18E. W.M.	From confluence of Derby Creek to Beaver Valley Hwy, R.M. 46.2 excluding Derby Creek and Icicle Creek
12-4625.00 Wenatchee River at Monitor	7.0 Sec. 11, T. 23N., R. 19E. W.M.	From mouth to confluence of Derby Creek, including Derby Creek and excluding Mission Creek
12-4620.00[1] Mission Creek near Cashmere	1.5 Sec. 9, T. 23N., R. 19E. W.M.	From mouth to headwaters
ECY 453070[2] Mission Creek near Cashmere	0.2 Sec. 5, T. 23N., R. 19E. W.M.	From mouth to headwaters
12-4565.00 Chiwawa River near Plain	6.2 Sec. 13, T. 27N., R. 17E. W.M.	From the confluence of the Chiwawa River and the Wenatchee River upstream to the headwaters of the Chiwawa River
ECY 45J070 Nason Creek near mouth	0.2 Sec. 33, T. 27N., R. 17E. W.M.	From the confluence of Nason Creek and the Wenatchee River upstream to the Nason Creek headwaters
ECY 45F070 Peshastin Creek at Green Bridge Rd.	1.4 Sec. 28, T. 24N., R. 18E. W.M.	From the confluence of Peshastin Creek and the Wenatchee River upstream to the Peshastin Creek headwaters

[1]This station is used for regulation of permits issued subject to the minimum instream flows listed in WAC 173-545-050.

[2]This station is to be used for regulation of any permits issued subject to the minimum instream flows in WAC 173-545-060.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-040, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-040, filed 6/3/83.]

WAC 173-545-050 Instream flows established on June 3, 1983. (1) The following instream flows were established June 3, 1983. Water rights established after that date and prior to the effective date of this rule are subject to these instream flows. The June 3, 1983, instream flows for the following stream management units in WAC 173-545-040 are as follows:

1983 Instream Flows in the Wenatchee River
(instantaneous cubic feet per second)

Month	Day	12-4570.00 Wenatchee R. at Plain	12-4580.00 Icicle Cr. near Leavenworth	12-4590.00 Wenatchee R. at Peshastin
Jan	1	550	120	700
	15	550	120	700
Feb	1	550	120	700
	15	550	120	700
Mar	1	550	150	750
	15	700	170	940
Apr	1	910	200	1300
	15	1150	300	1750
May	1	1500	450	2200
	15	2000	660	2800
Jun	1	2500	1000	3500
	15	2000	660	2600
Jul	1	1500	450	1900
	15	1200	300	1400
Aug	1	880	200	1000
	15	700	170	840
Sep	1	660	130	820
	15	620	130	780
Oct	1	580	130	750
	15	520	130	700
Nov	1	550	150	750
	15	550	150	750
Dec	1	550	150	750
	15	550	150	750

1983 Instream Flows in the Wenatchee River
(instantaneous cubic feet per second)

Month	Day	12-4620.00 Mission Cr. near Cashmere	12-4625.00 Wenatchee R. at Monitor
Jan	1	6	820
	15	6	820
Feb	1	6	820
	15	6	800
Mar	1	6	800
	15	11	1040
Apr	1	22	1350
	15	40	1750
May	1	40	2200
	15	40	2800
Jun	1	28	3500
	15	20	2400
Jul	1	14	1700
	15	10	1200
Aug	1	7	800
	15	5	700
Sep	1	4	700
	15	4	700
Oct	1	4	700
	15	5	700
Nov	1	6	800
	15	6	800
Dec	1	6	800
	15	6	800

(2) Instream flow hydrographs, WAC 173-545-170, Appendix 1 to this rule, shall be used for identification of instream flows on those days not specifically identified in WAC 173-545-050(1).

(3) The instream flows in subsection (1) of this section shall retain their original priority date and quantities, except where the flows in WAC 173-545-060(7) are lower than the flows in subsection (1) of this section. In those instances,

existing water rights subject to subsection (1) of this section will instead be subject to the lower flow in WAC 173-545-060(7). However, the priority date of the original right remains unchanged. If, at a future date, it is determined that the higher flows in subsection (1) of this section are required to retain flows necessary to preserve fish, wildlife, scenic, aesthetic, or other environmental values, the department will issue an order notifying the holders of the conditioned permits and certificates of such a decision and the justification.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-050, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-050, filed 6/3/83.]

WAC 173-545-060 Instream flows based on watershed planning. (1) The instream flows established in this section are based on the recommendations of the Wenatchee watershed planning unit and public input received during the rule-making process. These instream flows are established under RCW 90.82.080, and are necessary to meet the water resource management and ecosystem maintenance objectives of the Wenatchee watershed plan.

(2) Instream flows established in this section protect stream flows from future appropriations, and preserve flow levels that are necessary to protect wildlife, fish, water quality, aesthetic and other environmental values, recreation, and navigational values.

(3) Instream flows in subsection (7) of this section established at new locations or in larger amounts than the instream flows in WAC 173-545-050(1) are water rights with a priority date of November 2, 2001.

(4) All water rights (surface and ground water) established after the effective date of this rule, and not covered under the reservation in WAC 173-545-090, are subject to these instream flows. Water rights junior to the instream flow may be exercised when flow or ground water conditions will provide enough water to satisfy senior rights, including the instream flows. New appropriations which would conflict with instream flows shall be authorized only in situations where it is clear that the overriding considerations of the public interest will be served.

(5) Based upon the department's determination of overriding considerations of public interest, the reservation of water established in WAC 173-545-090 is not subject to the instream flows in subsection (7) of this section or WAC 173-545-050(1).

(6) Instream flows are expressed in cubic feet per second (cfs). Instream flows are measured at the control stations identified in WAC 173-545-040.

(7) Instream flows are established for the stream management units in WAC 173-545-040, as follows:

Instream Flows in the Wenatchee River Basin
Based on Watershed Planning
(instantaneous cubic feet per second)

Month	Day	12-4570.00 Wenatchee R. at Plain	12-4585.00 Icicle Cr. near Leavenworth	12-4590.00 Wenatchee R. at Peshastin	ECY 45J070 Nason Cr. near Mouth
Jan	1	550	267	1933	120
	15	550	267	1933	120
Feb	1	550	267	1933	120
	15	550	566	2800	160
Mar	1	550	518	2800	160
	15	700	518	2800	160
Apr	1	910	650	2800	160
	15	1150	650	2800	160
May	1	1500	650	2800	160
	15	2000	650	2800	160
Jun	1	2500	650	2800	160
	15	2000	550	1933	210
Jul	1	1500	550	1933	210
	15	1200	550	1933	210
Aug	1	880	400	1933	180
	15	700	343	1400	180
Sep	1	660	275	1311	165
	15	620	275	1311	165
Oct	1	580	267	1932	120
	15	520	267	2672	120
Nov	1	550	267	2900	120
	15	550	267	2900	120
Dec	1	550	267	1933	120
	15	550	267	1933	120

Instream Flows in the Wenatchee River Basin (cont'd)
(instantaneous cubic feet per second)

Month	Day	12-4625.00 Wenatchee R. at Monitor	ECY 45F070 Peshastin Cr. at Green Bridge Rd.	Chumstick Cr. at North Road
				To be determined
Jan	1	1867	53	(tbd)
	15	1867	53	
Feb	1	1867	53	tbd
	15	2400	120	
Mar	1	2400	120	tbd
	15	2400	120	
Apr	1	2400	120	tbd
	15	2400	120	
May	1	2400	120	tbd
	15	2400	120	
Jun	1	2400	120	tbd
	15	1600	110	
Jul	1	1600	110	tbd
	15	1600	110	
Aug	1	1600	80	tbd
	15	900	80	
Sep	1	900	80	tbd
	15	1338	80	
Oct	1	1723	53	tbd
	15	2427	53	
Nov	1	2800	53	tbd
	15	2800	53	
Dec	1	1867	53	tbd
	15	1867	53	

(8) Instream flow hydrographs, WAC 173-545-170, Appendix 1 to this rule, shall be used for identification of instream flows on those days not specifically identified in WAC 173-545-060(7).

(9) Future consumptive water right permits issued hereafter for the withdrawal of surface and ground water from the mainstem Wenatchee River and tributaries shall be subject to instream flows established in subsection (7) of this subsection, except for those withdrawals eligible for the reservation under WAC 173-545-090.

(10) Projects that would reduce the flow in a portion of a stream's length (e.g.: Hydroelectric diversion projects) are consumptive with respect to the bypassed portion of the stream and are subject to specific instream flow requirements for the bypassed reach. The department may require detailed, project-specific instream flow studies to determine a specific

instream flow for the bypassed reach. The flows established in subsection (7) of this section shall apply to the bypassed stream reach unless the department, by order, determines that different flows may be maintained in the bypassed reach.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-060, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-060, filed 6/3/83.]

WAC 173-545-070 Lakes and ponds. In accordance with RCW 90.54.020(3), lakes and ponds in the Wenatchee watershed shall be retained substantially in their natural condition, including those in the Wenatchee National Forest. Water withdrawals from lakes and ponds for purposes eligible under the reservation in WAC 173-545-090 are not subject to instream flows. All other water withdrawals from lakes and ponds or storage projects sited within or upon existing lakes or ponds are subject to instream flows and maximum future allocations.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-070, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-070, filed 6/3/83.]

WAC 173-545-080 Interim closure. The Chumstick Creek subbasin shall be closed to all future appropriations other than those provided by the interim reservation in WAC 173-545-090 (1)(d)(vi) until the department adopts a rule establishing instream flows, closes Chumstick Creek permanently, or determines that instream flows or a closure are not required.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-080, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-080, filed 6/3/83.]

WAC 173-545-090 Reservation of water for certain future uses. (1) Using the watershed plan as a primary expression of public interest, and consistent with the authority under RCW 90.54.050(1) and 90.82.130(4), the department's director determines that it is an overriding consideration of the public interest to reserve an amount of surface and ground water, up to 4 cubic feet per second, for future beneficial uses as follows:

(a) The priority date for uses under the reservation is the effective date of this chapter.

(b) The reservation is not subject to the instream flows established in WAC 173-545-050 and 173-545-060.

(c) Beneficial uses of water eligible for the reservation are limited to:

(i) Permitted uses for domestic purposes, irrigation associated with a residence, potable domestic water requirements associated with municipal, commercial, and industrial purposes, and stock water (as defined in WAC 173-545-030 (17)).

(ii) Permit-exempt uses for domestic purposes, irrigation associated with a residence, domestic water requirements associated with municipal, commercial, and industrial purposes, and stock water (as defined in WAC 173-545-030 (17)).

(d) The reservation of water for future use is limited to the following locations and amounts:

(i) Chiwawa River near Plain (USGS 12-4565.00), up to 0.5 cfs.

(ii) Nason Creek near mouth, up to 0.16 cfs.

(iii) Wenatchee River at Plain (USGS Gage No. 12-4570.00), up to 1.0 cfs inclusive of actual water use associated with the subbasin reservations in (d)(i) and (ii) of this subsection.

(iv) Icicle Creek near Leavenworth: Up to 0.1 cfs. Reservation of an additional 0.4 cfs will be considered after completion of flow restoration efforts targeting habitat between the city of Leavenworth and Icicle Irrigation District's point of diversion and the U.S. Fish and Wildlife Service hatchery return. Rule making will be required to establish this additional reservation.

(v) Peshastin Creek at Green Bridge: Up to 0.1 cfs.

(vi) Chumstick Creek at North Road: Up to 0.043 cfs as an interim reservation to meet projected growth for the three years immediately following the effective date of this rule. At the end of three years, or sooner if the interim reservation is fully appropriated, allocation of any water remaining in the interim reservation and water above the interim reservation, up to a total of 0.13 cfs, is subject to additional conditions described in subsection (10) of this section.

(vii) Mission Creek near Cashmere: Up to 0.03 cfs for an interim reservation to meet projected growth for the two years immediately following the effective date of this rule. The interim reservation is subject to additional conditions described in subsection (11) of this section.

(viii) Wenatchee River at Monitor (USGS Gage No. 12-4625.00): Up to 4 cfs inclusive of actual water use associated with the subbasin reservations in (d)(i) through (vii) of this subsection.

(2) A water right permit allocating water from the reservation must be consistent with the requirements of RCW 90.03.290.

(3) All water uses from the reservation must implement water use efficiency and conservation practices, consistent with the watershed plan.

(4) This reservation of water is intended to meet needs identified for the basin within the Wenatchee watershed plan. The department shall deny all applications for water from this reservation for use not conforming to subsection (1)(c) of this section.

(5) All water uses relying on the reservation must be measured and reported. The manner and form of such measuring and reporting to support the accounting system for the reservation water uses may be specified by the department, Chelan County, or by a local government, utility, or other public water purveyor in a permit, approval, license, or order. An accounting of all appropriations from the reservation shall be maintained by the department and the Chelan County natural resource department. The accounting shall, at a minimum, include estimated and measured use in gallons per day.

(6) All permitted and permit-exempt uses from the reservation will have the same priority date. The following will guide water supply decisions in times of water shortage:

(a) Among the use categories: Domestic and stockwatering uses will be met first, followed by domestic water requirements associated with municipal, commercial and industrial use, and then residential irrigation.

(b) Within each use category, the date of first beneficial use will be used. The use with the earliest date will be satisfied first.

(7) The reservation will be evaluated by the department and the Wenatchee planning unit prior to 2010, 2015, 2020, and 2025. The allocated and unallocated amounts for each use will be reviewed, as well as the allocated and unallocated amounts for the entire reserve. Modifications to the program may therefore be established through rule making, if needed.

(8) The department shall notify both Chelan County and the planning unit or its successor, in writing, when it determines that fifty percent, seventy-five percent, and one hundred percent, respectively, of the total reservation is appropriated. The department shall also issue a public notice in a newspaper of general circulation for the region at the same three junctures.

(9) The department shall require measuring and reporting for permitted surface and ground water appropriation from the reservation. If more accurate water use data are needed, the department may, after consulting with the planning unit and Chelan County, require measuring and reporting for ground water withdrawals otherwise exempted from permit requirements under RCW 90.44.050.

(10) For Chumstick Creek, allocation of the full 0.13 cfs reservation will be considered only after completion of an instream flow assessment and a cumulative impacts assessment. Rule making will be required to establish Chumstick Creek instream flows. A cumulative impacts assessment will be used to determine if outdoor water use associated with permit-exempt ground water uses initiated after June 6, 1983, interferes with the instream flows in WAC 173-545-050. Rule making will also be required to either terminate the interim closure of the Chumstick Creek subbasin or to make it permanent.

(11) For Mission Creek, the interim reservation will terminate after two years. A cumulative impacts assessment will be used to determine if outdoor water use associated with permit-exempt ground water uses initiated subsequent to June 6, 1983, interferes with the adopted instream flows in WAC 173-545-050.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-090, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-545-090, filed 6/9/88. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-090, filed 6/3/83.]

WAC 173-545-100 Maximum future allocation. (1)(a) The department determines that there are certain times when there are surface waters above the instream flows, referred to as "high flows." These high flows provide critical ecological functions such as channel and riparian zone maintenance, flushing of sediments, and fish migration. In order to protect the frequency and duration of these higher flows, the department hereby establishes maximum amounts of water/flow that can be withdrawn from specific streams at specific times, subject to the flows in WAC 173-545-060.

(b) A maximum allocation shall be used to review future applications for beneficial uses from the mainstem Wenatchee and tributary rivers and creeks.

Maximum Allocations in the Wenatchee River Basin
(instantaneous cubic feet per second)

Month	Day	12-4570.00 Wenatchee R. at Plain	12-4585.00 Icicle Cr. near Leavenworth	12-4590.00 Wenatchee R. at Peshastin
Jan	1	82	21	113
	15	82	21	113
Feb	1	78	20	111
	15	78	0	111
Mar	1	96	0	147
	15	96	0	147
Apr	1	243	59	335
	15	243	59	335
May	1	525	149	711
	15	525	149	711
Jun	1	604	175	800
	15	604	175	800
Jul	1	296	76	376
	15	296	76	376
Aug	1	102	28	122
	15	102	0	122
Sep	1	0	0	0
	15	0	0	0
Oct	1	0	0	0
	15	0	0	0
Nov	1	95	23	128
	15	95	23	128
Dec	1	92	25	122
	15	92	25	122

Maximum Allocations in the Wenatchee River Basin (cont'd)
(instantaneous cubic feet per second)

Month	Day	ECY 45F070 Peshastin Cr. near Green Bridge	12-4625.00 Wenatchee R. at Monitor	ECY 45E070 Mission Cr. near Cashmere
Jan	1	6	132	0.6
	15	6	132	0.6
Feb	1	6	148	1.2
	15	6	148	1.2
Mar	1	7	192	1.4
	15	7	192	1.4
Apr	1	16	360	2.7
	15	16	360	2.7
May	1	38	710	3.1
	15	38	710	3.1
Jun	1	44	813	1.9
	15	44	813	1.9
Jul	1	20	373	0
	15	20	373	0
Aug	1	0	117	0
	15	0	117	0.3
Sep	1	0	72	0
	15	0	0	0
Oct	1	0	0	0
	15	0	0	0
Nov	1	7	139	0.4
	15	7	139	0.4
Dec	1	7	130	0.4
	15	7	130	0.4

Maximum Allocations in the Wenatchee River Basin (cont'd)
(instantaneous cubic feet per second)

Month	Day	ECY 45J070 Nason Cr. near Mouth	12-4565.00 Chiwawa R. near Plain
Jan	1	13	12
	15	13	12
Feb	1	12	12
	15	12	0
Mar	1	15	0
	15	15	16
Apr	1	44	58
	15	44	58
May	1	99	139

Month	Day	ECY 45J070 Nason Cr. near Mouth	12-4565.00 Chiwawa R. near Plain
	15	99	139
Jun	1	114	147
	15	114	147
Jul	1	54	71
	15	54	71
Aug	1	17	24
	15	17	0
Sep	1	0	0
	15	0	0
Oct	1	0	0
	15	0	0
Nov	1	15	16
	15	15	16
Dec	1	15	16
	15	15	16

(2) The designation of a maximum allocation limit does not constitute a determination by the department that a permit to appropriate public waters will be issued. RCW 90.03.290 and 90.44.060 require that a permit can be issued only upon a determination that: Water is available; the use will not impair existing rights; water will be applied to a beneficial use; and the use is not detrimental to the public interest. Establishment of a water right within the limit of the allocation occurs after proper authorization from the department and after the water is first put to beneficial use. The water rights are subject to the instream flows established in WAC 173-545-060, and other provisions established in statutory, administrative and case law.

(3) The department shall require the metering and reporting of all permitted surface and ground water withdrawals for which a maximum allocation applies.

(4) The department will maintain a record of the amount of water appropriated from the Wenatchee River and tributaries specified above. Once the maximum amounts are fully appropriated, the department shall notify Chelan County and the planning unit in writing. The department shall also issue a public notice in a newspaper of general circulation for the region.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-100, filed 12/12/07, effective 1/12/08. Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-545-100, filed 6/9/88. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-100, filed 6/3/83.]

WAC 173-545-110 Permitting actions. (1) Surface and ground water permits not subject to the instream flows established in WAC 173-545-060 may be issued if:

(a) The proposed use is nonconsumptive, and compatible with the intent of this chapter; or

(b) The water use qualifies for the reservation established in WAC 173-545-090.

(2)(a) Future applications for surface waters that are not part of the reservation established in WAC 173-545-090 may be approved subject to the instream flows established in WAC 173-545-060 and the maximum water allocation limits established in WAC 173-545-100, unless the source is closed to further appropriation.

(b) Future applications for ground waters that are not part of the reservation established in WAC 173-545-090 may be approved subject to the instream flows established in WAC 173-545-060 and the maximum water allocation limits established in WAC 173-545-100 (except if there is a closure). Based upon existing data and the findings in the watershed plan, the department determines that there is a high likelihood of hydraulic continuity between surface water and ground water sources within both the Wenatchee River management units and tributaries established in WAC 173-545-040. Therefore, water rights without instream flow limitations may be issued for ground water only if the department determines that the withdrawal of ground water with proposed mitigation in place would not adversely affect or impair the instream flows.

(3) No right to withdraw or store the public surface or ground waters of the Wenatchee River basin that conflicts with the provisions of this chapter will hereafter be granted, except in cases where such rights will clearly serve overriding considerations of the public interest, as stated in RCW 90.54.020 (3)(a).

(4) All future surface and ground water permit holders shall be required to install and maintain measuring devices and report the data to the department in accordance with permit requirements. In addition, the department may require the permit holder to monitor stream flows and ground water levels.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-110, filed 12/12/07, effective 1/12/08.]

WAC 173-545-120 Changes and transfers. No changes to, or transfers of, existing surface and ground water rights in the Wenatchee River basin shall hereafter be granted if they conflict with the purpose of this chapter. Any change or transfer proposal can be approved only if there is a finding that existing rights, including the instream flows established in WAC 173-545-050 and 173-545-060, will not be impaired.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-120, filed 12/12/07, effective 1/12/08.]

WAC 173-545-130 Compliance and enforcement. (1) To obtain compliance with this chapter, the department, with assistance from Chelan County, the planning unit or its successor and partners, shall prepare and distribute technical and educational information regarding the scope and requirements of this chapter to the public. This is intended to assist the public in complying with the requirements of their water rights and applicable water laws.

(2) When the department determines that a violation has occurred, it shall first attempt to achieve voluntary compliance. An approach to achieving this is to offer information and technical assistance to the person, in writing, identifying one or more means to accomplish the person's purposes within the framework of the law.

(3) To obtain compliance and enforce this chapter, the department may impose such sanctions as appropriate under authorities vested in it, including, but not limited to, issuing regulatory orders under RCW 43.27A.190; and imposing civil penalties under RCW 43.83B.336, 90.03.400, 90.03.410, 90.03.600, 90.44.120 and 90.44.130.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-130, filed 12/12/07, effective 1/12/08.]

WAC 173-545-140 Appeals. All final written decisions of the department pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter can be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

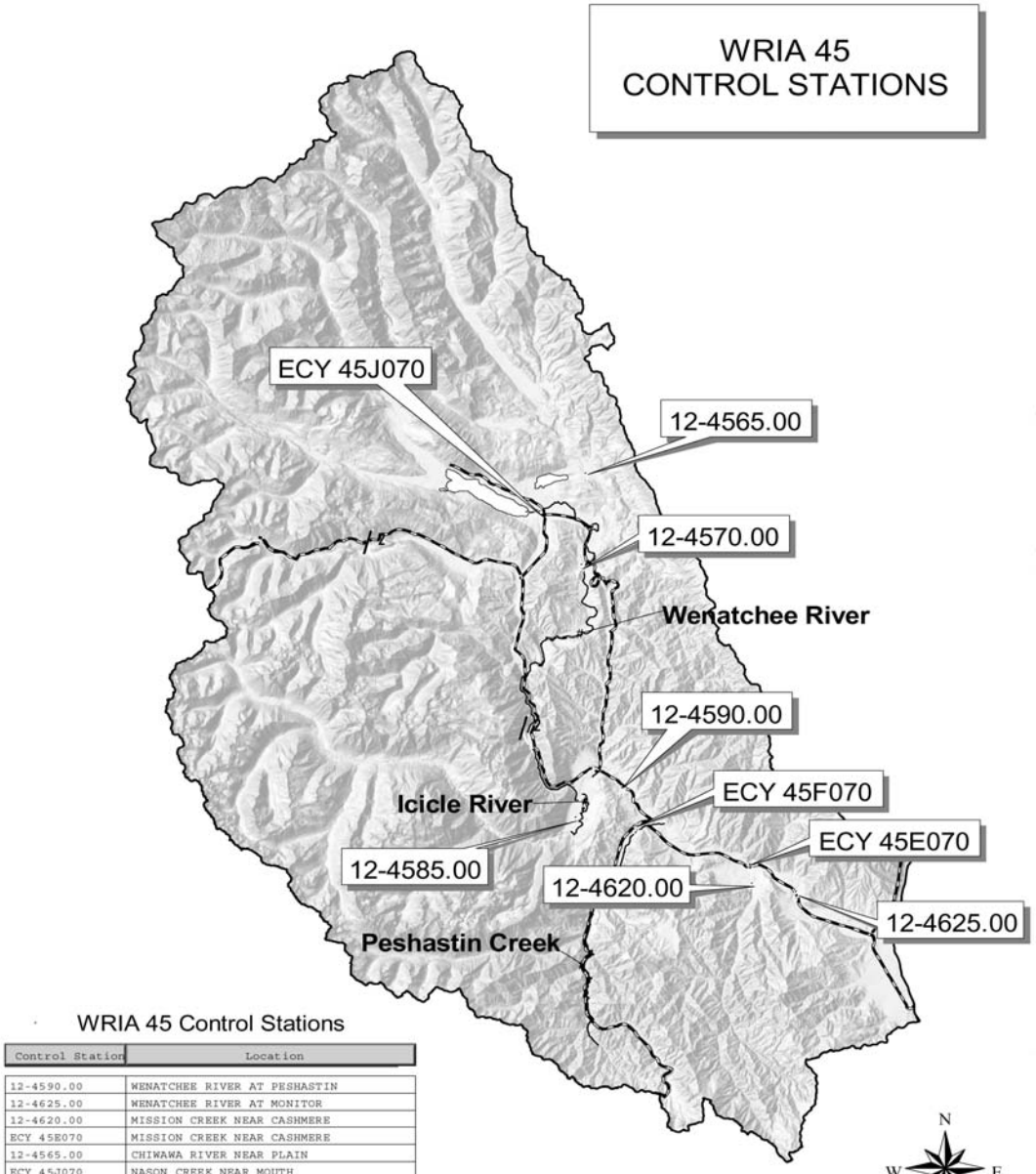
[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-140, filed 12/12/07, effective 1/12/08.]

WAC 173-545-150 Regulation review. Review of this chapter may be initiated by the department whenever significant new information is available, a significant change in conditions occurs, statutory changes are enacted that are determined by the department to require review of the chapter, or if modifications are necessary based on the reviews described in WAC 173-545-080 and 173-545-090. Chelan County, the planning unit, or other interested citizens with standing may request that the department initiate a review at any time. If the department initiates a review, it will consult with Chelan County and the planning unit or its successor. If necessary, the department will modify the appropriate provisions of this chapter by rule.

The reservation will be evaluated by the department and the Wenatchee planning unit prior to 2010, 2015, 2020, and 2025. The allocated and unallocated amounts for each use will be reviewed, as well as the allocated and unallocated amounts for the entire reserve. Modifications to the program may therefore be implemented by rule, if needed.

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-150, filed 12/12/07, effective 1/12/08.]

WAC 173-545-160 Map. For the purposes of administering this chapter, the boundaries of the Wenatchee River basin identified in the figure below are presumed to accurately reflect the basin hydrology.

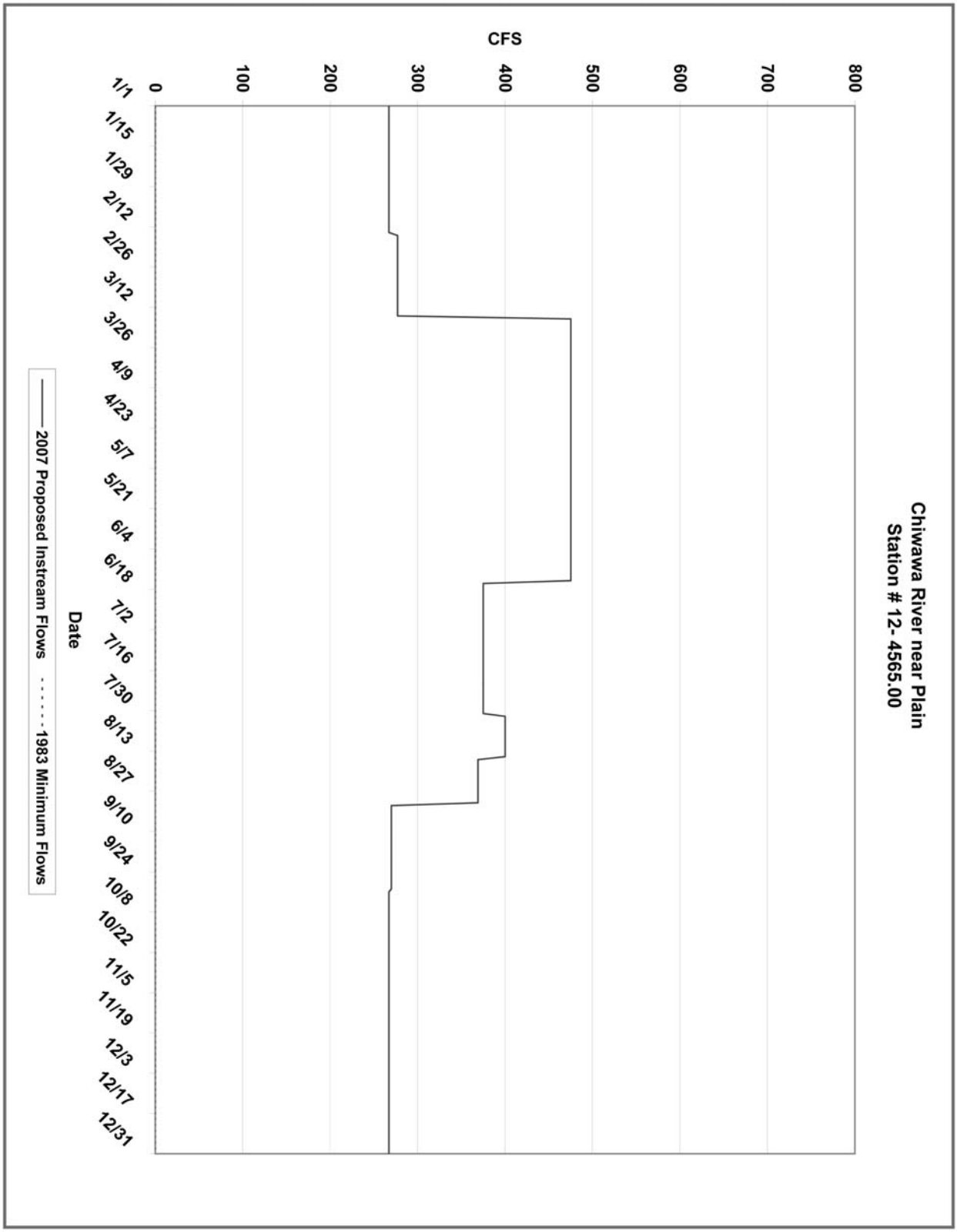


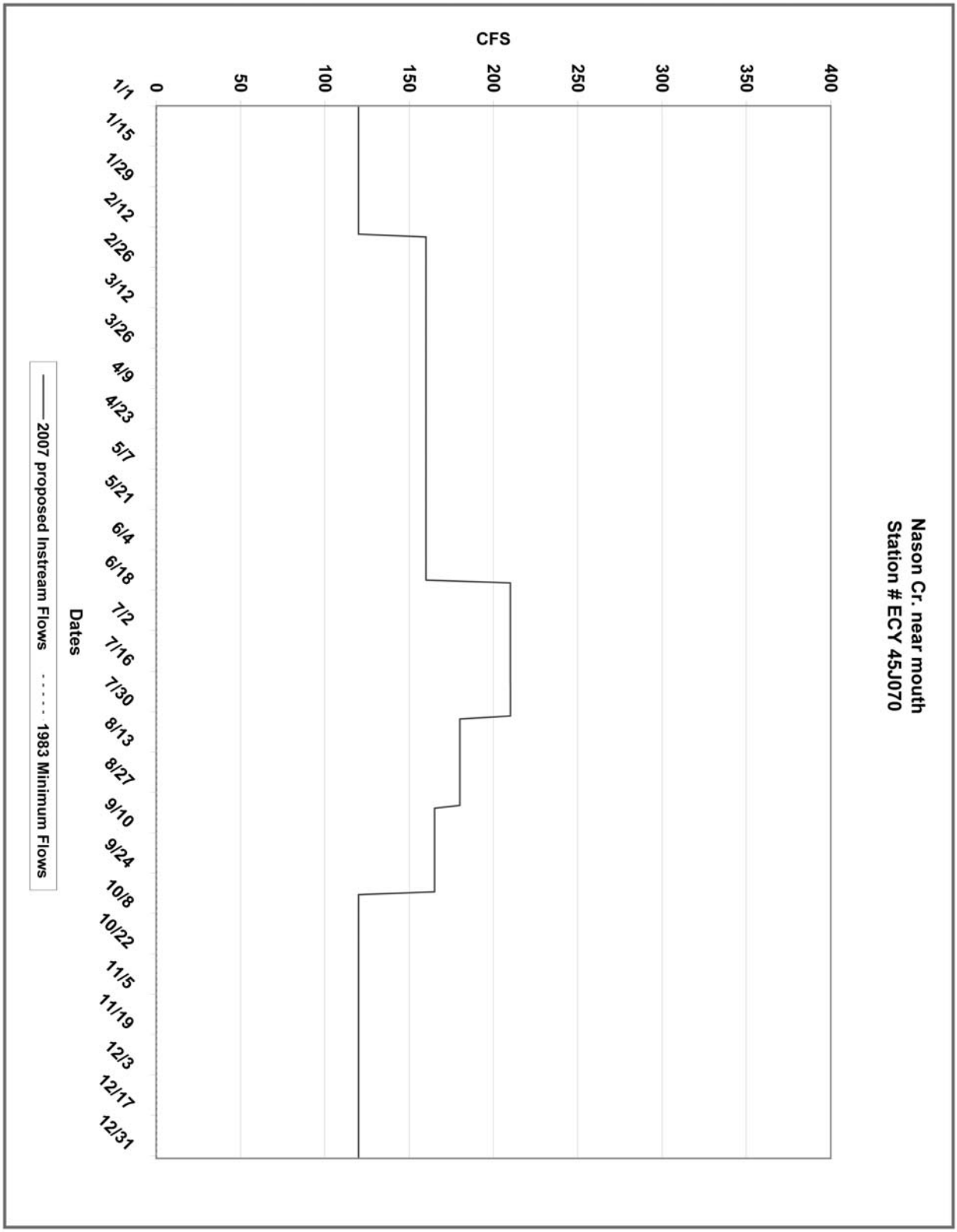
WRIA 45 Control Stations

Control Station	Location
12-4590.00	WENATCHEE RIVER AT PESHASTIN
12-4625.00	WENATCHEE RIVER AT MONITOR
12-4620.00	MISSION CREEK NEAR CASHMERE
ECY 45E070	MISSION CREEK NEAR CASHMERE
12-4565.00	CHIWAWA RIVER NEAR PLAIN
ECY 45J070	NASON CREEK NEAR MOUTH
ECY 45F070	PESHASTIN CREEK AT GREEN BRIDGE RD
12-4570.00	WENATCHEE RIVER AT PLAIN
12-4585.00	ICICLE CREEK NEAR LEAVENWORTH

[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-160, filed 12/12/07, effective 1/12/08.]

WAC 173-545-170 Appendix 1: Hydrographs.




Nason Cr. near mouth
Station # ECY 45J070
CFS
0
50
100
150
200
250
300
350
400
1/1
1/15
1/29
2/12
2/26
3/12
3/26
4/9
4/23
5/7
5/21
6/4
6/18
7/2
7/16
7/30
8/13
8/27
9/10
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10/22
11/5
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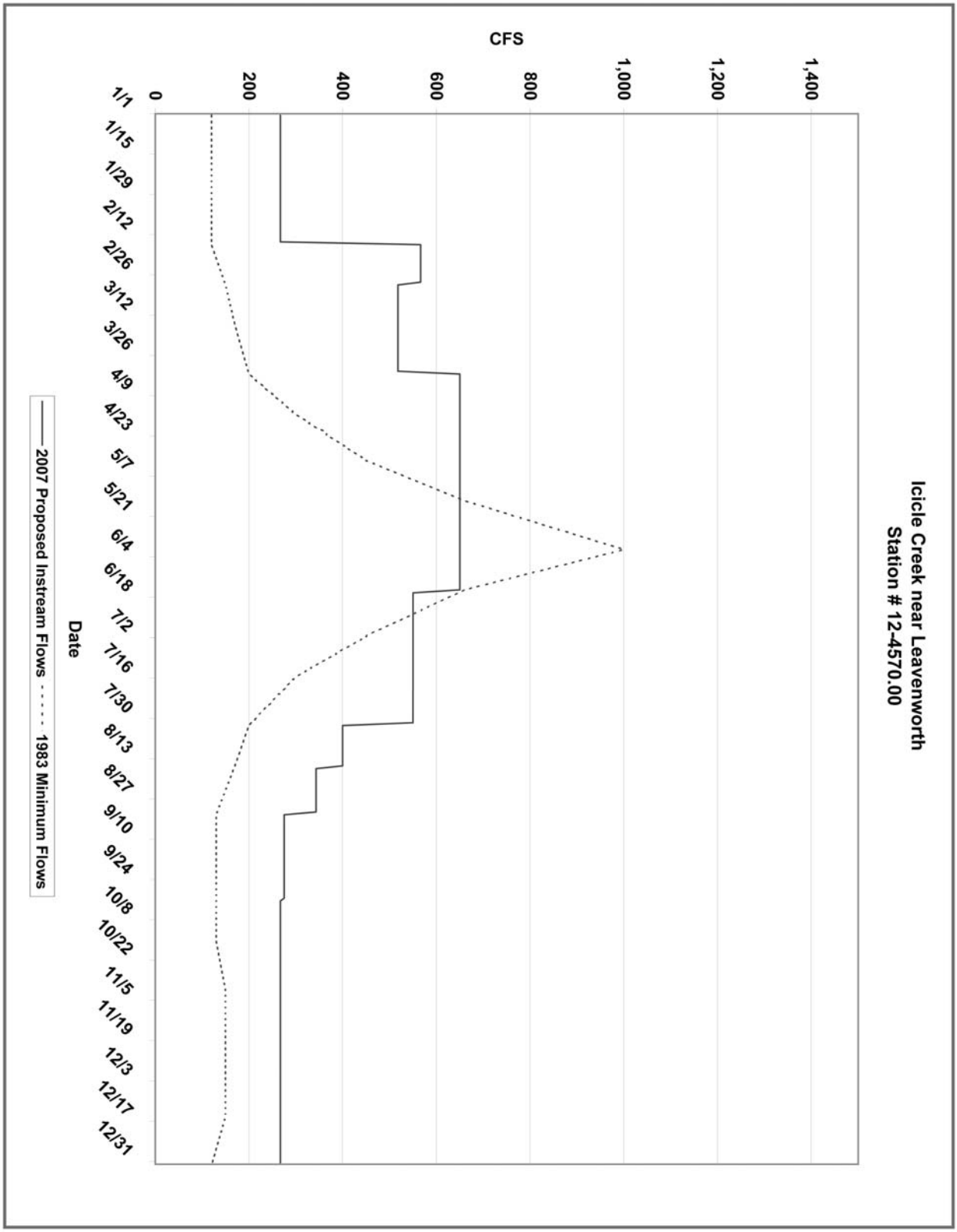
12/17
12/31
Dates
2007 proposed Instream Flows
1983 Minimum Flows


Icicle Creek near Leavenworth
Station # 12-4570.00
CFS
0
200
400
600
800
1,000
1,200
1,400
1/1
1/15
1/29
2/12
2/26
3/12
3/26
4/9
4/23
5/7
5/21
6/4
6/18
7/2
7/16
7/30
8/13
8/27
9/10
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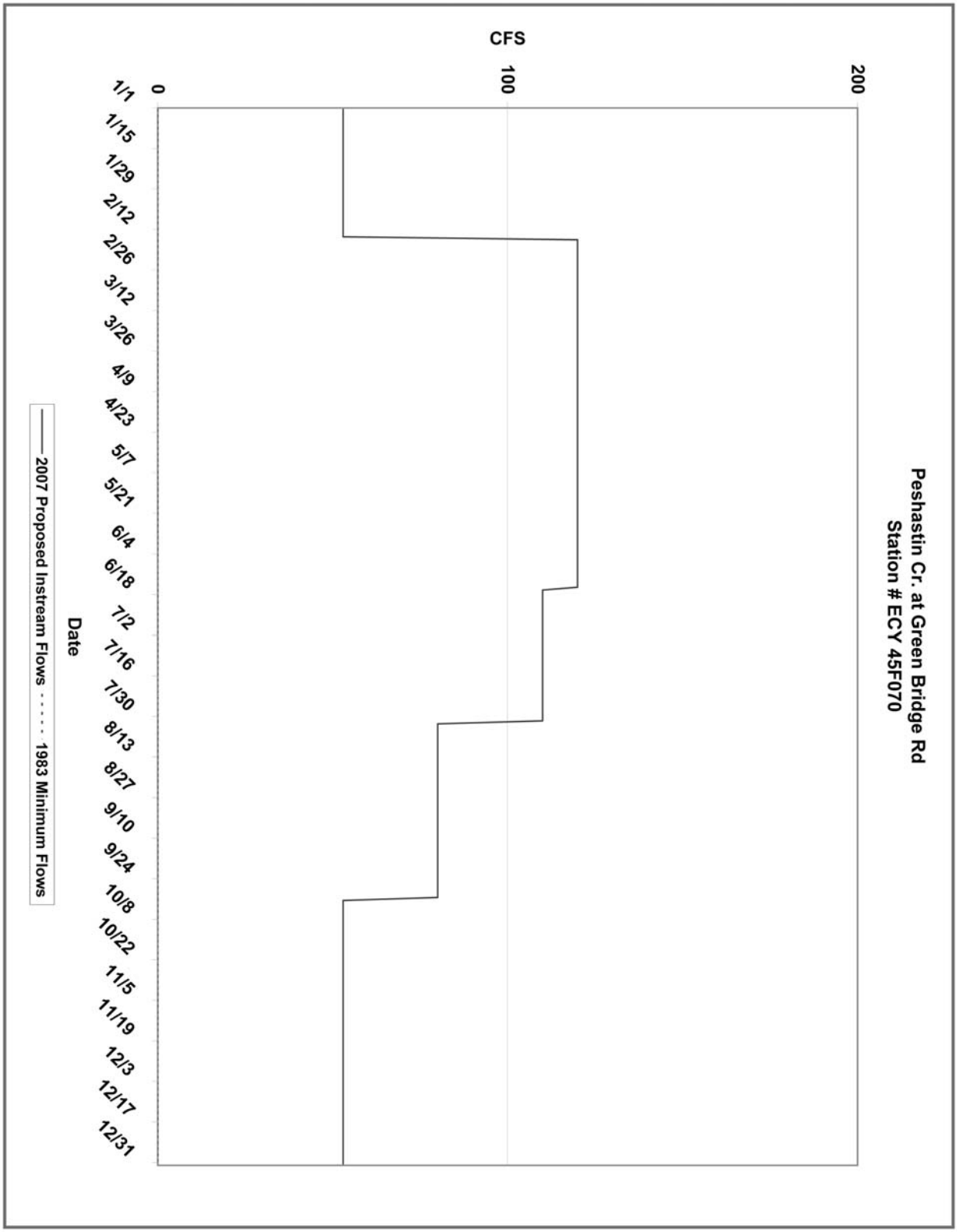
10/22
11/5
11/19
12/3
12/17
12/31
Date
2007 Proposed Instream Flows
1983 Minimum Flows


Peshastin Cr. at Green Bridge Rd
Station # ECY 45F070
CFS
0
100
200
1/1
1/15
1/29
2/12
2/26
3/12
3/26
4/9
4/23
5/7
5/21
6/4
6/18
7/2
7/16
7/30
8/13
8/27
9/10
9/24
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10/22
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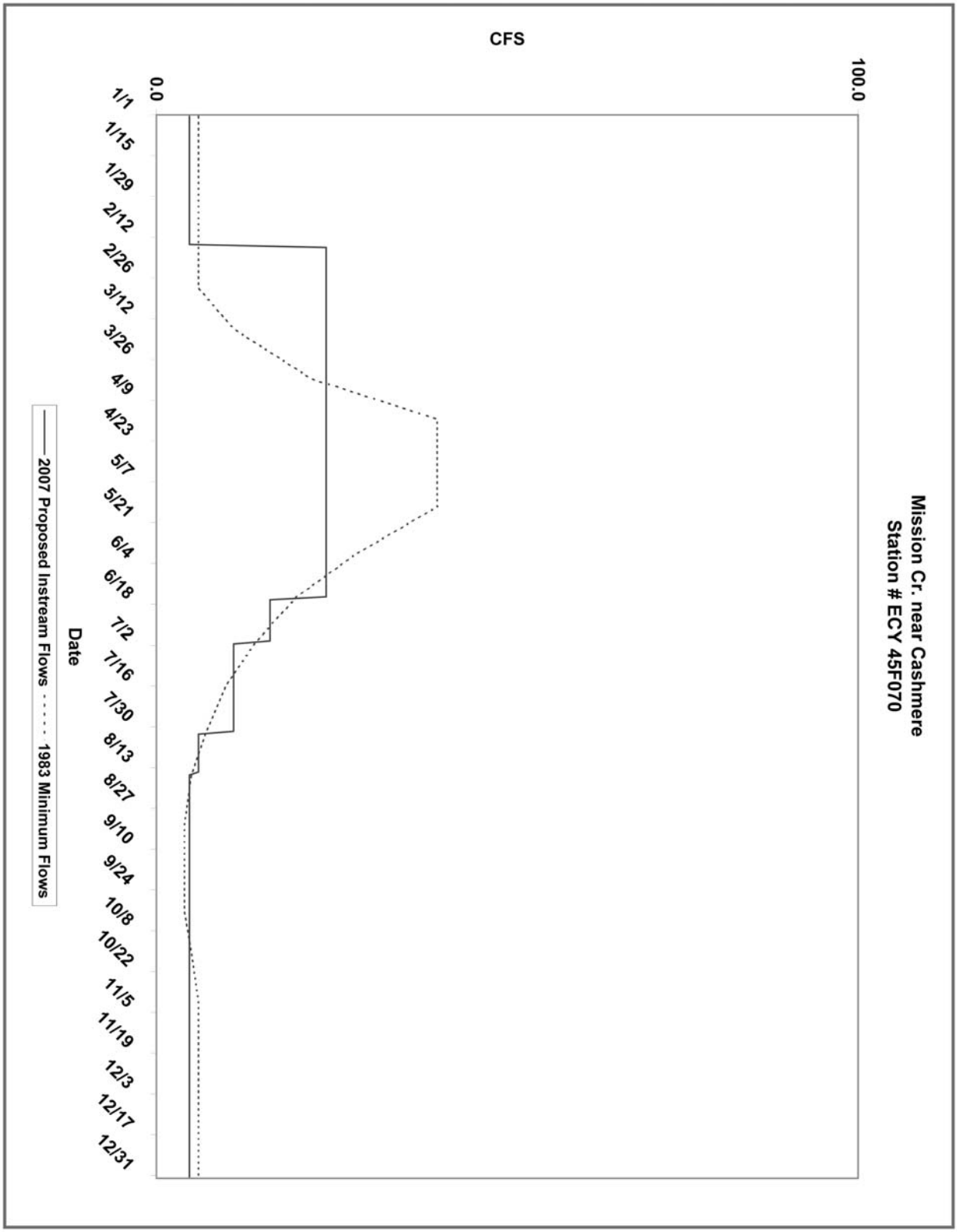
12/17
12/31
Date
2007 Proposed Instream Flows
1983 Minimum Flows


Mission Cr. near Cashmere
Station # ECY 45F070
CFS
100.0
0.0
1/1
1/15
1/29
2/12
2/26
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4/9
4/23
5/7
5/21
6/4
6/18
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7/16
7/30
8/13
8/27
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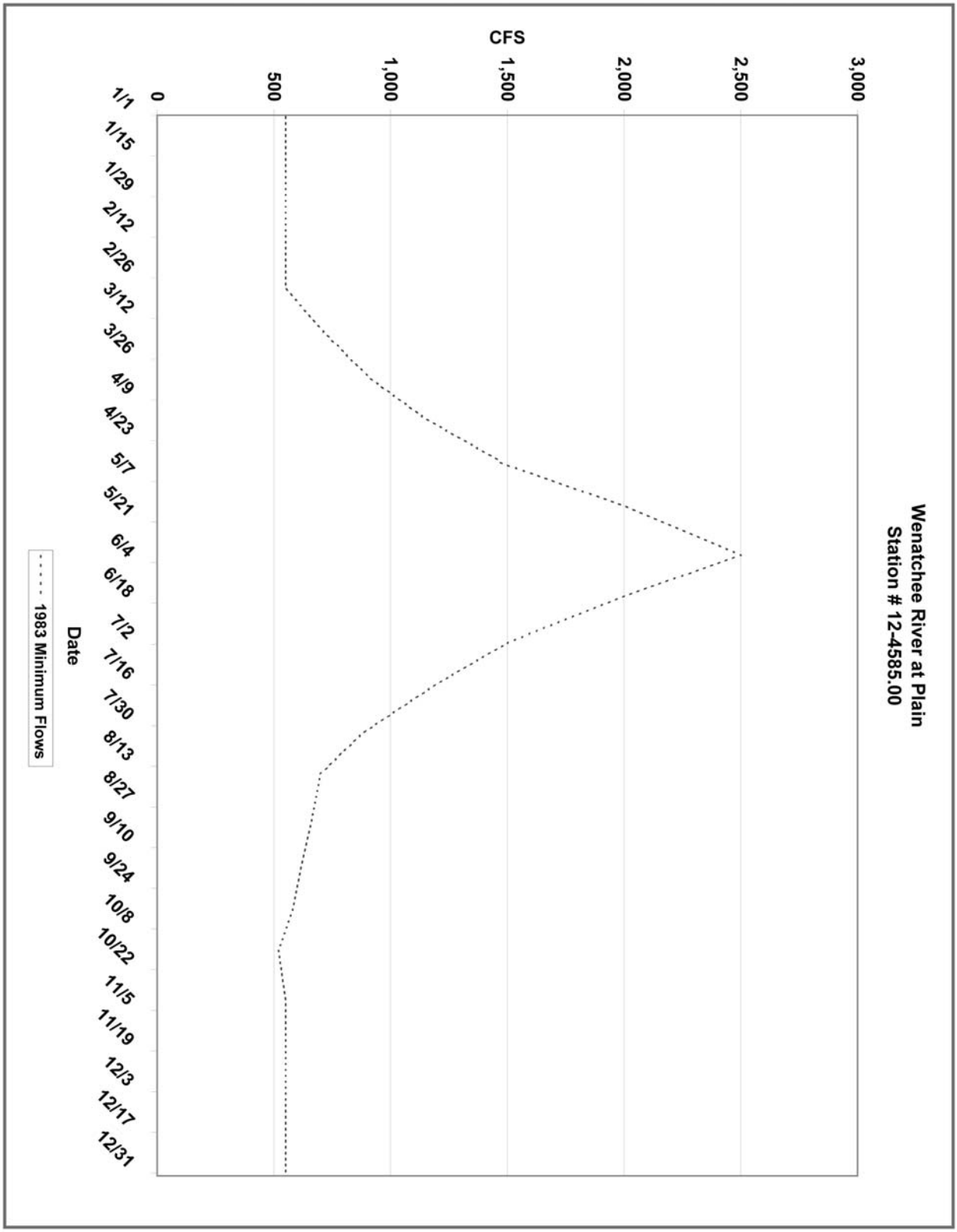
10/22
11/5
11/19
12/3
12/17
12/31
Date
2007 Proposed Instream Flows
1983 Minimum Flows


Wenatchee River at Plain
Station # 12-4585.00
CFS
3,000
2,500
2,000
1,500
1,000
500
0
1/1
1/15
1/29
2/12
2/26
3/12
3/26
4/9
4/23
5/7
5/21
6/4
6/18
7/2
7/16
7/30
8/13
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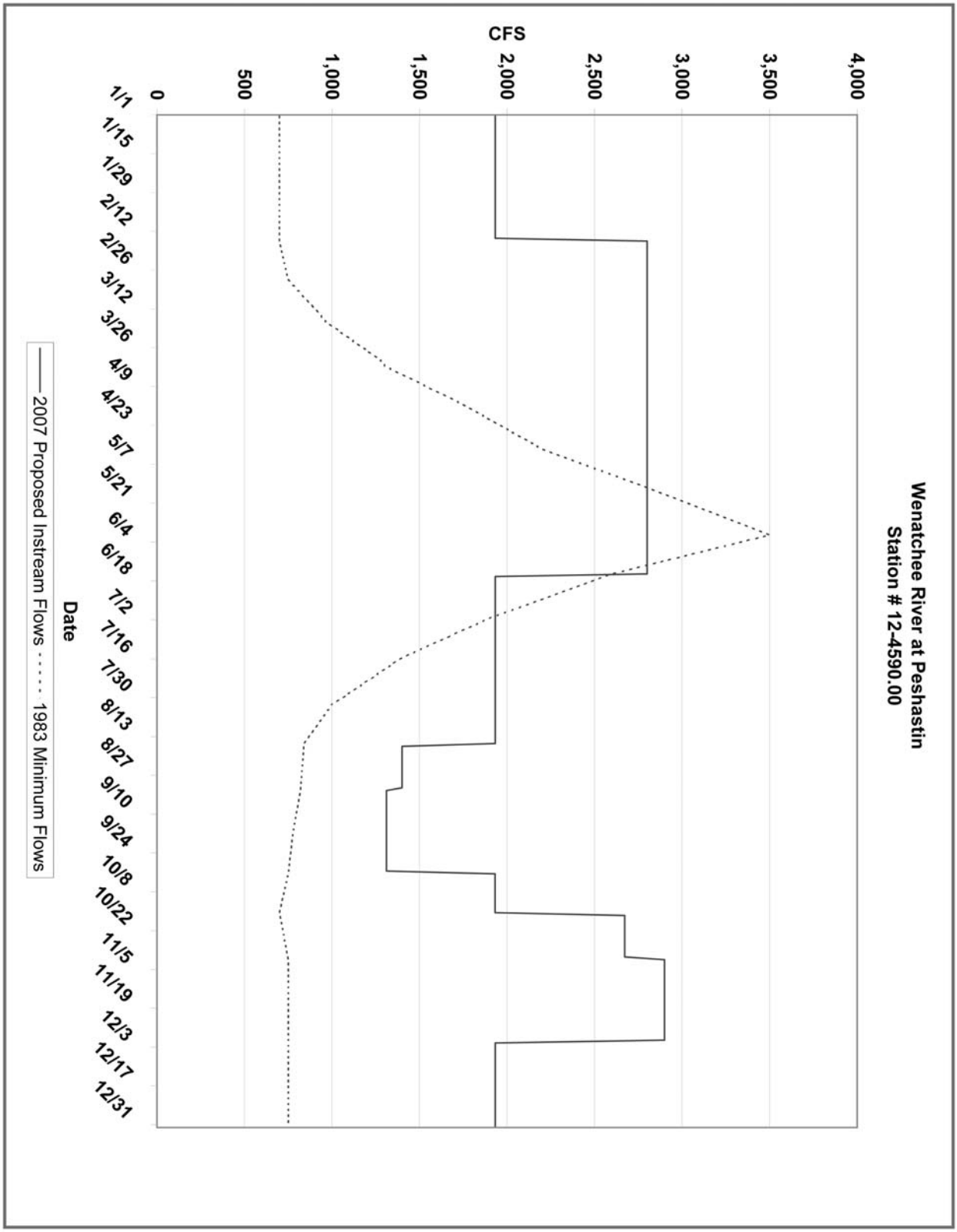
11/19
12/3
12/17
12/31
Date
1983 Minimum Flows


Wenatchee River at Peshastin
Station # 12-4590.00
CFS
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1/1
1/15
1/29
2/12
2/26
3/12
3/26
4/9
4/23
5/7
5/21
6/4
6/18
7/2
7/16
7/30
8/13
8/27
9/10
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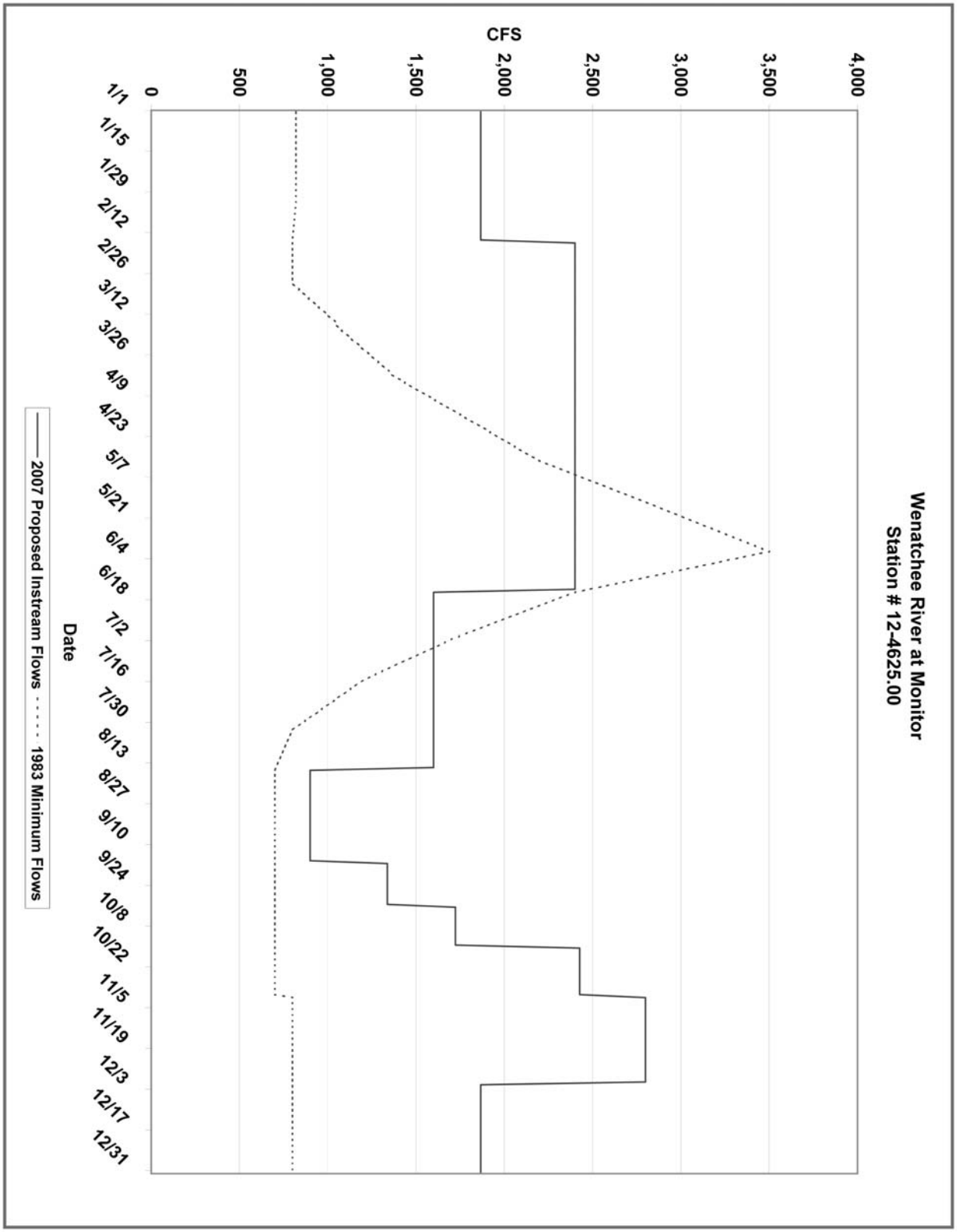
12/31
Date
2007 Proposed Instream Flows
1983 Minimum Flows



[Statutory Authority: Chapters 90.82, 90.54, 90.22, 90.03, and 90.44 RCW. 08-01-045 (Order 07-06), § 173-545-170, filed 12/12/07, effective 1/12/08.]

Chapter 173-546 WAC

WATER RESOURCES MANAGEMENT PROGRAM—ENTIAT RIVER BASIN WATER RESOURCE INVENTORY AREA (WRIA) 46

WAC

173-546-010	General provisions—Authority and applicability.
173-546-020	Purpose.
173-546-030	Definitions.
173-546-040	Establishment of stream management units.
173-546-050	Establishment of instream flows.
173-546-060	Lakes and ponds.
173-546-070	Reservation of water for specific future uses.
173-546-080	Maximum future allocation.
173-546-090	Future permitting actions.
173-546-100	Alternative sources of water.
173-546-110	Future changes and transfers.
173-546-120	Compliance and enforcement.
173-546-130	Appeals.
173-546-140	Regulation review.
173-546-150	Map.

WAC 173-546-010 General provisions—Authority and applicability. (1) This chapter is adopted under the authority of the Watershed Planning Act (chapter 90.82 RCW), Water Resources Act of 1971 (chapter 90.54 RCW), Minimum Water Flows and Levels Act (chapter 90.22 RCW), Water resource management (chapter 90.42 RCW), Regulation of public ground waters (chapter 90.44 RCW) and the Water resources management program rule (chapter 173-500 WAC).

(2) This chapter, including any subsequent additions and amendments, applies to all surface waters in the Entiat River basin, and all ground water hydraulically connected with those surface waters.

(3) This chapter shall not affect existing water rights, including perfected riparian rights, federal Indian and non-Indian reserved rights, or other appropriative rights existing on the effective date of this chapter, unless otherwise provided for in the conditions of the water right in question.

(4) This chapter does not limit the department's authority to establish flow requirements or conditions under other laws, including hydropower licensing under RCW 90.48.260.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-010, filed 8/3/05, effective 9/3/05.]

WAC 173-546-020 Purpose. (1) In enacting this chapter, the department uses the Entiat watershed plan as the framework for making future water resource decisions for the Entiat watershed, per RCW 90.82.130. The plan recommendations were approved by the Entiat watershed planning unit, a group composed of a broad base of water use interests, and also by Chelan County officials. The plan recommendations are therefore considered an expression of the public interest.

(2) The chapter creates a reservation for future uses that is senior to the instream flows set in WAC 173-546-050.

(3) This chapter sets forth the department's policies to guide the protection, use and management of Entiat River basin surface water and interrelated ground water resources. It protects existing water rights, establishes instream flows, and sets forth a program for the administration of future water allocation and use.

(4) The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Entiat River basin with the instream flows and levels necessary to protect and preserve wildlife, fish, scenic, aesthetic, recreation, water quality and other environmental values, navigational values, and stock watering requirements.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-020, filed 8/3/05, effective 9/3/05.]

WAC 173-546-030 Definitions. For the purposes of this chapter, the following definitions shall be used:

(1) **"Allocation"** means the designation of specific amounts of water for specific beneficial uses.

(2) **"Appropriation"** means the process of legally acquiring the right to specific amounts of water for beneficial uses, as consistent with the requirements of the ground and surface water codes and other applicable water resource statutes.

(3) **"Beneficial uses"** means uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, thermal power production, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

(4) **"Commercial agriculture"** means uses related to commercial orchards and vineyards, and commercial livestock and farming operations.

(5) **"Commercial/light industrial"** means a water supply for use by small businesses and commercial users. It also refers to the "value added" uses associated with agriculture, as defined by the Chelan County Code, Ch. 11.04.010, or any subsequent amendments. A "value added operation" means any activity or process that allows farmers to retain ownership and that alters the original agricultural product or commodity for the purpose of gaining a marketing advantage.

(6) **"Consumptive use"** means a use of water that reduces the amount of water in the water source.

(7) **"Department"** means the Washington state department of ecology.

(8) **"Domestic water use"** means, for the purposes of this chapter, use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, irrigation of not over one-half acre of lawn or garden per dwelling, and other incidental household uses. Stock watering is also included in this category. Stock watering uses must be consistent with the Chelan County Code, Section 11.88.030 or any subsequent amendments. It does not apply to feed lots and other activities which are not related to normal grazing land uses.

(9) **"Existing water right"** includes perfected riparian rights, federal Indian and non-Indian reserved rights or other appropriative rights.

(10) **"Hydraulic continuity"** means the interrelation between ground water (water beneath land surfaces or surface water bodies) and surface water (water above ground, such as lakes and streams).

(11) **"Instream flow"** as used in this chapter, has the same meaning as a minimum instream flow under chapter 90.82 RCW, a base flow under chapter 90.54 RCW, a minimum flow under chapter 90.03 or 90.22 RCW and an administrative flow in the Entiat watershed plan.

(12) **"Nonconsumptive use"** means a use of water that does not reduce the amount of water in the water source.

(13) **"Plan"** or **"watershed plan"** means the Entiat water resource inventory area (WRIA) management plan, approved by the Entiat WRIA planning unit on May 17, 2004, and by the Chelan County commissioners on September 13, 2004.

(14) **"Planning unit"** means the Entiat water resource inventory area (WRIA) planning unit (EWPU), or a successor which is mutually agreed upon by the EWPU. The planning unit was established in 1998 in accordance with chapter 90.82 RCW, Watershed Planning Act. The EWPU presently consists of the landowner steering committee, the Yakama Nation, a technical assistance group, and other interested stakeholders.

(15) **"Public water system"** means any system providing water for human consumption through pipes or other constructed conveyances, excluding a system serving only one single-family residence or a system with four or fewer connections all of which serve residences on the same farm. (Consistent with WAC 246-290-020; any subsequent amendments to WAC 246-290-020 will be incorporated by reference.)

(16) **"Reservation"** means an allocation of water set aside for future domestic, stock watering, agricultural, commercial and industrial beneficial uses. For the purposes of this chapter, the priority date of the reservation is senior to the instream flows set in WAC 173-546-050. "Reservation" is the same as "reserved water" in the Entiat WRIA management plan.

(17) **"Stream management unit"** means a stream segment, reach, or tributary used to describe the part of the relevant stream to which a particular use, action, instream flow level or reserve of water applies. Each of these units contains a control station. A map of the control points is included in this chapter (WAC 173-546-150).

(18) **"Withdrawal"** means the appropriation or use of ground water or surface water.

(19) **"WRIA"** means water resource inventory area. This term can be used interchangeably with "basin" and "watershed."

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-030, filed 8/3/05, effective 9/3/05.]

WAC 173-546-040 Establishment of stream management units. The department hereby establishes the following stream management units. The boundaries of the management units are shown on the map in WAC 173-546-150.

Stream Management Unit Information

Stream Management Unit Name Control Station Gauge #	Control Station by River Mile (RM); Section, Township and Range; Latitude (Lat.) and Longitude (Long.); Hydrologic Unit Code (HUC)	Stream Management Reach Description
USGS Gauge #12452990 Entiat River near Entiat, WA. ("Keystone Gauge") (Lower Entiat)	River Mile 1.4	From the confluence of the Entiat and Columbia rivers to the terminal glacial moraine at RM 16.2, including all tributaries except the Mad River.
	Sec. 18, T.25 N., R.21 E.W.M.	
	Lat. 47°39'48"	
	Long. 120°14'58" NAD 27	
	HUC 17020010	
USGS Gauge #12452800 Entiat River near Ardenvoir, WA (Upper Entiat)	River Mile 18	From the terminal glacial moraine at RM 16.2, to the Entiat River headwaters, including all tributaries.
	Sec. 27, T.27 N., R.19 E.W.M.	
	Lat. 47°49'07"	
	Long. 120°25'19" NAD 27	
	HUC 17020010	
USGS Gauge #12452890, Mad River at Ardenvoir	River Mile 0.35	From the confluence of the Mad River with the Entiat River to the Mad River headwaters, including all tributaries.
	Sec.19, T.26, R.20 E.W.M.	
	Lat. 47°44'13"	
	Long. 120°22'03" NAD 27	
	HUC 17020010	

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-040, filed 8/3/05, effective 9/3/05.]

WAC 173-546-050 Establishment of instream flows. (1) The instream flows established in this chapter are based on the recommendations of the Entiat planning unit and public input received during the rule-making process. These instream flows are established in accordance with RCW 90.82.080, and are necessary to meet the water resource management and ecosystem maintenance objectives of the Entiat watershed plan. Instream flows can serve to protect senior water rights.

(2) Instream flows established in this chapter protect stream flows from future withdrawals, and preserve flow levels that are necessary to protect wildlife, fish, water quality, scenic, aesthetic and other environmental values, navigational values, and stock watering requirements. In addition to protecting instream resources, instream flows serve to protect senior water rights.

(3) Instream flows established here are water rights. In accordance with RCW 90.82.080 (2)(a), the planning unit determined by unanimous vote that the priority date of the instream flows is the effective date of this chapter.

(4) All water rights established after the priority date of the instream flows, and not covered under the reservation, are expressly subject to these instream flows. Water rights junior to the instream flow may be exercised when flow or ground

water conditions will provide enough water to satisfy senior rights, including the instream flows. Withdrawals of water which would conflict with instream flows shall be authorized only in situations where it is clear that the overriding considerations of the public interest will be served.

(5) The reservation of water established in WAC 173-546-070 will have a priority date senior to the instream flows. Full use of the reservation will not diminish the protective levels established by the instream flows in WAC 173-546-050, and is necessary to meet the water resource management and ecosystem maintenance objectives under chapters 90.82 and 90.54 RCW.

(6) Instream flows are expressed in cubic feet per second (cfs). Instream flows are measured at the control stations identified in WAC 173-546-040.

(7) Instream flows are established for the stream management units in WAC 173-546-040, as follows:

Instream Flows in the Entiat River Basin
(cubic feet per second)

Month	Days	USGS Gauge #12452990	USGS Gauge #12452800	USGS Gauge #12452890
		Lower Entiat nr. Entiat, RM 1.4	Upper Entiat nr. Ardenvoir, RM 18	Mad River at Ardenvoir RM 0.35
January	1-31	185	175	32
February	1-29	185	175	32
March	1-15	185	175	32
	16-31	250	285	68
April	1-15	250	325	100
	16-30	350	375	100
May	1-15	474	375	100
	16-31	720	375	100
June	1-15	898	325	100
	16-30	617	325	100
July	1-15	359	275	68
	16-31	268	275	68
August	1-15	185	275	68
	16-31	185	275	51
September	1-30	185	175	32
October	1-31	185	175	32
November	1-30	185	175	32
December	1-31	185	175	32

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-050, filed 8/3/05, effective 9/3/05.]

WAC 173-546-060 Lakes and ponds. In accordance with RCW 90.54.020(3), lakes and ponds in the Entiat watershed shall be retained substantially in their natural condition, including those in the Wenatchee National Forest.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-060, filed 8/3/05, effective 9/3/05.]

WAC 173-546-070 Reservation of water for specific future uses. (1) Using the watershed plan as a primary expression of public interest, and consistent with the authority under RCW 90.54.050(1) and 90.82.130(4), the department determines that there is water available, and hereby reserves an amount of surface and ground water, up to five cubic feet per second (5 cfs), for specific future beneficial uses.

(a) The priority date for uses under the reservation is the effective date of this chapter.

(b) The reservation is not subject to the instream flows established in WAC 173-546-050.

(c) Beneficial uses eligible for the reservation include domestic, stock watering, commercial agriculture, and commercial/light industrial uses, consistent with the recommendations of the planning unit and the framework established by the Entiat watershed plan. The 5 cfs of reserved water use will be monitored at the USGS Gauge No. 12452990 (Entiat near Entiat, river mile 1.4), identified in the watershed plan as the "Keystone" gauge. Allocation of water from the reservation will be made as follows.

(2) Domestic and stock watering. The department may allocate up to 1 cfs for these uses. This amount is available for appropriation anywhere within the Entiat River basin.

(a) Outdoor irrigation. The department may allocate water for up to one-half acre of lawn or noncommercial garden from the domestic and stock watering reserve.

(3) Commercial agriculture. The department may allocate up to 3 cfs for these uses. This amount is available for appropriation only in the Lower Entiat stream management unit as identified in WAC 173-546-040, generally being within the lower 16.2 river miles of the Entiat River watershed, and downstream of the area known as the "Stillwater" reach.

(4) Commercial and light industrial uses. The department may allocate up to 1 cfs for these uses. This amount is available for appropriation only in the Lower Entiat stream management unit as identified in WAC 173-546-040, generally being within the lower 16.2 river miles of the Entiat River watershed, and downstream of the area known as the "Stillwater" reach.

(5) A water right permit issued from the reserve must be consistent with the requirements of RCW 90.03.290.

(6) All water uses from the reserve must be implemented using water use efficiency and conservation practices, consistent with the watershed plan.

(7) This reservation of water shall only be put to beneficial use within the stream management units defined by this chapter. Applications for the withdrawal of water for purposes outside of the stream management units defined in this chapter shall be denied by the department.

(8) A record of all withdrawals from the reservation shall be maintained by the department. For accounting purposes, the department shall use the assumptions and estimates outlined in the plan, which include:

(a) In-house domestic uses: A per capita net use of thirty-five gallons per day.

(b) Outdoor irrigation shall be consistent with the guidelines in Tables 4-14 and 4-15 (below), and with other relevant information as it becomes available.

(c) Commercial agriculture: The consumptive amount of the beneficial use shall be consistent with the crop irrigation requirement specified in Tables 4-14 and 4-15 (below), and with other relevant information as it becomes available. The consumptive amount shall also be consistent, when appropriate, with any amount of conveyance water made unavailable to the river through irrigation bypass.

Table 4-14. Monthly tree water use[1](ac-in) at WSU Tree Fruit Research Center, 1972-2002.

YEAR	APR	MAY	JUN	JUL	AUG	SEP	OCT[2]	SEASON TOTAL
1972	2.03	5.18	7.47	9.20	8.03	4.43	2.00	38.34
1973	2.28	5.40	9.22	11.48	9.80	4.60	2.00	44.78
1974	1.74	4.57	8.69	9.21	8.95	5.21	2.00	40.37
1975	1.72	5.26	8.33	10.49	8.88	4.66	2.00	41.34
1976	1.84	2.82	7.86	10.04	6.71	4.84	2.00	36.11
1977	1.69	4.49	6.67	8.32	5.43	4.32	2.00	32.92
1978	1.92	5.18	8.07	10.20	8.25	4.63	2.00	40.25
1979	2.10	3.78	8.11	9.45	8.31	3.28	2.00	37.03
1980	1.66	4.52	6.25	9.72	7.06	3.61	2.00	34.82
1981	1.61	4.26	6.19	8.53	7.63	3.76	2.00	33.98
1982	1.61	4.60	7.18	8.06	6.74	3.22	2.00	33.41
1983	1.44	5.20	6.66	7.18	6.53	3.89	2.00	32.90
1984	1.47	3.92	6.42	9.86	7.89	3.26	2.00	34.82
1985	1.72	5.18	8.34	10.71	7.93	3.13	2.00	39.01
1986	1.74	4.65	7.69	8.56	7.97	4.08	2.00	36.69
1987	1.88	4.75	7.30	8.28	8.09	4.46	2.00	36.76
1988	1.56	4.22	6.38	10.06	7.57	4.16	2.00	35.95
1989	1.79	4.47	7.65	9.40	7.13	4.43	2.00	36.87
1990	1.78	3.91	6.69	9.39	6.83	4.55	2.00	35.15
1991	1.87	4.21	6.41	10.00	7.42	4.48	2.00	36.39
1992	2.08	6.34	8.58	8.75	7.65	4.22	2.00	39.62
1993	1.10	4.75	6.36	7.46	7.20	3.90	2.00	32.77
1994	1.69	4.74	8.23	12.41	8.53	4.67	2.00	42.27
1995	1.47	5.28	7.90	10.52	7.90	4.66	2.00	39.73
1996	1.53	4.34	8.54	11.02	9.58	4.65	2.00	41.66
1997	1.14	4.27	7.22	9.16	7.30	3.48	2.00	34.57
1998	1.49	3.66	7.81	9.52	8.29	4.75	2.00	37.52
1999	1.60	4.57	8.03	9.31	7.26	4.00	2.00	36.77
2000	1.65	4.38	8.02	9.85	8.56	3.66	2.00	38.12
2001	1.39	4.98	7.06	10.23	7.65	4.35	2.00	37.66
2002	1.49	4.12	7.69	9.83	7.82	3.81	2.00	36.76
MO. AVG. SINCE 1972	1.68	4.58	7.52	9.55	7.77	4.17	2.00	37.27 ac-in

1. Data have already been adjusted using pan evaporation & KC value to approximate orchard tree water use.
2. The October value of 2 acre-inches was estimated based on miscellaneous October measurements provided by the WSU Tree Fruit Research Center, and conversations with Tim Smith, WSU Cooperative Extension. April through September values are based on data collected by T. Smith.

* Note: Actual irrigation rates must be 10 to 40% higher than tree use, depending on irrigation efficiency

(This table is from the watershed plan, based on the *State of Washington Irrigation Guide* and supplemented by Washington State Tree Fruit Research data collected in Wenatchee WA.)

Table 4-15. Average monthly tree and pasture/turf irrigation water use (ac-in) estimates.

Description of Value	Apr	May	Jun	Jul	Aug	Sep	Oct	Season (ac-in)
Average tree fruit water use by month, based on 1972-2002 WSU data.	1.68	4.58	7.52	9.55	7.77	4.17	2.00	37.27
Average tree water use by month, with 65% application efficiency.	2.58	7.05	11.57	14.69	11.95	6.42	3.08	57.34
Average Pasture/Turf water use by month (85% of WSU tree fruit water use avg. value).	1.43	3.89	6.39	8.12	6.60	3.54	1.70	31.68
Average Pasture/Turf water use by month, with 65% efficiency.	2.20	5.99	9.83	12.49	10.16	5.45	2.62	48.74

(This table is from the watershed plan, based on the *State of Washington Irrigation Guide* and supplemented by Washington State Tree Fruit Research data collected in Wenatchee WA.)

(d) Commercial and light industrial: The consumptive amount shall be the amount needed for the specific purpose, as determined by the department and/or the Chelan-Douglas health district.

(9) Since all uses from the reserve will have the same priority date, the following will guide water supply decisions in times of water shortage:

(a) Among the three use categories: Domestic and stockwatering uses will be met first, followed by commercial agriculture and finally commercial/light industrial.

(b) Within each use category, the date of first beneficial use will be used. The use with the earliest date will be satisfied first.

(10) The reservation is created in the context of the year 2025 planning horizon of the watershed plan. Future water supplies may also be available concurrently, using alternative water sources such as storage, reuse and conservation (WAC 173-546-100).

(11) The reservation will be evaluated by the department and the Entiat planning unit no less than every five years: 2010, 2015, and 2020. The allocated and unallocated amounts for each use will be reviewed, as well as the allocated and unallocated amounts for the entire reserve. Modifications to the program may therefore be implemented by rule, if needed.

(12) The department shall notify both Chelan County and the planning unit or its successor, in writing, when it determines that fifty percent, seventy-five percent, and one hundred percent, respectively, of the reservation is allocated. The department shall also issue a public notice in a newspaper of general circulation for the region at the same three junctures.

(13) The department shall require metering and reporting for permitted surface and ground water allocations from the reservation. If more accurate water use data is needed the department may, after consulting with the EWPU (or its successor) and Chelan County, require metering and reporting for ground water withdrawals otherwise exempted from permit requirements under RCW 90.44.050. Public water system providers will be required to meter.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-070, filed 8/3/05, effective 9/3/05.]

WAC 173-546-080 Maximum future allocation. (1)(a) The department determines that there are certain times when there are surface waters above the instream flows, referred to as "high flows." These high flows provide critical ecological functions such as channel and riparian zone maintenance, flushing of sediments, and fish migration. In order to protect the frequency and duration of these higher flows, the department hereby establishes maximum amounts of water/flow that can be withdrawn from specific streams at specific times above the instream flow levels.

(b) A maximum allocation shall be used to review future applications for beneficial uses from the mainstem Entiat and Mad rivers for the periods and in the amounts specified below:

(i) The maximum allocation from May 1 - June 30 is 100 cfs. Of that 100 cfs, 25 cfs may be allocated from the Mad River.

(ii) For the period of July 1-15, the maximum allocation is 67 cfs from the mainstem Entiat only.

(iii) For the period of April 16-30, the maximum allocation is 25 cfs from the Mad River only.

(iv) For the periods during which it is clear that no water is likely to be available above the instream flows, no maximum allocation amount is indicated.

Maximum Future Allocation, Entiat River Basin

Month	Days	Total Maximum Allocation, Mainstem Entiat (in cfs). Measured at USGS Gauge #12452990, Entiat River nr. Entiat, RM 1.4	Portion of Maximum Allocation Available From Mad River (in cfs). Measured at USGS Gauge #12452890, Mad River at Ardenvoir, RM 0.35
January	1-31		
February	1-29		
March	1-31		

Month	Days	Total Maximum Allocation, Mainstem Entiat (in cfs). Measured at USGS Gauge #12452990, Entiat River nr. Entiat, RM 1.4	Portion of Maximum Allocation Available From Mad River (in cfs). Measured at USGS Gauge #12452890, Mad River at Ardenvoir, RM 0.35
April	1-15		
	16-30		25
May	1-15	100	25
	16-31	100	25
June	1-15	100	25
	16-30	100	25
July	1-15	67	
	16-31		
August	1-31		
September	1-30		
October	1-31		
November	1-30		
December	1-31		

(2) The designation of a maximum allocation does not constitute a determination that water is available, as defined in RCW 90.03.290. A determination of water availability requires the application of four tests: Water is available; the use will not impair senior rights; water will be put to beneficial use; and the use is not detrimental to the public interest. Establishment of a water right from the allocation occurs after proper authorization from the department and after the water is first put to beneficial use. The water rights are subject to the instream flows established in WAC 173-546-050, and other provisions established in statutory, administrative and case law.

(3) The department shall require the metering and reporting of all permitted surface and ground water withdrawals from the maximum allocation.

(4) The department will maintain a record of the amount of water allocated from the Entiat and Mad Rivers. If the maximum amounts are fully appropriated, the department shall notify Chelan County and the planning unit or its successor, in writing. The department shall also issue a public notice in a newspaper of general circulation for the region.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-080, filed 8/3/05, effective 9/3/05.]

WAC 173-546-090 Future permitting actions. (1) Surface and ground water permits not subject to the instream flows established in WAC 173-546-050 may be issued if:

(a) The proposed use is nonconsumptive, and compatible with the intent of this chapter.

(b) The water use qualifies for the reservation established in WAC 173-546-070.

(2)(a) Future applications for surface waters that are not part of the reserve established in WAC 173-546-070 may be approved subject to the instream flows established in WAC 173-546-050 and the maximum water allocation limits established in WAC 173-546-080.

(b) Future applications for ground waters that are not part of the reservation established in WAC 173-546-070 may be approved subject to the instream flows established in WAC 173-546-050 and the maximum water allocation limits established in WAC 173-546-080. Based upon the findings in the watershed plan, the department determines that there is hydraulic continuity between surface water and ground water sources within both the Lower and Upper Entiat River management units established in WAC 173-546-040. Therefore, water rights shall be issued for ground water only if the department determines that the withdrawal of ground water with proposed mitigation in place would not interfere with or impair the instream flows or the maximum water allocation.

(3) No right to withdraw or store the public surface or ground waters of the Entiat River basin that conflict with the provisions of this chapter will hereafter be granted, except in cases where such rights will clearly serve overriding considerations of the public interest, as stated in RCW 90.54.020 (3)(a).

(4) All future surface and ground water permit holders shall be required to install and maintain measuring devices and report the data to the department in accordance with permit requirements. In addition, the department may require the permit holder to monitor stream flows and ground water levels.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-090, filed 8/3/05, effective 9/3/05.]

WAC 173-546-100 Alternative sources of water. (1) The legislature, in enacting chapter 90.82 RCW, required that strategies for increasing water supplies must be developed as part of the watershed plans. Such strategies may also be implemented through the watershed planning process. WAC 173-546-070 provides a limited reservation of water for specific new uses in the Entiat River basin. However, the ongoing need for reliable sources of new water continues. This need dictates the continued development and use of alternative sources of water, such as:

• Multipurpose water storage facilities;

• Conservation and efficiency measures applied to existing uses and the transfer of saved water; and

• Acquisition, leasing, establishment of a trust water rights program (including water banking).

(2) Alternative sources of water of equal or better quality than the proposed source can be used to improve stream flows for fish, offset impacts of withdrawals on stream flows and provide sources of water for future out-of-stream uses.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-100, filed 8/3/05, effective 9/3/05.]

WAC 173-546-110 Future changes and transfers. No changes to, or transfers of, existing surface and ground water rights in the Entiat River basin shall hereafter be granted if they conflict with the purpose of this chapter. Any change or transfer proposal can be approved only if there is a finding that existing rights, including the instream flows established in WAC 173-546-050, will not be impaired.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-110, filed 8/3/05, effective 9/3/05.]

WAC 173-546-120 Compliance and enforcement. (1) To obtain compliance with this chapter the department, with assistance from Chelan County, the planning unit or its successor and partners, shall prepare and distribute technical and educational information regarding the scope and requirements of this chapter to the public. This is intended to assist the public in complying with the requirements of their water rights and applicable water laws.

(2) When the department determines that a violation has occurred, it shall first attempt to achieve voluntary compliance. An approach to achieving this is to offer information and technical assistance to the person, in writing, identifying one or more means to accomplish the person's purposes within the framework of the law.

(3) To obtain compliance and enforce this chapter, the department may impose such sanctions as appropriate under authorities vested in it, including, but not limited to, issuing regulatory orders under RCW 43.27A.190; and imposing civil penalties under RCW 43.83B.336, 90.03.400, 90.03.-410, 90.03.600, 90.44.120 and 90.44.130.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-120, filed 8/3/05, effective 9/3/05.]

WAC 173-546-130 Appeals. All final written decisions of the department pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter can be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

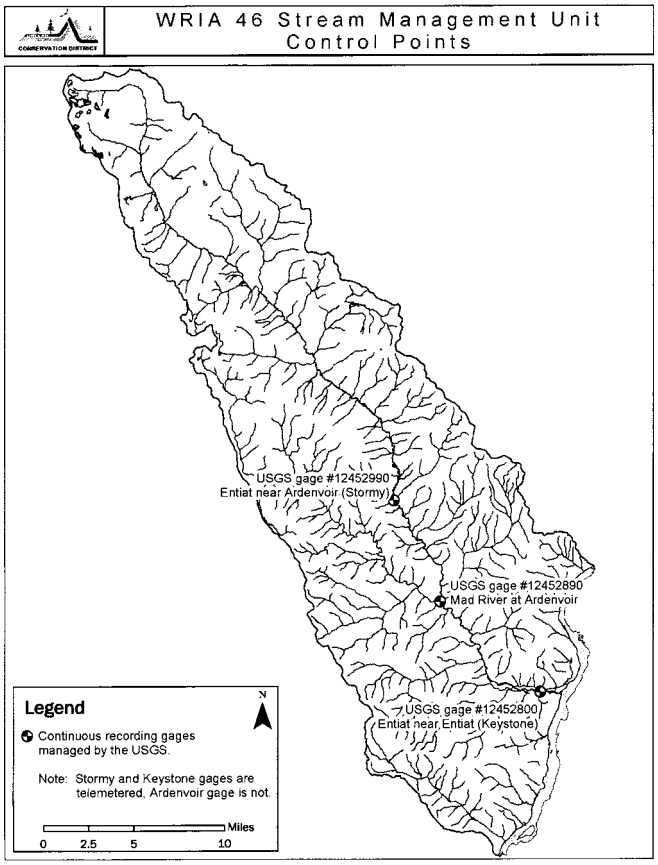
[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-130, filed 8/3/05, effective 9/3/05.]

WAC 173-546-140 Regulation review. Review of this chapter may be initiated by the department whenever significant new information is available, a significant change in conditions occurs, statutory changes are enacted that are determined by the department to require review of the chapter, or if modifications are necessary based on the review described in WAC 173-546-070. Chelan County, the planning unit, or other interested citizens with standing may request that the department initiate a review at any time. If the department initiates a review, it will consult with Chelan County and the planning unit or its successor. If necessary, the department will modify the appropriate provisions of this chapter by rule.

The reservation will be evaluated by the department and the Entiat planning unit no less than every five years: 2010, 2015, and 2020. The allocated and unallocated amounts for each use will be reviewed, as well as the allocated and unallocated amounts for the entire reserve. Modifications to the program may therefore be implemented by rule, if needed.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-140, filed 8/3/05, effective 9/3/05.]

WAC 173-546-150 Map. For the purposes of administering this chapter, the boundaries of the Entiat River basin identified in the figure below are presumed to accurately reflect the basin hydrology.



[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. 05-16-114 (Order 04-11), § 173-546-150, filed 8/3/05, effective 9/3/05.]

Chapter 173-548 WAC

WATER RESOURCES PROGRAM IN THE METHOW RIVER BASIN, WRIA 48

WAC

173-548-010	General provision.
173-548-020	Establishment of base flows.
173-548-030	Future allocations—Reservation of surface water for beneficial uses.
173-548-040	Priority of future water rights during times of water shortage.
173-548-050	Streams and lakes closed to further consumptive appropriations.
173-548-060	Ground water.
173-548-070	Effect on prior rights.
173-548-080	Enforcement.
173-548-090	Appeals.
173-548-100	Regulation review.

WAC 173-548-010 General provision. These rules, including any subsequent additions and amendments, apply to waters within and contributing to the Methow River basin, WRIA 48 (see WAC 173-500-040). Chapter 173-500 WAC,

the general rules of the department of ecology for the implementation of the comprehensive water resources program, applies to this chapter 173-548 WAC.

[Order DE 76-37, § 173-548-010, filed 12/28/76.]

WAC 173-548-020 Establishment of base flows. (1) Base flows are established for stream management units with monitoring to take place at certain control points as follows:

STREAM MANAGEMENT UNIT INFORMATION

Stream Management Unit Name, Control Station Name and Number	Control Station Location by River Mile, Section, Township, Range	Affected Stream Reach (includes tributaries)
Lower Methow		
Methow R. nr. Pateros (12.4499.50)	6.7 20-30-23E	Methow River confluence with Wells Pool to confluence with Twisp River.
Middle Methow		
Methow R. nr. Twisp (12.4495.00)	40.0 17-33-22E	Methow River from confluence with Twisp River to confluence with Chewack River.
Upper Methow		
Methow R. nr. Winthrop (12.4473.89)	50.2 2-34-21E	Methow River from confluence with Chewack River to confluence with Little Boulder Creek and including Little Boulder Creek.
Methow Headwaters		
Methow R. at Little Boulder Cr. (12.4473.83)	65.3 25-36-19E	Methow River from confluence with Little Boulder Creek to headwaters.
Early Winters Creek		
Early Winters Cr. near Mazama	27-36-19E	Early Winters Creek from confluence with Methow River to headwaters.
Chewack River		
Chewack R. nr. Boulder Creek (12.4475.00)	8.7 35-36-21E	Chewack River confluence with Methow River to headwaters.
Twisp River		
Twisp R. nr. Twisp (12.4489.98)	0.3 7-33-22E	Twisp River from confluence with Methow River to headwaters.

(2) Base flows established for the stream management units in WAC 173-548-020(1) are as follows:

Base Flows in the Methow River
(All Figures in Cubic Feet Per Second)

[CODIFICATION NOTE: The graphic presentation of this table has been varied slightly in order that it would fall within the printing specification for the Washington Administrative Code. The following table was too wide to be accommodated in the width of the WAC column. The table as codified has been divided into two tables with Part 1 covering the Lower Methow, Middle Methow and Upper Methow and with Part 2 covering the Methow Headwaters, Early Winters Creek, Chewack River and Twisp River.]

PART 1

Month	Day	Lower Methow (12.4499.50)	Middle Methow (12.4495.00)	Upper Methow (12.4473.89)
Jan.	1	350	260	120
	15	350	260	120
Feb.	1	350	260	120
	15	350	260	120
Mar.	1	350	260	120
	15	350	260	120
Apr.	1	590	430	199
	15	860	650	300
May	1	1,300	1,000	480
	15	1,940	1,500	690
Jun.	1	2,220	1,500	790
	15	2,220	1,500	790
Jul.	1	2,150	1,500	694
	15	800	500	240
Aug.	1	480	325	153
	15	300	220	100
Sep.	1	300	220	100
	15	300	220	100
Oct.	1	360	260	122
	15	425	320	150
Nov.	1	425	320	150
	15	425	320	150
Dec.	1	390	290	135
	15	350	260	120

PART 2

Month	Day	Methow Headwaters (12.4473.83)	Early Winters Creek	Chewack River (12.4475.00)	Twisp River (12.4489.98)
Jan.	1	42	10	56	34
	15	42	10	56	34
Feb.	1	42	10	56	34
	15	42	10	56	34
Mar.	1	42	10	56	34
	15	42	10	56	34
Apr.	1	64	14	90	60
	15	90	23	140	100
May	1	130	32	215	170
	15	430	108	290	300
Jun.	1	1,160	290	320	440
	15	1,160	290	320	440
Jul.	1	500	125	292	390
	15	180	45	110	130
Aug.	1	75	20	70	58
	15	32	8	47	27
Sep.	1	32	8	47	27
	15	32	8	47	27
Oct.	1	45	11	56	35
	15	60	15	68	45
Nov.	1	60	15	68	45
	15	60	15	68	45
Dec.	1	51	12	62	39
	15	42	10	56	34

(3) Base flow hydrographs, as represented in Figure 1 in the document entitled "water resources management program, Methow River basin" dated 1976, shall be used for definition of base flows on those days not specifically identified in WAC 173-548-020(2) and 173-548-030.

(4) All rights hereafter established shall be subject to the base flows established in WAC 173-548-020 (1) through (3), except as provided under WAC 173-548-030 herein.

(5) Future appropriations of water which would conflict with base flows shall be authorized, by the director, only in those situations when it is clear that overriding considerations of the public interest will be served.

[Order DE 76-37, § 173-548-020, filed 12/28/76.]

WAC 173-548-030 Future allocations—Reservation of surface water for beneficial uses. (1) The department

determines that there are surface waters available for appropriation from the stream management units specified in the amount specified in cubic feet per second (cfs) during the time specified as follows:

(a) Maximum surface water available for future allocation from the indicated reach is as follows:

Month	Lower Methow	Middle Methow	Upper Methow	Methow Headwaters	Early Winters Creek	Chewack River	Twisp River
Oct.	95	50	44	15	29	09	14
Nov.	116	101	46	06	21	10	15
Dec.	112	99	44	17	26	10	15
Jan.	50	36	26	08	19	03	09
Feb.	51	37	29	09	19	04	10
Mar.	147	139	80	38	19	24	18
Apr.	565	590	273	336	35	118	148
May	2,922	2,927	784	412	403	809	703
Jun.	3,116	2,853	1,017	1,249	294	1,292	890
Jul.	965	877	583	608	189	308	298
Aug.	214	192	203	109	94	70	70
Sep.	62	55	76	33	47	23	26

All figures in cubic feet per second.

(b) The control station for each reach is defined in WAC 173-548-020.

(c) The appropriation limit is set forth to be an amount equal to the one in two year natural reach discharge on a monthly basis for all management reaches except Early Winters Creek. The appropriation limit for Early Winters Creek is set forth to be an amount equal to the estimated natural mean monthly streamflow for that stream.

(2) The amounts of water referred to in WAC 173-548-030(1) above are allocated for beneficial uses in the future as follows:

(a) Allocation of surface waters by use category (April through September):

Use Description	Apr.	May	Jun.	Jul.	Aug.	Sep.
Lower Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	860	1,940	2,220	800	300	300
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Middle Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	650	1,500	1,500	500	220	220
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Upper Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	300	690	790	240	100	100
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Methow Headwaters						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	90	430	1,160	180	32	32
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Early Winters Creek						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	23	108	290	45	8.0	11.0
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Chewack River						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	140	290	320	110	47	47
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Twisp River						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	100	300	440	130	27	27
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					

All figures in cubic feet per second

(b) Allocation of surface waters by use category (October through March):

Use Description	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Lower Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	425	425	350	350	350	350
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Middle Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	320	320	260	260	260	260
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Upper Methow						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	150	150	120	120	120	120
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Methow Headwaters						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	60	60	42	42	42	42
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					

Use Description	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Early Winters Creek						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	15	15	10	10	10	10
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Chewack River						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	68	68	56	56	56	56
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					
Twisp River						
Single Domestic and Stock Use	2.0	2.0	2.0	2.0	2.0	2.0
Base Flow	45	45	34	34	34	34
Public Water Supply, Irrigation, and Other Uses	Remaining waters up to the appropriation limit set forth in WAC 173-548-030 (1)(c)					

All figures in cubic feet per second.

(c) Allocations presented in this section do not limit the utilization of waters stored for later release, provided such storage does not infringe upon existing rights or base flow and is duly permitted under RCW 90.03.290 and 90.03.350.

(d) As the amount of water allocated for each category of use approaches the amount available for future allocation set forth in WAC 173-548-030(1), the department shall review the program to determine whether there is a need for program revision.

[Order DE 76-37, § 173-548-030, filed 12/28/76.]

WAC 173-548-040 Priority of future water rights during times of water shortage. (1) As between rights established in the future pertaining to waters allocated in WAC 173-548-030 (2)(a) and (b), all rights subject to this program shall be regulated in descending order of use category priority regardless of the date of the priority of right.

(2) As between rights established in the future within a single use category allocation of WAC 173-548-030, the date of priority shall control with an earlier dated right being superior to those rights with later dates.

[Order DE 76-37, § 173-548-040, filed 12/28/76.]

WAC 173-548-050 Streams and lakes closed to further consumptive appropriations. The department, having determined based on existing information that there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the streams and lakes listed in (a) and (b), and ground water hydraulically connected with these surface waters to further consumptive appropriation[.] This includes rights to use water consumptively established through permit procedures and ground water withdrawals otherwise exempted from permit under RCW 90.44.050. Specific situations in which well construction may be approved are identified.

No wells shall be constructed for any purposes, including those exempt from permitting under RCW 90.44.050, unless one or more of the following conditions have been met and construction of the well has been approved in writing by the department prior to the beginning of well construction:

(1) The proponent has a valid water right permit recognized by the department. For an existing community domestic use, a water right permit must be held by a purveyor of an approved system. (For the purposes of this chapter, an approved water system is one in compliance with the state drinking water regulations, chapter 246-290 WAC and the state surface and ground water codes, chapters 90.03 and 90.44 RCW); or

(2) The proponent has obtained a valid state surface or ground water right through a transfer approved by the department under the statutory authority of chapter 90.03 or 90.44 RCW; or

(3) The proponent is replacing or modifying an existing well developed under the exemption from permit clause of RCW 90.44.050 and this has been approved in writing by the department; or,

(4) If the ground water being sought for withdrawal has been determined by the department not to be hydraulically connected with surface waters listed as closed, the department may approve a withdrawal. When insufficient evidence is available to the department to make a determination that ground and surface waters are not hydraulically connected, the department shall not approve the withdrawal of ground water unless the person proposing to withdraw the ground water provides additional information sufficient for the department to determine that hydraulic continuity does not exist and that water is available.

(a) STREAM CLOSURES

The following streams are closed all year, including all ground waters hydraulically connected to these streams.

Stream Name (Includes Tributaries)
Wolf Creek
Bear Creek (Davis Lake)
Thompson Creek
Beaver Creek
Alder Creek
Benson Creek
Texas Creek
Libby Creek
Cow Creek
Gold Creek
McFarland Creek
Squaw Creek
Black Canyon Creek
French Creek

(b) LAKE CLOSURES

The following lakes are closed all year, including all ground waters hydraulically connected to these lakes:

Name	Location
Alta Lake	3 mi. SW of Pateros
Black Lake	25 mi. N of Winthrop
Black Pine Lake	9 mi. SW of Twisp
Crater Lake	10 mi. W of Carlton
Davis Lake	Bear Creek Drainage

Name	Location
Eagle Lake	11 mi. SW of Carlton
French Creek	Sec.28, T.31N., R.23E.
Libby Lake	10 mi. W of Carlton
Louis Lake	20 mi. W of Winthrop
Middle Oval Lake	16 mi. W of Carlton
North Lake	20 mi. W of Winthrop
Patterson Lake	Sec.8, T.34N., R.21E.
Pearrygin Lake	Sec.36, T.35N., R.21E.
Slate Lake	14 mi. W of Winthrop
Sunrise Lake	16 mi. W of Methow
Upper Eagle Lake	12 mi. W of Carlton
West Oval Lake	16 mi. W of Carlton

[Statutory Authority: Chapters 34.05, 90.54, 18.104, 90.03 and 90.44 RCW. 91-23-093 (Order 91-27), § 173-548-050, filed 11/19/91, effective 12/20/91; Order DE 76-37, § 173-548-050, filed 12/28/76.]

WAC 173-548-060 Ground water. If it is determined that a future development of ground water measurably affects surface waters subject to the provisions of chapter 173-548 WAC, then rights to said ground water shall be subject to the same conditions as affected surface waters.

[Order DE 76-37, § 173-548-060, filed 12/28/76.]

WAC 173-548-070 Effect on prior rights. Nothing in this chapter shall be construed to lessen, enlarge, or modify existing rights acquired by appropriation or otherwise, and legally vested prior to the effective date of this chapter.

[Order DE 76-37, § 173-548-070, filed 12/28/76.]

WAC 173-548-080 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-548-080, filed 6/9/88.]

WAC 173-548-090 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-548-090, filed 6/9/88.]

WAC 173-548-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-548-100, filed 6/9/88.]

Chapter 173-549 WAC

WATER RESOURCES PROGRAM IN THE OKANOGAN RIVER BASIN, WRIA 49

WAC

173-549-010	General provision.
173-549-015	Purpose.
173-549-016	Definition.
173-549-020	Establishment of minimum instream flows.
173-549-025	Stream closures.
173-549-027	Policy statement for future permitting actions.
173-549-035	Lakes.
173-549-060	Ground water.
173-549-070	Effect on prior rights and exemptions.
173-549-080	Future rights.
173-549-090	Enforcement.
173-549-095	Appeals.
173-549-100	Regulation review.
173-549-900	Minimum instream flow hydrographs.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-549-030	Future allocations—Reservation of surface water for beneficial uses. [Order DE 76-25, § 173-549-030, filed 7/14/76.] Repealed by 84-13-076 (Order DE 84-15), filed 6/20/84. Statutory Authority: Chapters 90.54 and 90.22 RCW.
173-549-040	Priority of future water rights during times of water shortage. [Order DE 76-25, § 173-549-040, filed 7/14/76.] Repealed by 84-13-076 (Order DE 84-15), filed 6/20/84. Statutory Authority: Chapters 90.54 and 90.22 RCW.
173-549-050	Streams and lakes closed to further consumptive appropriations. [Order DE 76-25, § 173-549-050, filed 7/14/76.] Repealed by 84-13-076 (Order DE 84-15), filed 6/20/84. Statutory Authority: Chapters 90.54 and 90.22 RCW.

WAC 173-549-010 General provision. These rules apply to waters within the Okanogan River Basin (WRIA 49) as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (the Water Resources Act of 1971) and chapter 90.22 RCW (Minimum water flows and levels) and in accordance with chapter 173-500 WAC (Water resources management program).

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-010, filed 6/20/84; Order DE 76-25, § 173-549-010, filed 7/14/76.]

WAC 173-549-015 Purpose. Chapter 90.54 RCW (the Water Resources Act of 1971) requires that utilization and management of the waters of the state shall be guided by a number of fundamentals, including the following:

> "(1) Uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state, are declared to be beneficial." (RCW 90.54.020(1).)

The act further specifies that "Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values." (RCW 90.54.020 (3)(a).)

The purpose of this chapter is to satisfy the requirements of RCW 90.54.020 (3)(a) while, at the same time, allowing the continued use of water for other beneficial uses such as agriculture, which is acknowledged as a vital activity greatly benefiting the citizens of the Okanogan Basin and the state of Washington.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-015, filed 6/20/84.]

WAC 173-549-016 Definition. For the purposes of this chapter, the term minimum instream flow shall be synonymous with the term base flow as defined in chapter 90.54 RCW and the term minimum flow as defined in chapter 90.22 RCW.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-016, filed 6/20/84.]

WAC 173-549-020 Establishment of minimum instream flows. (1) Minimum instream flows are established for stream management units with monitoring to take place at certain control points as follows:

Stream Management Unit Information

Stream Management Unit Name, Control Station Name and Number	Control Station Location by River Mile, Section, Township, Range	Affected Stream Reach
Lower Okanogan		
Okanogan R. at Malott (12447200)	17.0, 9-32-25E	Okanogan River confluence with Wells Pool to confluence of Chewiliken Cr.
Middle Okanogan		
Okanogan R. nr. Tonasket (12445000)	50.8, 8-36-27E	Okanogan River confluence of Chewiliken Creek to confluence Similkameen River
Upper Okanogan		
Okanogan R. at Oroville (12439500)	77.3, 27-40-27E	Okanogan River confluence of Similkameen River to Osoyoos Lake
Similkameen		
Similkameen R. at Nighthawk (12442500)	15.8, 7-40-26E	Similkameen River confluence with Okanogan River to Canadian Border

(2) Minimum instream flows established for the stream management units in WAC 173-549-020(1) are as follows:

Minimum Instream Flows in the Okanogan River
(All Figures in Cubic Feet Per Second)

Month	Day	Lower Okanogan 12447200	Middle Okanogan 1244500	Upper Okanogan 124426000	Similkameen 12439500
Jan.	1	860	800	320	400
	15	830	800	320	400
Feb.	1	820	800	320	400
	15	850	800	320	400
Mar.	1	880	800	320	425
	15	900	800	320	450
Apr.	1	925	910	330	510
	15	1,100	1,070	340	640
May	1	1,750	1,200	350	1,100
	15	3,800	3,800	500	3,400
Jun.	1	3,800	3,800	500	3,400
	15	3,800	3,800	500	3,400
Jul.	1	2,100	2,150	420	1,900
	15	1,200	1,200	350	1,070
Aug.	1	800	840	320	690
	15	600	600	300	440
Sept.	1	620	600	300	400
	15	700	600	300	400
Oct.	1	750	730	330	450
	15	960	900	370	500
Nov.	1	950	900	370	500
	15	950	900	320	500
Dec.	1	930	900	320	500
	15	900	850	320	450

(3) Minimum instream flow hydrographs, as represented in WAC 173-549-900, shall be used for definition of minimum instream flows on those days not specifically identified in WAC 173-549-020(2).

(4) Future consumptive water right permits hereafter issued for diversion of surface water from the mainstem Okanogan River and the Similkameen River shall be expressly subject to minimum instream flows established in WAC 173-549-020 (1) through (3) except those described in WAC 173-549-070.

(5) Projects that would reduce the flow in a portion of a stream's length (e.g. hydroelectric projects that bypass a portion of a stream) will be considered consumptive only with respect to the affected portion of the stream. Such projects will be subject to instream flows as specified by the department. These flows may be those established in WAC 173-549-020 or, when appropriate, may be flows specifically tailored to that particular project and stream reach. When studies are required to determine such reach- and project-specific flow requirements, the department may require the project proponent to conduct such studies.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-020, filed 6/20/84; Order DE 76-25, § 173-549-020, filed 7/14/76.]

WAC 173-549-025 Stream closures. (1) Consistent with the provisions of chapter 90.54 RCW, it is the policy of the department to preserve an appropriate minimum instream flow in all perennial streams and rivers of the Okanogan River Basin for protection of instream values.

(2) In keeping with this policy, a partial year closure from May 1 to October 1 will be established on all perennial streams in the basin except those with established minimum instream flows as described in WAC 173-549-020.

(3) The upper Okanogan stream management unit as established in WAC 173-549-020(1) is closed to further consumptive appropriation from June 15 through August 31 with the exception of single-domestic use and stockwatering use, provided that no alternative source of supply is available.

(4) When a project (as described in WAC 173-549-020(5)) is proposed on a stream that is closed to further appropriations, the department shall deny the water right application unless the project proponent can adequately demonstrate that the project does not conflict with the intent of the closure.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-025, filed 6/20/84.]

WAC 173-549-027 Policy statement for future permitting actions. (1) Consistent with the provisions of chapter 90.54 RCW, it is the policy of the department to preserve an appropriate minimum instream flow in all perennial streams and rivers as well as the water levels in all lakes in the Okanogan River Basin by encouraging the use of alternate sources of water which include (a) ground water, (b) storage water, or (c) acquisition of existing water rights.

(2) All future permits to appropriate water from the Okanagan River, the Similkameen River and perennial tributaries shall be subject to the required flows at all downstream control stations as established in WAC 173-549-020.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-027, filed 6/20/84.]

WAC 173-549-035 Lakes. (1) In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. In considering future water right applications, the department shall deny any application for surface or ground water which will result in a significant decrease in lake level or in the stream flow of any stream draining the lake, except that no decrease in stream flow shall be allowed during the May 1 - October 1 stream closure period.

(2) Notwithstanding the above, nothing in this chapter shall limit the utilization of waters stored for later release, provided such storage does not infringe upon existing rights or instream flow and is duly permitted under RCW 90.03.290 and 90.03.350.

(3) Any future water rights for waters from Osoyoos Lake or from ground waters determined to be in significant hydraulic continuity with Osoyoos Lake, issued after the effective date of this chapter and upon completion of the new Osoyoos Lake outlet control structure, shall be subject to the maintenance of a water surface level of 910.5 feet USCGS in Osoyoos Lake and said diversions shall be curtailed when the lake elevation drops below elevation 910.5 feet USCGS.

(4) Notwithstanding the provisions of this chapter, the construction and operation of the proposed new outlet control structure for Osoyoos Lake shall be consistent with the terms and conditions of the International Joint Commission Order of Approval signed on December 9, 1982, pursuant to the 1909 Boundary Waters Treaty.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-035, filed 6/20/84.]

WAC 173-549-060 Ground water. If department investigations determine that there is significant hydraulic continuity between surface water and the proposed ground water source, any water right permit or certificate issued shall be subject to the same conditions as affected surface waters. If department investigations determine that withdrawal of ground water from the source aquifers would not interfere with stream flow during the period of stream closure or with maintenance of minimum instream flows, then applications to appropriate public ground waters may be approved.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-060, filed 6/20/84; Order DE 76-25, § 173-549-060, filed 7/14/76.]

WAC 173-549-070 Effect on prior rights and exemptions. (1) Nothing in this chapter shall affect any existing water rights including, among others, riparian, appropriative, and federal Indian and non-Indian reserved rights, existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities.

(2) Single domestic use and stockwatering use shall be exempt from the provisions established in this chapter except that, when the cumulative impacts of numerous domestic diversions begins to significantly affect the quantity of water available for instream uses or the maintenance of lake levels, then any water rights issued after that time shall be issued only for in-house use if no alternative supply is available.

(3) Nonconsumptive uses which are compatible with the intent of the chapter may be approved.

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-070, filed 6/20/84; Order DE 76-25, § 173-549-070, filed 7/14/76.]

WAC 173-549-080 Future rights. No rights to divert or store public surface or ground waters of the Okanogan River Basin, WRIA 49, shall hereafter be granted which shall conflict with the purpose of this chapter except as provided in RCW 90.54.020 (3)(a).

[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-080, filed 6/20/84.]

WAC 173-549-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-549-090, filed 6/9/88. Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-090, filed 6/20/84.]

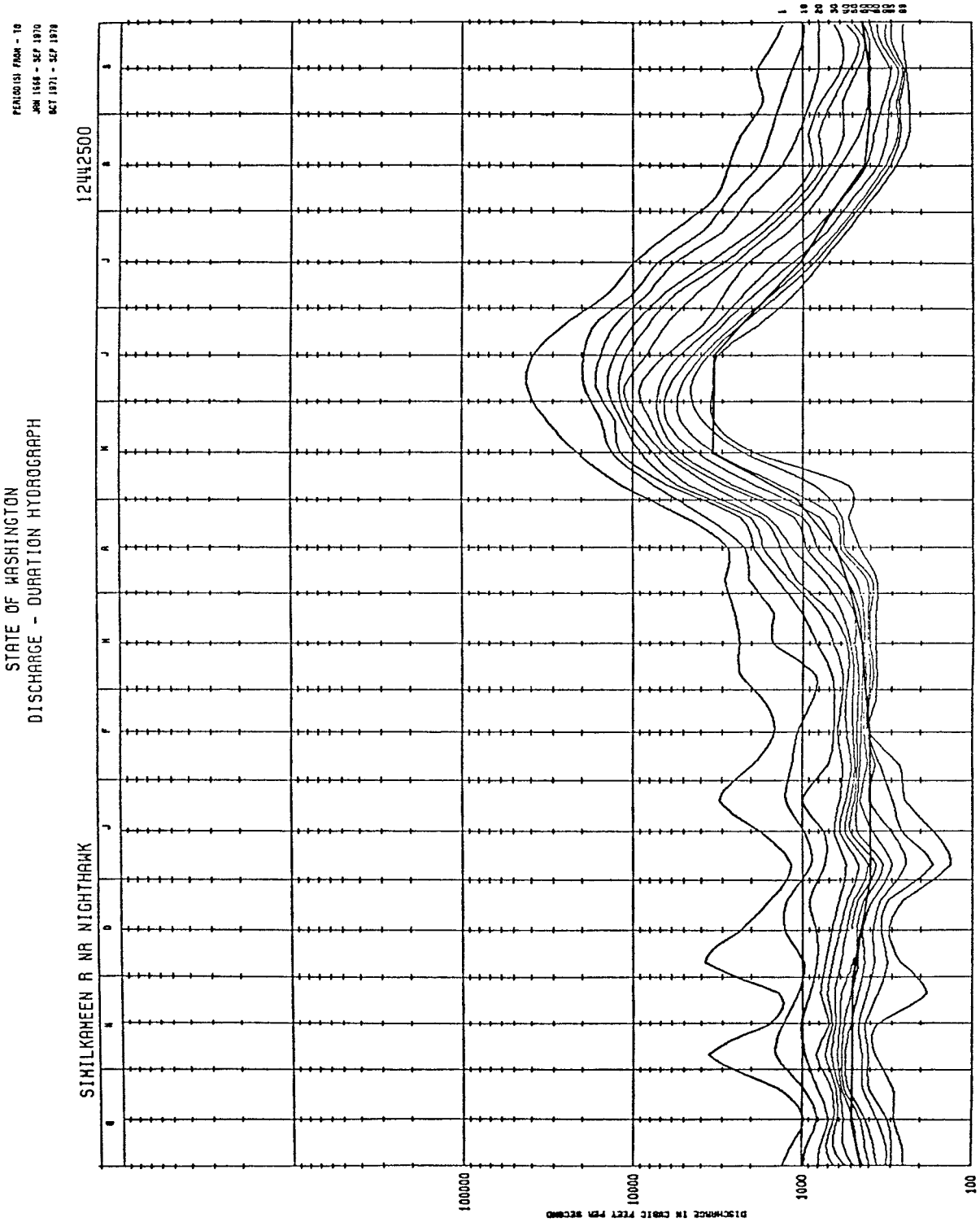
WAC 173-549-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

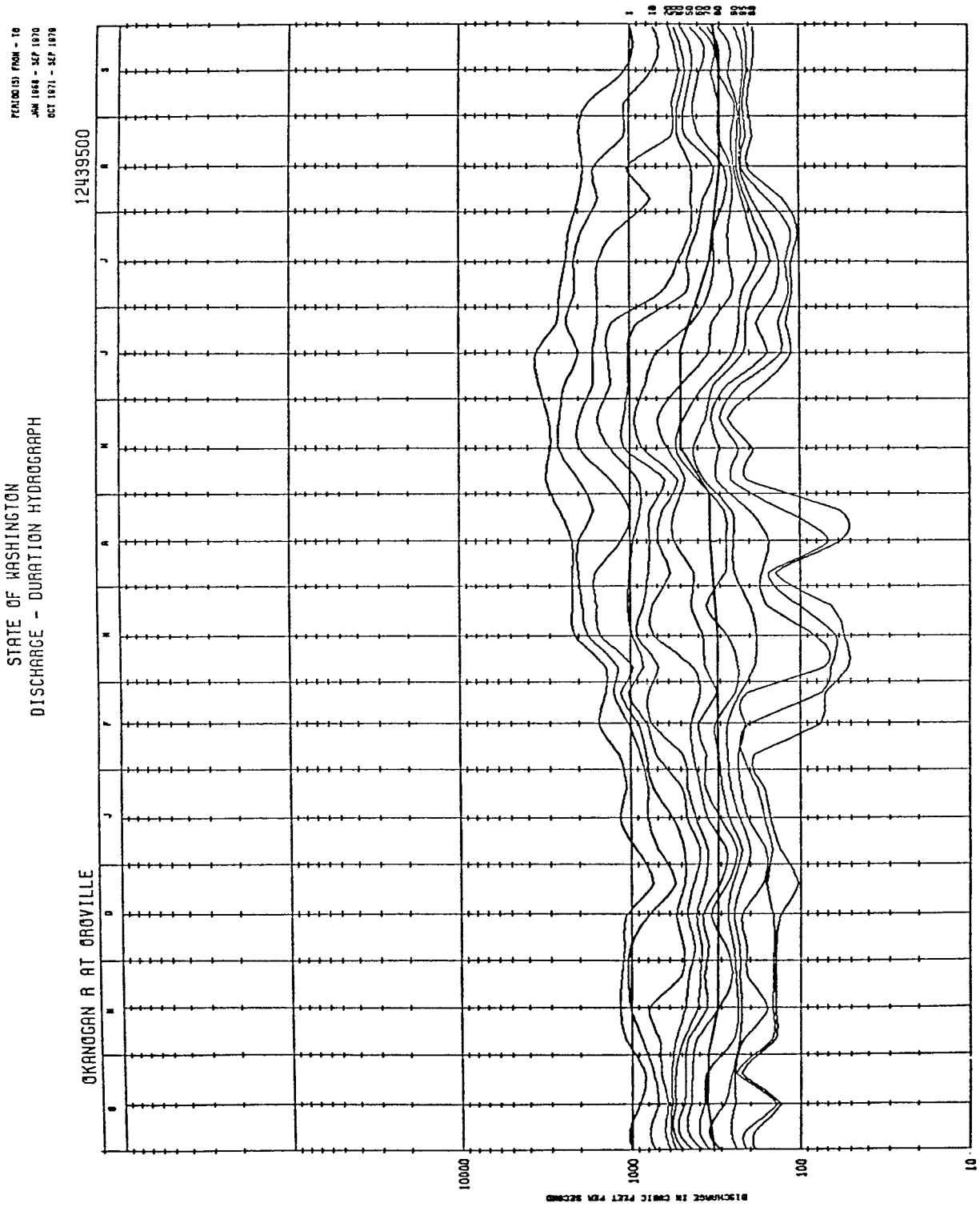
[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-549-095, filed 6/9/88.]

WAC 173-549-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-549-100, filed 6/9/88. Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-100, filed 6/20/84.]

WAC 173-549-900 Minimum instream flow hydrographs.

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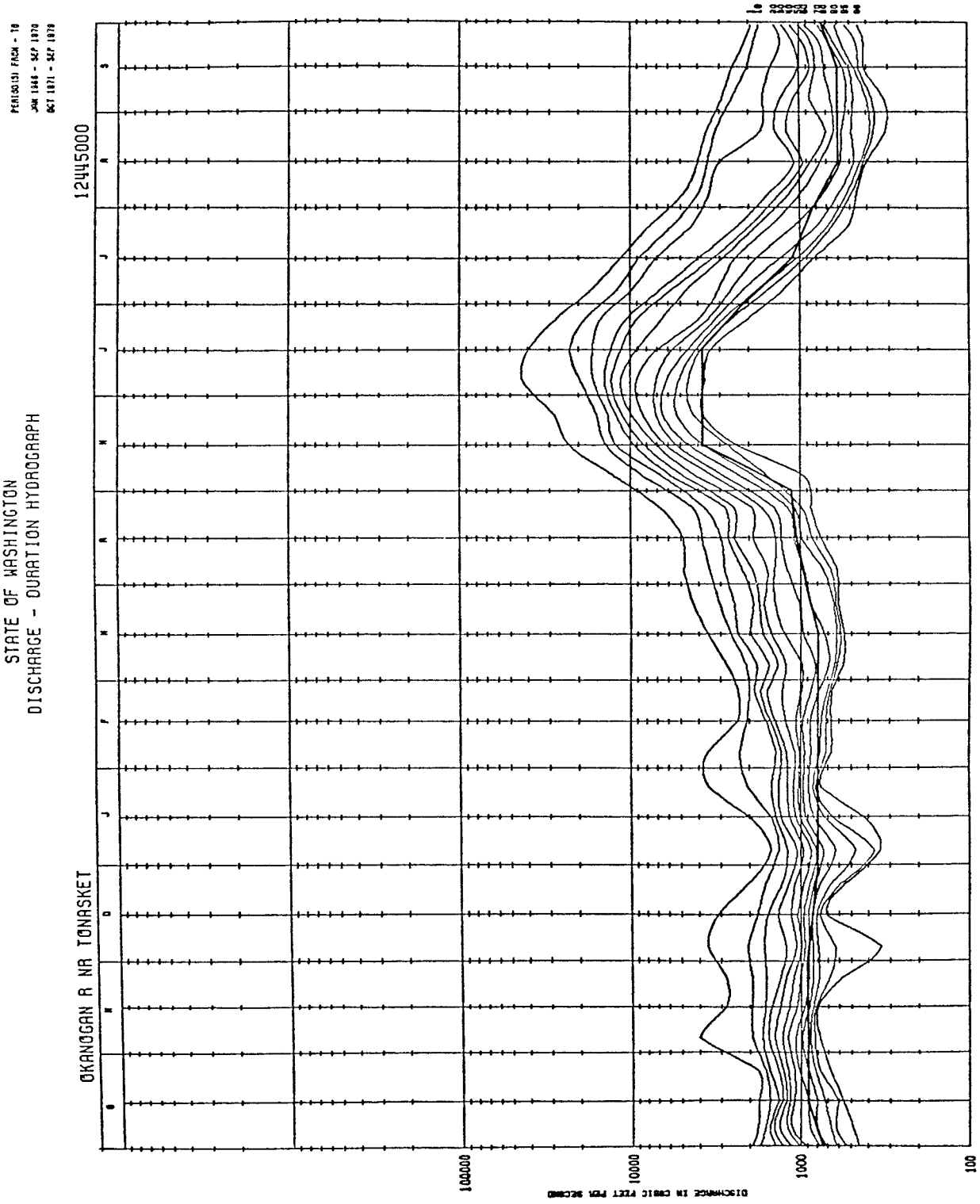
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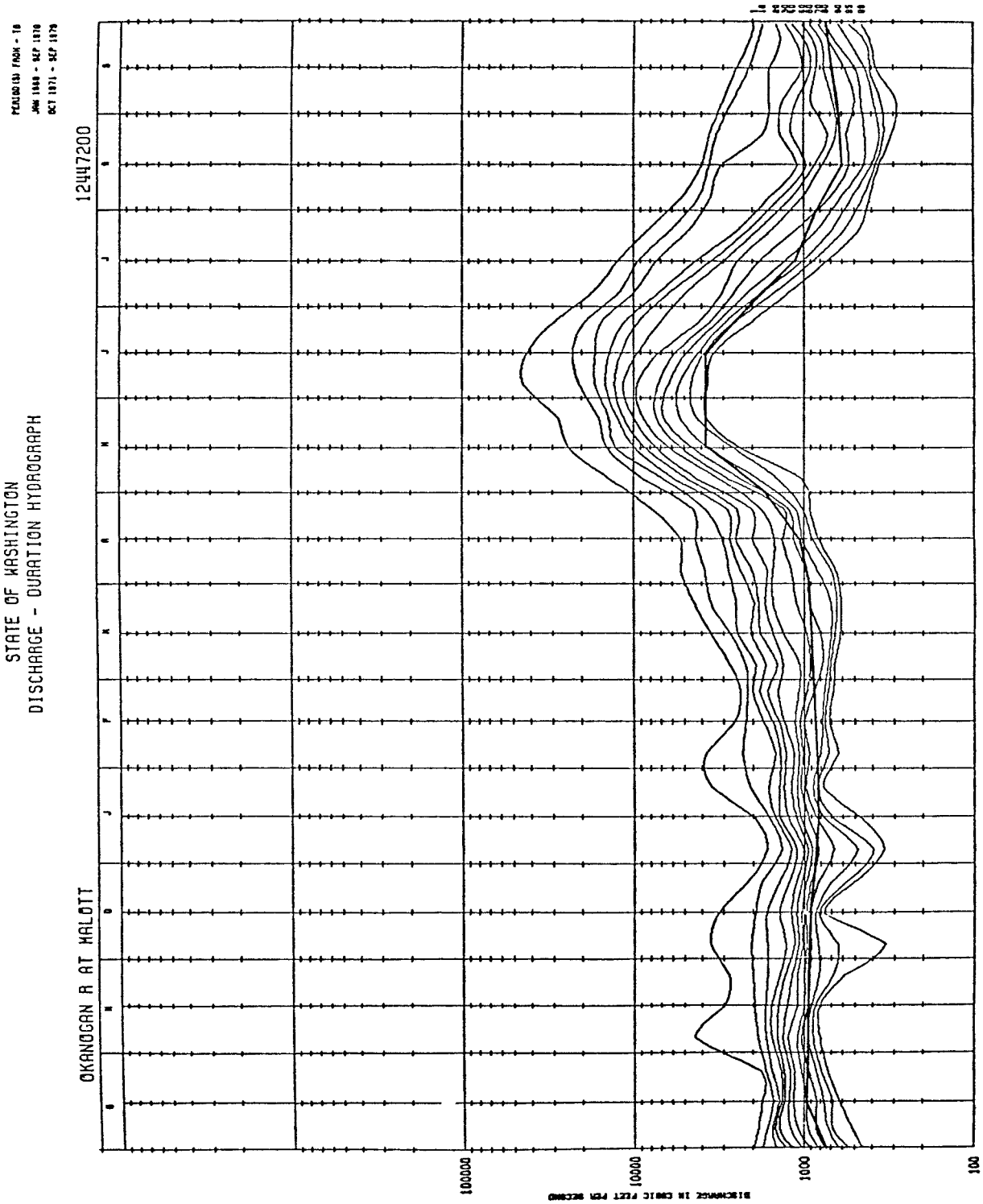


[Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-900, filed 6/20/84.]

Chapter 173-555 WAC

WATER RESOURCES PROGRAM IN THE LITTLE SPOKANE RIVER BASIN, WRIA 55

WAC

173-555-010	General provision.
173-555-020	Definition.
173-555-030	Establishment of base flows.
173-555-040	Future allocations—Reservation of surface water for beneficial uses.
173-555-050	Priority of future water rights during times of water shortage.
173-555-060	Streams and lakes closed to further consumptive appropriations.
173-555-070	Effect on prior rights.
173-555-080	Enforcement.
173-555-090	Appeals.
173-555-100	Regulation review.

WAC 173-555-010 General provision. These rules, including any subsequent additions and amendments, apply to waters within and contributing to the Little Spokane River basin, WRIA-55 (see WAC 173-500-040). Chapter 173-500 WAC, the general rules of the department of ecology for the implementation of the comprehensive water resources program, applies to this chapter 173-555 WAC.

[Order DE 75-24, § 173-555-010, filed 1/6/76.]

WAC 173-555-020 Definition. "NONCOMMERCIAL AGRICULTURAL IRRIGATION" means beneficial use of water upon not more than three acres for the purpose of crops and livestock for domestic use.

[Order DE 75-24, § 173-555-020, filed 1/6/76.]

WAC 173-555-030 Establishment of base flows. (1) Base flows are established for stream management units with monitoring to take place at certain control points as follows:

Stream Management Unit Information

Control Station Number, Stream Management Unit Name	Control Station Location by River Mile and Section, Township Range	Affected Stream Reach
No. 12-4270.00 Little Spokane River Elk	34.6 Sec. 8, T.29N., R.43 E.W.M.	From confluence with Dry Creek to the headwaters including tributaries except Dry Creek.
No. 12-4295.00 Little Spokane River Chattaroy	23.05 Sec. 34, T.28N., R.43 E.W.M.	From confluence with Deer Creek to confluence with Dry Creek including tributaries except Deer Creek.
No. 12-4310.00 Little Spokane River Dartford	10.8 Sec. 6, T.26N., R.43 E.W.M.	From confluence with Little Creek to confluence with Deer Creek including tributaries except Little Creek.
No. 12-4315.00 Little Spokane River Confluence	3.9 Sec. 3, T.26N., R.42 E.W.M.	From mouth to confluence with Little Creek including tributaries.

(2) Base flows established for the stream management units in WAC 173-555-030(1) are as follows:

Base Flows in the Little Spokane River Basin
(in Cubic Feet Per Second)

Month	Day	12-4270.00 Elk	12-4295.00 Chattaroy	12-4310.00 Dartford	12-4315.00 Confluence
Jan.	1	40	86	150	400
	15	40	86	150	400
Feb.	1	40	86	150	400
	15	43	104	170	420
Mar.	1	46	122	190	435
	15	50	143	218	460
Apr.	1	54	165	250	490
	15	52	143	218	460
May	1	49	124	192	440
	15	47	104	170	420
Jun.	1	45	83	148	395
	15	43	69	130	385
Jul.	1	41.5	57	115	375
	15	39.5	57	115	375
Aug.	1	38	57	115	375
	15	38	57	115	375
Sept.	1	38	57	115	375
	15	38	63	123	380
Oct.	1	38	70	130	385
	15	39	77	140	390
Nov.	1	40	86	150	400
	15	40	86	150	400
Dec.	1	40	86	150	400
	15	40	86	150	400

(3) Base Flow hydrographs, Figure II-1 in the document entitled "water resources management program in the Little Spokane River Basin" dated August, 1975 shall be used for definition of base flows on those days not specifically identified in WAC 173-555-030(2).

(4) All rights hereafter established shall be expressly subject to the base flows established in sections WAC 173-555-030 (1) through (3).

[Order DE 75-24, § 173-555-030, filed 1/6/76.]

WAC 173-555-040 Future allocations—Reservation of surface water for beneficial uses. (1) The department determines that these are surface waters available for appropriation from the stream management units specified in the amount specified in cubic feet per second (cfs) during the time specified as follows:

(a) Surface water available from the east branch of the Little Spokane River, confluence with Dry Creek to headwaters, based on measurement at control station number 12-4270.00 at Elk are:

Month	May		June		July		Aug.		Sept.		Oct.	
Date	1	15	1	15	1	15	1	15	1	15	1	15
Amount	26	22	17	14	11	9	5	5	5	5	7	7

(b) Surface water available from the Little Spokane River from confluence with Little Creek at Dartford to Eloika Lake outlet, and to confluence with Dry Creek based on measurement at control station number 12-4310 at Dartford are:

Month	May		June		July		Aug.		Sept.		Oct.	
Date	1	15	1	15	1	15	1	15	1	15	1	15
Amount	340	236	152	103	62	34	11	11	11	11	20	20

(c) Available surface waters for those days not specified in (a) and (b) shall be defined from Figures II-3 and II-4 in the document entitled "water resources management program in the Little Spokane River basin" dated August, 1975.

(2) The amounts of waters referred to in WAC 173-555-040(1) above are allocated for beneficial uses in the future as follows:

(a) Three cubic feet per second from the amount available in the east branch of the Little Spokane River referred to in WAC 173-555-040 (1)(a) above and five cubic feet per second from the amount available in the Little Spokane River, besides east branch, referred to in WAC 173-555-040 (1)(b) are allocated to future domestic, stockwatering and noncommercial agricultural irrigation purposes within the stream reaches specified therein throughout the year.

(b) The remainder of the amount referred to in WAC 173-555-040 (1)(a) and (b) besides the amount specified in WAC 173-555-040 (2)(a) are allocated to consumptive and nonconsumptive uses not specified in WAC 173-555-040 (2)(a). These are further described in the figures appended hereto.

[Order DE 75-24, § 173-555-040, filed 1/6/76.]

WAC 173-555-050 Priority of future water rights during times of water shortage. (1) As between rights established in the future pertaining to waters allocated in WAC 173-555-040 (2)(a) and (b), all rights established in (a) shall be superior to those pertaining to (b) regardless of the date of the priority of right.

(2) As between rights established in the future within a single use category allocation of WAC 173-555-040, the date of priority shall control with an earlier dated right being superior to those rights with later dates.

[Order DE 75-24, § 173-555-050, filed 1/6/76.]

WAC 173-555-060 Streams and lakes closed to further consumptive appropriations. The department, having determined there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the following streams to further consumptive appropriation except for domestic and normal stockwatering purposes excluding feedlot operation:

SURFACE WATER CLOSURES

Stream* Name	Affected Reach	Date of Closure	Period of Closure
Dry Creek	Mouth to headwaters	5-26-1952	1 June-31 Oct.
Otter Creek	Mouth to headwaters	2-23-1971	"
Bear Creek	Mouth to headwaters	4-13-1953	"
Deer Creek	Mouth to headwaters	2-29-1968	"
Dragoon Creek	Mouth to headwaters	7-02-1951	"
Deep Creek	Mouth to headwaters	6-14-1961	"
Deadman Creek[1/]	Mouth to headwaters	11-28-1961	"
Little Creek	Mouth to headwaters	4-13-1953	"
W. Branch Little Spokane River	Outlet of Eloika Lake to headwaters	Date of adoption	"
All natural lakes in the basin		"	"

* Includes all tributaries in the contributing drainage area unless specifically excluded.

1/ An unnamed tributary flowing through Sec. 20, T26N., R.44E. is exempted from closure.

[Order DE 75-24, § 173-555-060, filed 1/6/76.]

WAC 173-555-070 Effect on prior rights. Nothing in this chapter shall be construed to lessen, enlarge or modify the existing rights acquired by appropriation or otherwise.

[Order DE 75-24, § 173-555-070, filed 1/6/76.]

WAC 173-555-080 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-555-080, filed 6/9/88.]

WAC 173-555-090 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-555-090, filed 6/9/88.]

WAC 173-555-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-555-100, filed 6/9/88.]

Chapter 173-559 WAC

WATER RESOURCES PROGRAM FOR THE COLVILLE RIVER BASIN, WRIA-59

WAC

173-559-010 Purpose.
173-559-020 Definitions.
173-559-030 Establishment of base flows.
173-559-040 Allocation for future surface water appropriations.
173-559-050 Certain streams and lakes are closed to further consumptive appropriations.
173-559-060 Ground water.
173-559-070 Effects on prior rights.
173-559-080 Enforcement.

173-559-090 Appeals.
173-559-100 Regulation review.

WAC 173-559-010 Purpose. This regulation is adopted in accordance with the water resources management regulation, chapter 173-500 WAC, which was promulgated under the authority of the Water Resources Act of 1971, chapter 90.54 RCW. This chapter, including any amendments, applies to all waters that lie within or contribute to the Colville River drainage basin. This chapter sets forth the department's policies to manage the basin's water resources.

[Order DE 77-6, § 173-559-010, filed 7/22/77.]

WAC 173-559-020 Definitions. For purposes of this chapter, the following definitions shall be used.

(1) "Allocation" means the designating of specific amounts of the water resource for specific beneficial uses.

(2) "Base flow" means a level of stream flow established in accordance with provisions of chapter 90.54 RCW required in perennial streams to preserve wildlife, fish, scenic, aesthetic, and other environmental and navigational values.

(3) "Consumptive use" means use of water, whereby there is diminishment of the water resources.

(4) "Department" means the Washington state department of ecology.

(5) "Director" means the director of the department of ecology.

(6) "Domestic use" means use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, irrigation of not over one-half acre of lawn and garden per dwelling, and other incidental household uses.

(7) "Hydrograph" is a graph showing the variation of streamflow (or stream discharge) with respect to time during a year as determined at a specific cross-sectional location on the stream.

(8) "In-house domestic use" means use of water for drinking, cleaning, sanitation, and other uses in a residence, excluding irrigation of lawn and garden.

(9) "Nonconsumptive use" means a type of water use where either there is no diversion from a source body, or where there is no diminishment of the source.

(10) "Perennial stream" means a stream with a natural flow which is normally continuous at any given location.

(11) "Reservoir permit" means a water right permit which authorizes construction of an impoundment structure, storage of water and generally the use of water in the amount of one filling annually.

(12) "Secondary permit" means a water right permit which allows diversion of water for beneficial use from a storage reservoir. A secondary permit is necessary only for use in excess of one filling annually, or for diversion and use by a party other than the reservoir owner.

(13) "Stream management unit" means a stream segment, reach, or tributary, containing a control station, that is identified on a stream reach map in an adopted water resource management program document as a unit for defining base flow levels.

(14) "Water right" means a right to make beneficial use of public waters of the state.

[Order DE 77-6, § 173-559-020, filed 7/22/77.]

WAC 173-559-030 Establishment of base flows. RCW 90.54.020 requires that perennial rivers and streams shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values and navigational values. Under this provision, base flows for stream management units of a basin are established which describe discharge rates at stream measurement stations in each unit. The following subsections, WAC 173-559-030 (1) through (4), establish these requirements for WRIA 59:

(1) In the Colville River basin, monitoring of base flows will take place at the following control points:

Table 1
Stream Management Units

Stream Management Unit and Control Station Number	Control Station Location by River-Mile, and Section Township and Range	Stream Management Reach
Upper Colville River No. 12.4080.00	32.1 Sec. 31, T. 33 N., R. 40 E.W.M.	Colville River from confluence with Stensgar Creek to confluence of Sheep Creek and Deer Creek.
Lower Colville River No. 12.4090.00	5.0 Sec. 29, T. 36 N., R. 38 E.W.M.	Colville River from confluence with Lake Roosevelt to confluence with Stensgar Creek.

(2) In the Colville River basin, base flows for the stream management units in WAC 173-559-030(1) are set in Table 2 as follows:

Table 2
Base Flows in the Colville River basin
(in Cubic Feet Per Second)

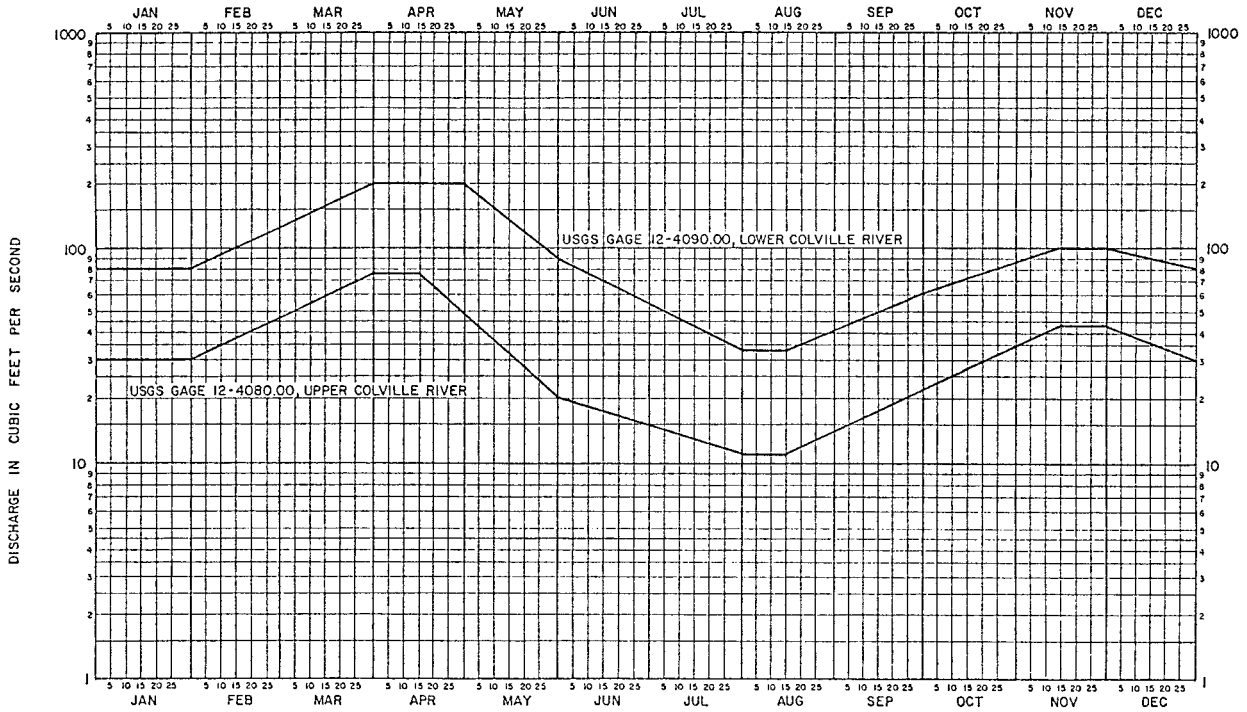
Month	Day	Upper Colville (12.4080.00)	Lower Colville (12.4090.00)
Jan.	1	30	80
	15	30	80
Feb.	1	30	80
	15	38	100
Mar.	1	47	124
	15	59	157
Apr.	1	76	200
	15	76	200
May	1	49	200
	15	32	135
Jun.	1	20	90
	15	17	70
Jul.	1	15	55
	15	13	43
Aug.	1	11	33
	15	11	33
Sep.	1	14	40
	15	18	49
Oct.	1	22	60
	15	27	70
Nov.	1	35	84
	15	43	100
Dec.	1	43	100
	15	36	90

(3) Figure 1, base flow hydrographs for selected stations, shall be used to define base flows on those days not identified in WAC 173-559-030(2).

(4) All surface water rights, established by appropriation in the Upper Colville and Lower Colville stream management units after adoption of this regulation, shall be subject to the base flows set in WAC 173-559-030 (1) through (3). However, these base flows will not apply to in-house domestic use and stock watering use, if an alternate source is not available to satisfy these uses. If the cumulative impact of numerous single in-house domestic use diversions is determined to substantially affect a stream's base flow or existing rights, then new permits for this use may be denied.

Figure 1

BASE FLOW HYDROGRAPH FOR SELECTED STATIONS



[Order DE 77-6, § 173-559-030, filed 7/22/77.]

WAC 173-559-040 Allocation for future surface water appropriations. (1) The department determines that surface water is available for appropriation from the Upper Colville River stream management unit and the Lower Colville River stream management unit except as provided in WAC 173-559-050(2). Tables 3 and 4 show the available amounts in cubic feet per second during specified periods, as follows:

Table 3
Allocation of Public Surface Water from the Upper Colville River Stream Management Unit
(Units in Cubic Feet Per Second)

Month	Base Flow	Future Consumptive Uses
Jan.	30	47
Feb.	41	68
Mar.	61	129
April	44	256
May	20	192
June	13	93

Table 3
Allocation of Public Surface Water from the Upper Colville River Stream Management Unit
(Units in Cubic Feet Per Second)

Month	Base Flow	Future Consumptive Uses
July		
1-15	12	18
16-31	12	0
Aug.	11	0
Sept.	17	0
Oct.	27	16
Nov.	43	21
Dec.	36	37

Table 4
Allocation of Public Surface Water from the Lower Colville River Management Unit

(Units in Cubic Feet Per Second)

Month	Base Flow	Future Consumptive Uses
Jan.	80	47
Feb.	100	68
Mar.	157	129
April	200	256
May	135	256
June	70	94
July		
1-15	43	18
16-31	43	0
Aug.	33	0
Sept.	49	0
Oct.	70	17
Nov.	100	21
Dec.	90	37

(2) Total appropriations for nonconsumptive uses may exceed the allocation limits specified in Tables 3 and 4.

(3) Monthly allocations in Tables 3 and 4 do not apply to the use of stored water. Specific provision will be included in all reservoir permits regarding period of filling, use and release of water.

[Order DE 77-6, § 173-559-040, filed 7/22/77.]

WAC 173-559-050 Certain streams and lakes are closed to further consumptive appropriations. (1) The department has determined that no water is available for further consumptive appropriation in streams tributary to the Colville River. Therefore, these tributary streams are closed to further consumptive appropriation except for reservoir storage from November 1 through May 31. Applications for single in-house domestic use, or stockwatering may be approved if no alternate source of water supply is available and the proposed use will not impair existing water rights.

(2) The Upper Colville River and Lower Colville River will be closed to further consumptive appropriation from July 16 through September 30, except for in-house domestic use and normal stockwatering if no alternate source of water supply is available.

(3) If the cumulative impact of numerous single in-house domestic use diversions is determined to substantially affect a closed stream's base flow, then new permits for this use may be denied. Base flow levels for closed streams are specified in the department's publication, "water resources management program, Colville River basin."

(4) Appropriation of water from streams tributary to the Colville River for out of stream storage and on-stream storage shall be subject to the base flows recommended in the department's publication, "water resources management program, Colville River basin."

(5)(a) Lakes included in table 5 are closed to further consumptive appropriation for specified periods of the year, except for in-house domestic and stockwatering uses. The department may deny applications for domestic use if the cumulative effect of such diversions would be detrimental to retaining a lake substantially in its natural condition.

Table 5 Lake Closures

Lake	Tributary to	Location	Period of Closure
Deer Lake	Sheep Creek	T. 30 N., R. 41 E. Secs. 1, 11,12,14	June 1-Oct. 31
Loon Lake	Sheep Creek	T. 30 N., R. 41, E. Secs. 33, 34., T.29 N., R. 41 E. Secs. 2, 3,4,10,11	June 1-Oct. 31
Waitts Lake	Waitts Creek	T. 31 N., R. 40 E. Secs. 17-20	June 1-Oct. 31
Jumpoff Joe Lake	Colville River	T. 31 N., R. 40 E. Sec. 19	June 1-Oct. 31
White Mud Lake		T. 35 N., R. 40 E. Sec. 19.	June 1-Oct. 31
Heritage and Thomas Lakes	Little Pend Oreille River	T. 36 N., R. 42 E. Secs. 8,9, 17,18	June 1-Oct. 31

(b) Appropriation of water from lakes not specified in table 5 will be permitted if prior water rights will not be adversely affected and if the appropriation will not conflict with the intent of RCW 90.54.020 (3)(a) which stipulates, in part, that "lakes and ponds shall be retained substantially in their natural condition."

[Order DE 77-6, § 173-559-050, filed 7/22/77.]

WAC 173-559-060 Ground water. If it is determined that a future development of ground water affects surface waters subject to the provisions of WAC 173-559-030 through 173-559-050, then rights to said ground water shall be subject to the same conditions as affects the surface water.

[Order DE 77-6, § 173-559-060, filed 7/22/77.]

WAC 173-559-070 Effects on prior rights. Nothing in this chapter shall be construed to lessen, enlarge, or modify existing rights acquired by appropriation or by other means.

[Order DE 77-6, § 173-559-070, filed 7/22/77.]

WAC 173-559-080 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-559-080, filed 6/9/88.]

WAC 173-559-090 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-559-090, filed 6/9/88.]

WAC 173-559-100 Regulation review. The department of ecology shall initiate a review of the rules established

in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-559-100, filed 6/9/88.]

Chapter 173-563 WAC

INSTREAM RESOURCES PROTECTION PROGRAM FOR THE MAIN STEM COLUMBIA RIVER IN WASHINGTON STATE

WAC

173-563-010	Background and purpose.
173-563-020	Applicability.
173-563-030	Authority.
173-563-040	Establishment of instream flows for instream uses.
173-563-050	Critical flow adjustment to, and waivers of, minimum instantaneous and average weekly flows.
173-563-052	Establishment of instream flows for out-of-stream uses.
173-563-056	Application of minimum average weekly flows to out-of-stream uses.
173-563-060	Establishment of conservation and efficiency fundamentals.
173-563-070	Enforcement.
173-563-075	Regulation review.
173-563-080	Overriding considerations.
173-563-090	Regulation review.
173-563-100	Implementation.
173-563-900	Critical flow adjustment—Minimum instantaneous and weekly average flows—Columbia River.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-563-015 Withdrawal of unappropriated waters. [Statutory Authority: Chapter 173-500 WAC, chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW. 95-02-066 (Order 94-18), § 173-563-015, filed 1/3/95, effective 2/3/95. Statutory Authority: Chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW and chapter 173-500 WAC and WAC 173-563-075. 93-01-009 (Order 92-20), § 173-563-015, filed 12/3/92, effective 1/3/93.] Repealed by 98-08-062 (Order 97-15), filed 3/30/98, effective 4/30/98. Statutory Authority: Chapter 90.54 RCW, WAC 173-563-090 and ESHB 1110 (1997).

WAC 173-563-010 Background and purpose. The Columbia River is an international as well as an interstate river with its waters subject to laws of seven western states, the Province of British Columbia, Canada and the federal governments of the United States and Canada. The flows and levels of the river are in a state of continuous change through the operation of numerous federally owned or federally licensed dams located within the river. The waters of the Columbia River are operated to support extensive irrigation development, inland navigation, municipal and industrial uses, and hydroelectric power development. Among all these uses, the anadromous fisheries of the Columbia River, which are dependent on clean flowing water, require for their survival the establishment of minimum flows of water and special actions by all agencies sharing in the management of the Columbia River.

The provisions of this chapter apply, as a matter of state law, to water right permits issued pursuant to the state's water rights code. The provisions hereof shall provide the department of ecology the basic state policy relating to minimum flows and levels for the Columbia River, for submission to various federal, interstate and state agencies having jurisdiction over the river. Further, the department of ecology of the state of Washington recognizes that, under our federal constitutional system, regulatory powers over the river are shared powers between the United States and the state of Washington and that by various federal actions the state's powers may, and in some cases have been superseded through the mandates of the Supremacy Clause of the United States Constitution.

This chapter is adopted under state legislation, to promote the proper utilization of the water resources of the Columbia River and to protect and insure the viability of the instream resource values associated with the main stem of the Columbia River in the future through (1) the establishment of minimum flows on the main stem Columbia River in Washington state, and (2) the establishment of conservation and efficiency fundamentals relating to out-of-stream and instream uses and values.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 80-08-021 (Order DE 80-2), § 173-563-010, filed 6/24/80.]

WAC 173-563-020 Applicability. (1) This chapter applies to public surface waters of the main stem Columbia River in Washington state and to any ground water the withdrawal of which is determined by the department of ecology to have a significant and direct impact on the surface waters of the main stem Columbia River.

The extent of the "main stem" Columbia River shall be the Columbia River from the upstream extent of tidal influence (Bonneville Dam-River Mile 146.1) upstream to the United States-Canada border (River Mile 745) and including those areas inundated by impounded waters at full pool elevations.

(2) Chapter 173-500 WAC, the general rules of the department of ecology for the implementation of the comprehensive water resources program mandated by RCW 90.54.-040, applies to this chapter.

(3) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, including existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir, or related facilities. This exemption includes rights embodied in all water right permits and certificates existing on the effective date of this chapter.

(4) The instream flows established and implemented by this chapter for instream and out-of-stream uses, and the average weekly flows applied by this chapter to out-of-stream uses do not apply to any application for water from the main stem Columbia River on which a decision is made by the department of ecology on or after July 27, 1997. Any water right application considered for approval or denial after that date will be evaluated for possible impacts on fish and existing water rights. The department will consult with appropriate local, state, and federal agencies and Indian tribes in making this evaluation. Any permit which is then approved for the use of such waters will be, if deemed necessary, subjected to instream flow protection or mitigation conditions determined on a case-by-case basis through the evaluation conducted with the agencies and tribes.

(5) Waters withdrawn by the United States pursuant to RCW 90.40.030 prior to the effective date of this rule relating to the second half of the Columbia basin project, and water right permits and certificates hereafter issued by the depart-

ment of ecology pertaining to such withdrawn waters, are not subject to the provisions of this chapter.

(6) For the purposes of this chapter, average weekly flows shall be the average of the daily average flows reported in the Columbia River operational hydromet and management system (CROHMS) for a seven-day period beginning at 12:01 a.m. Monday and ending at midnight on Sunday. When the beginning of the seven-day period defined in this section does not correspond to the dates on which flows are established in WAC 173-563-040, the flow requirements for that week shall be the arithmetic average of the required flows listed in WAC 173-563-040 for each of the seven days, rounded to the nearest 1,000 cfs.

[Statutory Authority: Chapter 90.54 RCW, WAC 173-563-090 and ESHB 1110 (1997). 98-08-062 (Order 97-15), § 173-563-020, filed 3/30/98, effective 4/30/98. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-020, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-020, filed 6/24/80.]

WAC 173-563-030 Authority. These rules are adopted under the authority of chapters 90.54, 90.22, and 90.03 RCW, and in relation to chapter 173-500 WAC.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 80-08-021 (Order DE 80-2), § 173-563-030, filed 6/24/80.]

WAC 173-563-040 Establishment of instream flows for instream uses. (1) In order to protect the quality of the natural environment and provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values, minimum instantaneous flows and minimum average weekly flows are established for instream uses at the following project locations on the main stem Columbia River in Washington state:

CONTROL STATION	RIVER MILE	MANAGEMENT UNIT
The Dalles Dam	191.5	John Day Dam to Bonneville Dam (Lake Bonneville and Celilo Lake) (River Mile 146.1-215.6)
John Day Dam	215.6	John Day Dam to McNary Dam (Umatilla Lake) (River Mile 215.6-292.0)
McNary Dam	292.0	McNary Dam to Priest Rapids Dam (Lake Wallula and the Hanford Reach) (River Mile 292.0-397.1)
Priest Rapids Dam and upstream (Wanapum, Rock Island, Rocky Reach, Wells, Chief Joseph, and Grand Coulee Dam)	397.1+	Priest Rapids Dam upstream to Canadian Border (River Mile 397.1-745.0)

(2) Minimum instantaneous flows at the locations listed in WAC 173-563-040(1) are established for instream uses as follows:

MINIMUM INSTANTANEOUS FLOWS - COLUMBIA RIVER PROJECTS
(1,000 cubic feet/second)

	Chief* Joseph	Wells & Rocky Reach Rock Island & Wanapum*	Priest Rapids	McNary & John Day	The Dalles
Jan	10	10	50	20	20
Feb	10	10	50	20	20
Mar	10	10	50	50	50
Apr 1-15	20	20	50	50	70
16-25	20	30	50	70	70
26-30	20	50	50	70	70
May	20	50	50	70	70
June 1-15	20	50	50	70	70
16-30	10	20	50	50	50
Jul 1-15	10	20	50	50	50
16-31	10	50	50	50	50
Aug	10	50	50	50	50
Sep	10	20	36	50	50
Oct 1-15	10	20	36	50	50
16-31	10	20	50	50	50
Nov	10	10	50	50	50
Dec	10	10	50	20	20

* As provided in WAC 173-563-050(1), the minimum instantaneous flows set forth in this subsection are subject to a reduction of up to twenty-five percent during low flow years, except that in no case shall the outflow from Priest Rapids Dam be less than 36,000 cfs. For the reach from Grand Coulee through Wanapum, minimum instantaneous flows shall be as shown above, or as necessary to maintain minimum flows (subject to low runoff adjustment) at Priest Rapids, whichever is higher.

(3) Minimum average weekly flows for instream uses are established at the locations listed in WAC 173-563-040(1) as follows:

MINIMUM AVERAGE WEEKLY FLOWS - COLUMBIA RIVER PROJECTS
(1,000 cubic feet/second)

	Chief Joseph*	Wells & Rocky Reach*	Rock Island & Wanapum*	Priest Rapids	McNary	John Day	The Dalles
Jan	30	30	30	70	60	60	60
Feb	30	30	30	70	60	60	60
Mar	30	30	30	70	60	60	60
Apr 1-15	50	50	60	70	100	100	120
16-25	60	60	60	70	150	150	160
26-30	90	100	110	110	200	200	200
May	100	115	130	130	220	220	220
Jun 1-15	80	110	110	110	200	200	200
16-30	60	80	80	80	120	120	120
Jul 1-15	60	80	80	80	120	120	120
16-31	90	100	110	110	140	140	140
Aug	85	90	95	95	120	120	120
Sep	40	40	40	40	60	85	90
Oct 1-15	30	35	40	40	60	85	90
16-31	30	35	40	70	60	85	90
Nov	30	30	30	70	60	60	60
Dec	30	30	30	70	60	60	60

* For the reach from Grand Coulee through Wanapum, minimum average weekly flows shall be as shown above, or as necessary to maintain minimum flows (subject to low runoff adjustment) at Priest Rapids, whichever is higher. As provided in WAC 173-563-050(1), the minimum average weekly flows set forth in this subsection are subject to a reduction of up to twenty-five percent during low flow years, except that in no case shall the outflow from Priest Rapids Dam be less than 36,000 cfs.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-040, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-040, filed 6/24/80.]

WAC 173-563-050 Critical flow adjustment to, and waivers of, minimum instantaneous and average weekly flows. (1) The director of the department of ecology, when he deems it to be an overriding public interest requirement, may reduce the minimum instantaneous and/or average weekly

flows for the Columbia River established in this chapter up to twenty-five percent during low flow years, except that in no case shall the outflow from Priest Rapids be less than 36,000 cfs. The amount of the reduction (from zero to twenty-five percent) shall be: (a) Based on the March 1 forecast for April through September runoff at The Dalles, Oregon, as published by the National Weather Service in Water Supply Outlook for the Western United States, and (b) determined from Figure 1 in WAC 173-563-900.

(2) Prior to implementing the critical flow adjustment to minimum flows in a low water year, the department of ecology shall conduct a public hearing to announce its intentions and to solicit public and agency comment on the proposed action.

(3) The department has determined that some damage to instream values may be incurred at flow values equivalent to eighty-eight million acre-feet or less. Therefore, the reduced flows shall be referred to as critical flows and shall be authorized by the director of the department of ecology under the critical flow adjustment only when the March 1 forecast of April through September flow at The Dalles is below eighty-eight million acre-feet (MAF). The critical flows shall, in no case, provide less than 39.4 MAF (seventy-five percent of 52.5 MAF for the April through September period).

(4) The director of the department of ecology may waive the state's minimum flow requirements delineated in this chapter for a defined period of time for the purpose of studying the impacts of various flow levels on the river system and its operation when such studies are to be conducted in consultation with the Washington departments of fisheries and/or wildlife and when said exemption is requested by the departments of fisheries and/or wildlife. Such a request shall be made by letter to the director of the department of ecology. This waiver may include the Federal Energy Regulatory Commission studies to be conducted under Docket No. E-9569 and any operational change which does not allow the flows under this chapter to be met, but which, in the opinion of the director, still provides a commensurate level of protection for instream resources.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-050, filed 6/9/88. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-050, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-050, filed 6/24/80.]

WAC 173-563-052 Establishment of instream flows for out-of-stream uses. In order to protect the quality of the natural environment and provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values, the minimum average weekly flows listed in WAC 173-563-040(3) are established for out-of-stream uses.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-052, filed 10/7/82 and 10/8/82.]

WAC 173-563-056 Application of minimum average weekly flows to out-of-stream uses. (1) For the first 4,500 cfs of water rights issued subject to this program, the following conditions shall apply:

(a) When the March 1 forecast of April-September runoff at The Dalles, Oregon (as published by the National Weather Service in Water Supply Outlook for the Western United States) is equal to or greater than 88 million acre-feet (MAF), no regulation of out-of-stream diverters shall occur, regardless of the gaged flow of the Columbia River.

(b) When the flow forecast is less than 88 MAF but greater than 60 MAF, the department shall encourage voluntary water conservation through appropriate notification of water users in an attempt to foster efficient resource use.

(c) When the flow forecast is 60 MAF or less, the department shall regulate out-of-stream diverters on the basis of first-in-time is first-in-right whenever it is predicted that gaged flows will fall below the minimum average weekly flows as established by this chapter.

(2) For any water allocations issued in excess of the first 4,500 cfs defined in WAC 173-563-056(1), the following conditions shall apply:

(a) When the March 1 forecast of April-September runoff at The Dalles, Oregon (as published by the National Weather Service in Water Supply Outlook for the Western United States) is equal to or greater than 88 million acre-feet (MAF), no regulation of out-of-stream diverters shall occur, regardless of the gaged flow of the Columbia River.

(b) When the flow forecast is less than 88 MAF, the department shall regulate out-of-stream diverters on the basis of first-in-time is first-in-right whenever it is predicted that gaged flows will fall below the CRIRPP minimum average weekly flows as established by this chapter.

(3) The department shall utilize the Bonneville Power Administration (BPA) 30-day power operation plan in predicting specific periods of anticipated flow conditions.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-056, filed 10/7/82 and 10/8/82.]

WAC 173-563-060 Establishment of conservation and efficiency fundamentals. (1) The department, having determined that public water is available from the main stem of the Columbia River in Washington and that continued issuance of water right permits and certificates therefrom is in the public interest, does acknowledge and is concerned that, cumulatively, the projected future diversions from the main stem Columbia River in Washington state may, under certain flow conditions, have a detrimental effect on instream values.

(2) Also, it is in the public interest that the state's water resources be conserved and that the burden of water shortages in low water years should be shared by the various users to the greatest extent practicable.

(3) Notwithstanding the constraints on pro rata water-sharing under existing state water laws, the department shall, in projected low water years, utilize all reasonable measures of influence to achieve the goal of this section.

(4) During proof of appropriation of water under RCW 90.03.330 and before issuing a certificate of water right, the department shall assure that the quantities of water shown on the certificate accurately reflect the perfected usage consistent with up-to-date water conservation practices and water delivery system efficiencies.

(5) The department shall continue to seek effective methods to better achieve the goal of this section.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-060, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-060, filed 6/24/80.]

WAC 173-563-070 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under the authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-070, filed 6/9/88. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 80-08-021 (Order DE 80-2), § 173-563-070, filed 6/24/80.]

WAC 173-563-075 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-075, filed 6/9/88.]

WAC 173-563-080 Overriding considerations. Future authorizations for the use of water which would conflict with the provisions of this chapter shall be authorized by the director only in those situations when it is clear that overriding considerations of the public interest will be served. Such decisions shall be made in consultation with the directors of the Washington state department of fisheries, the Washington state department of wildlife, the Washington state department of agriculture, and the Washington state commissioner of public lands.

Consideration of the public interest by the director of the department of ecology shall include an evaluation of all uses of the river and its impact on the state of Washington. The uses to be considered include, but are not limited to, uses of water for domestic, stockwatering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, thermal power production, and preservation of environmental and aesthetic values and all other uses compatible with the enjoyment of the public waters of the state.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-080, filed 6/9/88. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-080, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-080, filed 6/24/80.]

WAC 173-563-090 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-563-090, filed 6/9/88. Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 80-08-021 (Order DE 80-2), § 173-563-090, filed 6/24/80.]

WAC 173-563-100 Implementation. (1) All water right permits and certificates subject to this chapter or issued subject to chapter 173-531A WAC shall be issued subject to the department's minimum flow requirements. (The minimum average weekly flows established in WAC 173-563-040 and 173-563-052 are equivalent to a flow of 52.5 MAF at The Dalles for the April through September period.)

(2) All water rights for instream uses subject to the minimum flows established in this chapter shall contain the following provision:

This permit/certificate is subject to the minimum flow provisions contained in chapter 173-563 WAC and is subject to regulation by the department of ecology to insure protection of instream resources.

(3) All water rights for out-of-stream uses subject to the flows established in this chapter shall contain the following provisions:

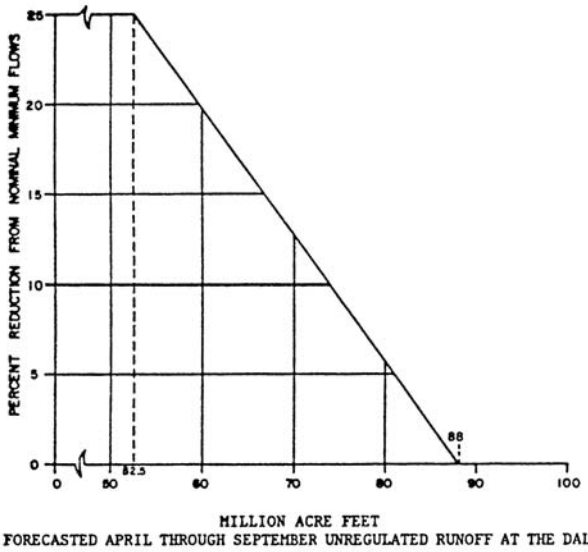
(a) This permit/certificate is subject to the minimum flow provisions contained in chapter 173-563 WAC and is subject to regulation by the department of ecology to insure protection of instream resources.

(b) Use of water under this authorization shall be contingent upon the water right holder's utilization of up to date water conservation practices and maintenance of efficient water delivery systems consistent with established regulation requirements and facility capabilities.

[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-100, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-100, filed 6/24/80.]

WAC 173-563-900 Critical flow adjustment—Minimum instantaneous and weekly average flows—Columbia River.

FIGURE 1
CRITICAL FLOW ADJUSTMENT MINIMUM INSTANTANEOUS AND WEEKLY AVERAGE FLOWS COLUMBIA RIVER



[Statutory Authority: RCW 90.54.040, 90.54.050, chapters 90.03 and 90.22 RCW. 82-21-001 and 82-21-007 (Orders DE 82-35 and DE 82-35A), § 173-563-900, filed 10/7/82 and 10/8/82; 80-08-021 (Order DE 80-2), § 173-563-900, filed 6/24/80.]

Chapter 173-564 WAC

WATER RESOURCES MANAGEMENT PROGRAM FOR THE MAIN STEM OF THE SNAKE RIVER IN WASHINGTON STATE

WAC

173-564-010 Background and purpose.
173-564-020 Authority.
173-564-030 Applicability.
173-564-040 Withdrawal of unappropriated waters.

WAC 173-564-010 Background and purpose. The Snake River is an interstate river with waters subject to laws of five states and the federal government. The flows and levels of the river in Washington state are heavily influenced by the operation of federally owned and federally licensed dams located upstream from Washington and within Washington, as well as by water diversions in the various states. The waters of the river support extensive irrigation, navigation, municipal, industrial, and power generation uses as well as nationally significant anadromous fish runs. These fish runs require for their survival clean, flowing water assured by minimum flows and special actions by all agencies sharing in the management of the river.

The department of ecology of the state of Washington recognizes that, under our federal constitutional system, regulatory power over the Snake River is shared between the United States and the states and that by various federal actions the state's powers may in some cases be superseded through the mandates of the Supremacy Clause of the United States Constitution.

This chapter is adopted to promote the proper utilization of the water resources of the Snake River and to protect and insure the viability of the instream resource values associated with the main stem of the river in the future.

[Statutory Authority: Chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW and Chapter 173-500 WAC. 93-01-010 (Order 92-21), § 173-564-010, filed 12/3/92, effective 1/3/93.]

WAC 173-564-020 Authority. These rules are adopted under the authority of chapters 34.05, 43.21A, 43.27A, 90.03, 90.44, and 90.54 RCW, and in relation to chapter 173-500 WAC.

[Statutory Authority: Chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW and Chapter 173-500 WAC. 93-01-010 (Order 92-21), § 173-564-020, filed 12/3/92, effective 1/3/93.]

WAC 173-564-030 Applicability. (1) This chapter applies to public surface waters of the main stem of the Snake River in Washington and to any ground water where the ground water is determined by the department of ecology to be part of or tributary to the surface waters of the main stem of the Snake River. For purposes of this chapter, the main stem of the Snake River extends from the Idaho, Oregon and Washington border, in the extreme southeastern corner of the state of Washington, at river mile 175, to the confluence with the Columbia River near Pasco, Washington at river mile 0.

(2) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, including existing water right permits and certificates.

[Statutory Authority: Chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW and Chapter 173-500 WAC. 93-01-010 (Order 92-21), § 173-564-030, filed 12/3/92, effective 1/3/93.]

WAC 173-564-040 Withdrawal of unappropriated waters. (1) The National Marine Fisheries Service (NMFS) listed Snake River sockeye salmon as endangered under the federal Endangered Species Act on December 20, 1991. NMFS listed Snake River spring/summer and fall chinook salmon as threatened under the act on May 17, 1992. Since then, new information and changing conditions continue to place into question whether sufficient information and data is available for making sound decisions on water availability and the public interest for additional appropriations from the main stem of the Snake River. In response to the petitions for listing, the Northwest governors directed the regional Northwest Power Planning Council to develop a plan for the recovery of the petitioned species and other weak fish stocks in the Columbia Basin, including the Snake River. In late 1992 the council finalized its strategy for salmon, which cautioned the states against continuing to allow new appropriations at the same time that there is a regional effort to acquire additional flows for imperiled fish stocks. This regional effort has greatly intensified as a result of additional petitions for Endangered Species Act listings in the basin, consecutive dry years and a 1994 federal court decision that the hydroelectric system operations plan approved by NMFS and the federal operating agencies was not adequate.

(2) Pursuant to subsection (1) of this section, the waters of the main stem of the Snake River that are unappropriated by water rights for which applications were accepted for filing by the department prior to December 20, 1991, are withdrawn from further appropriation, except that the department may issue a permit to withdraw water for:

(a) Nonrecurring temporary projects for up to six months duration, with a possible extension of no more than six additional months (applications for extensions must include adequate justification for the extension and must demonstrate that reasonable efforts are being made to use the water for the project as efficiently as possible);

(b) Nonconsumptive uses which, for the purposes of this section, are defined as uses where:

(i) There is no diversion from the water source; or

(ii) The water is diverted and returned immediately to the source at the point of diversion following its use, in the same quantity as diverted and with no degradation in water quality;

(c) Uses which are necessary for emergency public health and safety needs, when all other reasonable methods of obtaining water (e.g., conservation, efficiencies, etc.) have been exhausted; and

(d) Uses which are specifically intended to benefit weak fish stocks.

(3) All water right applications which the department accepted for filing prior to December 20, 1991, for diversion or pumping of surface water from the main stem of the Snake River, or for withdrawal of ground water which is part of the main stem of the Snake River, shall be processed in accordance with existing policies and procedures and are not subject to this withdrawal of waters.

(4) With the exceptions specified in subsection (2) of this section, all water right applications which the department

accepted or accepts for filing on or after December 20, 1991, which would result in the diversion or pumping of surface water from the main stem of the Snake River, regardless of the point of diversion specified in the water right application, are subject to this withdrawal of waters. These applications will be acted upon, without loss of priority date, after the expiration of the withdrawal of waters.

(5) With the exceptions specified in subsection (2) of this section, all water right applications which the department accepted or accepts for filing on or after December 20, 1991, which require a permit under RCW 90.44.050 and would result in the withdrawal of ground water which is in direct hydraulic continuity with the main stem of the Snake River are subject to this withdrawal of waters. All applications will be evaluated on a case-by-case basis. Applications determined to be subject to the withdrawal will be acted upon, without loss of priority date, after the expiration of the withdrawal of waters.

(6) This section will expire on July 1, 1999, or upon adoption by the department of ecology of a new instream resources protection program for the main stem Snake River, whichever shall occur first. The instream resources protection program shall be established in accordance with chapter 173-500 WAC (Water resources management program).

[Statutory Authority: Chapter 173-500 WAC, chapters 34.05, 43.21A, 43.27A, 90.03, 90.44 and 90.54 RCW. 95-02-066 (Order 94-18), § 173-564-040, filed 1/3/95, effective 2/3/95; 93-01-010 (Order 92-21), § 173-564-040, filed 12/3/92, effective 1/3/93.]

Chapter 173-590 WAC

PROCEDURES RELATING TO THE RESERVATION OF WATER FOR FUTURE PUBLIC WATER SUPPLY

WAC

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173-590-170	Reservation without petition—Hearings.
173-590-180	Appeal.
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WAC 173-590-010 Background. (1) The Water Resources Act of 1971 (chapter 90.54 RCW) sets forth fundamentals of water resource policy to insure that the waters of the state will be protected and fully utilized for the greatest benefit to the people of the state of Washington, and in relation thereto, the act provides direction to the department of ecology and other state agencies and officials in carrying out water and related resource programs.

(2) The act directs the department to develop and implement a water resources program which will provide a process for making decisions on future water resource allocation and use.

(3) The program may be developed in regional segments so that immediate attention may be given to waters of a given physioeconomic region of the state or to specific critical problems of water allocation and use.

(4) Preservation and protection of water in a potable condition for adequate and safe supplies to satisfy human domestic needs is one of the fundamentals of state water resource policy set forth in said act.

(5) The act further directs the department of ecology to modify existing regulations and adopt new regulations to insure that existing regulatory programs are in accord with the water resource policies of the act.

(6) Allocation of waters among potential uses and users shall be based generally on the securing of the maximum net benefits for the people of the state. Maximum net benefits shall constitute total benefits less cost including opportunity lost.

[Order DE 75-32, § 173-590-010, filed 3/11/76 and 3/10/76.]

WAC 173-590-020 Purpose. The purpose of this chapter is to establish and set forth a procedure whereby any person within the state of Washington may petition the department to reserve water for future public water supply.

[Order DE 75-32, § 173-590-020, filed 3/10/76.]

WAC 173-590-030 Authority. This regulation is adopted pursuant to the Water Resources Act of 1971, chapter 90.54 RCW.

[Order DE 75-32, § 173-590-030, filed 3/10/76.]

WAC 173-590-040 General. (1) These rules shall apply to both surface and ground waters of the state.

(2) Because of changing future conditions, including institutional arrangements, reservations under this chapter will be for specific geographic areas rather than for particular water suppliers.

(3) Appropriation of reserved water shall be in accordance with the intent and procedures set forth in chapters 90.03 and 90.44 RCW and adopted water resources programs under chapters 173-500 through 173-562 WAC applicable to the geographic area specified in a water right application.

(4) Regulations reserving waters for public water supply shall, where appropriate, provide guidelines for an interim use of the reserved waters for other beneficial uses.

[Order DE 75-32, § 173-590-040, filed 3/10/76.]

WAC 173-590-050 Definitions. For the purpose of this chapter and subsequent regulations, the following definitions shall be used:

(1) "Community water use" means use of water associated with needs of a community including street cleaning, parks, public buildings, public swimming pools, fire fighting, and attendant commercial, industrial and irrigational uses.

(2) "Director" means the director of the state of Washington department of ecology or his authorized representative.

(3) "Department" means the department of ecology unless specified otherwise.

(4) "Domestic water use" means use of water associated with human health and welfare requirements, including water

used for drinking, bathing, sanitary purposes, cooking, laundering, irrigation of not over one-half acre of lawn or garden per dwelling, and other incidental household uses.

(5) "Commercial and/or industrial use" means use of water associated with commercial and/or industrial requirements such as service, processing, cooling and conveying.

(6) "Public water supply" means any water supply intended or used for human consumption and community uses for more than one single-family residence.

(7) "Public water supply system" means a set of facilities including source, treatment, storage, transmission and distribution facilities whereby water is furnished to any municipality, community, collection, or number of individuals for human consumption and community uses.

(8) "Coordinated water system plan" means a plan adopted by utilities covering one or more public water supply system(s), which identifies present and future needs of participating water systems and sets forth means for meeting those needs in the most efficient manner possible. In areas where more than one water system lie in close proximity, a coordinated water system plan may consist of either of the following:

(a) A compilation of current and compatible water system plans developed by each utility containing the elements of comprehensive plan as set forth in WAC 248-54-280, with the addition of future service area designations, assessment of the feasibility of shared source, transmission, and storage facilities, and other mutual or regional concerns.

(b) An area wide water system plan developed jointly or by a lead agency which adequately addresses all the items mentioned in (a) above.

(9) "Reservation" means an allocation of water for a future beneficial use with the priority established as of the date when the reservation becomes effective.

(10) "Appropriation" means the process of legally acquiring the right to specific amounts of the public water resource for application to beneficial uses pursuant to RCW 90.03.250 through 90.03.340 and 90.44.060.

(11) "Person" means any individual, municipal, public, or private corporation, or other entity however dominated, including a state agency or county who operates a public water supply system or who contemplates such an operation.

[Order DE 75-32, § 173-590-050, filed 3/10/76.]

WAC 173-590-060 Reservation procedure—Petition for reservation. Any person, hereafter desiring the department to reserve water for future public water supply may file a petition with the director requesting future establishment of a reservation, provided that the applicant shall have a coordinated water system plan approved by the secretary, department of social and health services unless exempted from this requirement by both the secretary and the director.

[Order DE 75-32, § 173-590-060, filed 3/10/76.]

WAC 173-590-070 Contents of petition. Each petition to the director for the reservation of water shall include, but not be limited to, the following:

(1) Name and post office address of the applicant.

(2) Source of water supply.

(3) Map showing the proposed general service area, source of supply, pipelines, distribution systems, wells and other appurtenant works.

(4) Present and projected population in 10, 25, and 50 years.

(5) The amount of the present and proposed use in the following categories, and the time during which water will be required each year if the requirements differ seasonally:

(a) Domestic water use;

(b) Community water uses including specific amounts for attendant commercial, industrial and irrigational uses;

(c) Other(s) as specified.

(6) Copy of a coordinated water system plan, or comprehensive plan under WAC 248-54-280 if water systems are sufficiently separated so that no advantages will be realized by coordination. All review comments from the local A-95 clearinghouse on said plan shall be provided.

(7) Information to justify the requested reservation quantity in the form of official state population estimates, regional plan or engineering reports.

(8) A summary of ongoing and planned conservation programs. When applicable, this must summarize water usage for the previous five years including total water diverted or withdrawn, total water sold, and the quantities used by residential, wholesale and large industrial users. Status of metering of all services must be described. Rate structures should not encourage waste of the water resources and should be described.

(9) Other data as may be required by the director.

[Order DE 75-32, § 173-590-070, filed 3/10/76.]

WAC 173-590-080 Record of petition. The department shall maintain a file of all petitions for reservation of water under the provisions of this chapter. If a petition is returned to the petitioner for completion or correction, the date and the reasons for the return thereof shall be endorsed and shall be recorded in the reservation file.

[Order DE 75-32, § 173-590-080, filed 3/10/76.]

WAC 173-590-090 Notice. Upon receipt of a proper petition, the director shall publish notice thereof in a newspaper or newspapers of general circulation in the county or counties in which the storage, diversion, and use is to be made, once a week for two consecutive weeks.

The director shall send notice thereof to the secretary, department of social and health services, and to the directors of the departments of fisheries and wildlife for the purpose of soliciting their comments.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-090, filed 6/9/88; Order DE 75-32, § 173-590-090, filed 3/10/76.]

WAC 173-590-100 Investigation. When a petition is received, the director shall conduct an investigation of the surrounding impacts of the proposed reservation.

[Order DE 75-32, § 173-590-100, filed 3/10/76.]

WAC 173-590-110 Reservation. Upon review of a petition for reservation, related data and the results from the departmental investigation, the director shall notify the peti-

tioner of action pertaining to the petition, to withdraw affected waters under RCW 90.54.050(2), or to reserve water(s). If reservation is deemed appropriate, the director shall take action to adopt a regulation or amend an existing regulation established pursuant to chapter 173-500 WAC to reserve water for a future public water supply for the general geographic area described in the petition or for a general area the director determines appropriate. (RCW 90.54.050 mandates the department to conduct a public hearing, prior to adoption of a rule to withdraw or to reserve in each county in which waters relating to the rule are located.)

The amount of the reservation shall be determined by the director and may be more or less than the amount requested in the petition. The total reservation amount may be prorated to specific subareas of service in the proposed development area. Appropriate map may be appended to regulation.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-110, filed 6/9/88; Order DE 75-32, § 173-590-110, filed 3/10/76.]

WAC 173-590-120 Compatibility with existing water resources program. Reservation of waters pursuant to this chapter and other elements of a comprehensive water resources program developed pursuant to chapters 173-500 through 173-562 WAC and amendments thereof shall be compatible.

[Order DE 75-32, § 173-590-120, filed 3/10/76.]

WAC 173-590-130 Separate reservation by use. In situations where a given area will require significant quantities of water for other than community and domestic water uses, the reservation may identify separate quantities for each use.

[Order DE 75-32, § 173-590-130, filed 3/10/76.]

WAC 173-590-140 Reservation subject to review and change. From time to time, any reservation established under this chapter shall be reviewed and, when it appears appropriate to the department in implementing RCW 90.54.050, modified. No change shall be made without consultation of interested parties. The water resource program and the coordinated water system plan shall be reviewed whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-140, filed 6/9/88; Order DE 75-32, § 173-590-140, filed 3/10/76.]

WAC 173-590-150 Effective date of reservation. The effective date of a reservation established under the provisions of this chapter shall be the date when a regulation pertaining to a specific reservation has been adopted: Provided, That the effective date for any additional amount of reservation pursuant to the provisions of WAC 173-590-140 shall be the date when such subsequent amendments become effective.

[Order DE 75-32, § 173-590-150, filed 3/10/76.]

WAC 173-590-160 Application for water rights. With regard to any permit issued pursuant to RCW 90.03.290 and 90.44.060 which authorizes withdrawal and use of waters subject of a regulation provided for in WAC 173-590-110 hereof, the priority date of said permit shall be the effective date of said regulation.

[Order DE 75-32, § 173-590-160, filed 3/10/76.]

WAC 173-590-170 Reservation without petition—Hearings. Whenever it appears necessary, the director may reserve and set aside waters for beneficial utilization in the future on his own motion as provided under RCW 90.54.050 (1). In so doing, prior to the adoption of such rule, the director shall conduct a public hearing in each county in which waters relating to such rule are located.

[Order DE 75-32, § 173-590-170, filed 3/10/76.]

WAC 173-590-180 Appeal. The procedures hereof relate solely to rule-making activity of the department and are designed to obtain information to assist the department in determining when waters should be reserved as provided in RCW 90.54.050. Actions conducted under this chapter do not relate to contested cases within the meaning of the Administrative Procedure Act, chapter 34.04 RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-180, filed 6/9/88; Order DE 75-32, § 173-590-180, filed 3/10/76.]

WAC 173-590-190 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-190, filed 6/9/88.]

Chapter 173-591 WAC

RESERVATION OF FUTURE PUBLIC WATER SUPPLY FOR THURSTON COUNTY

WAC

173-591-010 Purpose.
173-591-020 Authority.
173-591-030 General.
173-591-040 Reservation area defined.
173-591-050 Definitions.
173-591-060 Petition received—Notice.
173-591-070 Reservation.
173-591-080 Future nonpublic water supply—Policy uses.
173-591-090 Monitoring program.
173-591-100 Water quality.
173-591-110 Exemptions.
173-591-115 Appeals.
173-591-120 Regulation review.
173-591-130 Reservation boundary maps.

WAC 173-591-010 Purpose. The purpose of this chapter is to reserve ground waters within Thurston County for future public water supply.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-010, filed 7/14/86.]

WAC 173-591-020 Authority. This regulation is adopted pursuant to the Water Resources Act of 1971, chapter 90.54 RCW and chapter 173-590 WAC.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-020, filed 7/14/86.]

WAC 173-591-030 General. (1) These rules shall apply to ground waters in Thurston County, as defined in WAC 173-591-040 and 173-591-070(4), as specified in Figure II-2 of the coordinated water system plan for Thurston County, dated May 1982, as approved by the department of social and health services for the purposes of reserving ground waters for future public supply, and as shown as the reservation source of supply subareas on the Thurston County reservation source of supply subarea boundary map in WAC 173-591-130, Illus. 2.

(2) The reservation adopted under this chapter will be for the specific geographical area so named the "reservation boundaries" as shown in Figure II-1 of the coordinated water supply plan for Thurston County, dated May 1982, as approved by the department of social and health services for the purposes of reserving ground waters for future public water supply, and shown on the Thurston County reservation area boundary map in WAC 173-591-130, Illus. 1.

(3) Appropriation of reserved waters under this chapter shall be in accordance with the intent and procedures set forth in chapters 90.03 and 90.44 RCW and chapter 173-513 WAC Instream resources protection program—Deschutes River Basin, Water Resource Inventory Area (WRIA) 13 (adopted 6/24/80) and chapter 173-511 WAC Instream resources protection program—Nisqually River Basin, Water Resource Inventory Area (WRIA) 11 (adopted 2/2/81) and chapter 173-514 WAC Instream resources protection program—Kennedy-Goldsborough Water Resource Inventory Area (WRIA 14) (adopted 1/23/84).

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-030, filed 7/14/86.]

WAC 173-591-040 Reservation area defined. "Thurston County reservation area" and "Thurston County reservation source of supply area" shall mean those lands lying within Thurston County described as follows:

Location	Township	Range	Sections
Reservation Area	16N	3W	1-3, 10-12
	16N	2W	1-12
	16N	1W	4-9
	17N	3W	1, 2, 3 (portion), 10-15, 22-27, 34-36
	17N	2W	1-36
	17N	1W	1-21, 27 (portion), 28-33
	17N	1E	6, 7, portions of 3, 8, 18
	18N	3W	1-4, 9-16, 21 (portion), 22 (portion), 23-25, 36
	18N	1W	1-36
	18N	1E	6, 7, 17-20, 29-32, portions of 5, 8, 16, 28
	19N	3W	12, 13, 23-28, 33-36, (portions in Thurston County)
	19N	2W	portion in Thurston County
	19N	1W	portion in Thurston County
	19N	1E	portion in Thurston County
Reservation Source of Supply Area			
Airport	17N	2W	3, 10-15, 22-24 & portions of 9, 16, 21 east of Interstate 5
	18N	2W	34
Allison Springs	18N	2W	18
Location	Township	Range	Sections
Black Lake	17N	2W	4-8, 17-20, 29-31 & portions of 9, 16, 21, 18 & 33 west of Interstate 5
	18N	2W	31-33
Deschutes Valley	17N	2W	12
	18N	2W	25, 26, 35, 36
Hawks Prairie	18N	1W	1-8 & portions of 9-12 north of Interstate 5
	19N	1W	25-36
	18N	1E	portion of 6 west of Nisqually River
	19N	1E	portions of 30 & 31 west of Nisqually River
McAllister Springs	18N	1E	19
Mottman Industrial Park	18N	2W	27-29
Southeast	17N	1W	2-11, 14-23
	18N	1W	19-21, 28-34

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-040, filed 7/14/86.]

WAC 173-591-050 Definitions. For the purpose of this chapter the following definitions shall be used:

(1) "Community water use" means use of water associated with needs of a community including street cleaning, parks, public buildings, public swimming pools, fire fighting, and attendant commercial, industrial and irrigation uses.

(2) "Director" means the director of the state of Washington department of ecology or the director's authorized representative.

(3) "Department" means the department of ecology unless otherwise specified.

(4) "Domestic water use" means use of water associated with human health and welfare requirements, including water used for drinking, bathing, sanitary purposes, cooking, laundering, irrigation of not over one-half acre of lawn or garden per dwelling, and other incidental household uses.

(5) "Commercial and/or industrial use" means use of water associated with commercial and/or industrial requirements such as service, processing, cooling and conveying.

(6) "Public water supply" means any water supply intended or used for human consumption and community uses for more than one single-family residence.

(7) "Public water supply system" means a set of facilities including source, treatment, storage, transmission and distribution facilities whereby water is furnished to any municipality, community, collection, or number of individuals for human consumption and community uses.

(8) "Coordinated water system plan" means a plan adopted by utilities covering one or more public water supply system(s), which identifies present and future needs of participating water systems and sets forth means for meeting those needs in the most efficient manner possible.

(9) "Reservation" means an allocation of water for a future beneficial use with the priority established as of the date when the reservation becomes effective.

(10) "Appropriation" means the process of legally acquiring the right to specific amounts of the public water resource for application to beneficial uses pursuant to RCW 90.03.250 through 90.03.340 and 90.44.060.

(11) "Person" means any individual, municipal, public, or private corporation, or other entity, including a federal or state agency or county which operates a public water supply system or who contemplates such an operation.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-050, filed 7/14/86.]

WAC 173-591-060 Petition received—Notice. A petition requesting the reservation of ground waters in Thurston County pursuant to chapter 173-590 WAC, and a coordinated water system plan approved by the secretary of the department of social and health services were received and accepted by the department. Notice of the receipt of proper petition was published in a newspaper of general circulation in Thurston County for two consecutive weeks, and the director sent notice thereof to the directors of the departments of fisheries, wildlife, and social and health services for the purpose of soliciting their comments.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-591-060, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-060, filed 7/14/86.]

WAC 173-591-070 Reservation. (1) The department, having received a final environmental impact statement dated January 16, 1985, and having conducted an investigation of the surrounding impacts of the proposed reservation and having heard comments solicited through the notice of receipt of petition and having found ground waters to be generally available for the purposes of the reservation and that the proposed use of the ground waters will result in the maximum net benefit for the people of the state, does hereby reserve portions of those ground waters for future public water supplies in Thurston County.

(2) The department finds that to provide peaking capacity on a daily basis the appropriate amount of the reservation shall be 40,589 gallons per minute, limited to a maximum annual withdrawal of 22,931 acre-feet/year, provided that the total annual withdrawal and diversion from all sources shall not exceed 48,225 acre-feet/year. This is intended to serve the estimated population of 288,092 in fifty years. The amount of this reservation shall be reviewed by the department whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

(3) A map showing the reservation area boundary is shown in Figure II-1 of the coordinated water system plan for Thurston County, dated May 1982, as approved by the department of social and health services for the purposes of reserving water for future public water supply purposes, and shown as the reservation area boundary map in WAC 173-591-130, Illus. 1.

(4) Due to the nature of the geographic distribution of the ground waters to be reserved and the development patterns that are anticipated in Thurston County, the reserved ground waters are intended to be beneficially utilized from the unconsolidated materials overlying bedrock, and are prorated to the subareas designated in Figure V-1 of the coordinated water system plan for Thurston County, dated May 1982, as approved by the department of social and health services for the purpose of reserving water for future public water supply purposes, and shown as the reservation source of supply subareas map in WAC 173-591-130, Illus. 2. The reserved ground waters are generally prorated to the reservation source of supply subareas as follows, with the totaled reserved quantity to be obtained from within the boundary area.

Source Location	Reservation Quantities Instantaneous (GPM)	Annual (Af/Yr)
Airport	2,500	1,486
Allison Springs	2,000	1,888
Black Lake	2,000	1,888
Deschutes Valley	1,969	1,170
Hawks Prairie	7,000	4,160
McAllister Springs	2,000	———
Mottman Indust. Park	2,000	1,888
Southeast	14,426	8,573
Total	40,589	22,931

(5) The priority date of any permit issued pursuant to RCW 90.03.290 and 90.44.070 which authorizes withdrawal and use of public water for public water supply pursuant to the reservation provided in subsection (2) of this section shall be the effective date of this regulation.

(6) A record of all ground water permits issued pursuant to the reservation provided in subsection (2) of this section shall be maintained by the department in a manner that will readily show the quantities that have been allocated from the reserved ground waters for each subarea identified in subsection (4) of this section and the quantities of unappropriated ground waters that may remain in the reserved status available for appropriation.

(7) No permit issued as described in subsection (5) of this section shall authorize a withdrawal that causes a lowering of the water levels below a reasonable or feasible pumping lift in any withdrawal facilities of a senior ground water right holder.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-591-070, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-070, filed 7/14/86.]

WAC 173-591-080 Future nonpublic water supply—Policy uses. If applications are made for the use of the ground water reserved in WAC 173-591-070(2) for purposes other than public water supplies, as defined in WAC 173-591-050 (6) and (7), the director may issue a permit allowing such uses but these uses shall be junior in priority to all rights issued pursuant to WAC 173-591-070. Interim uses authorized in this section may be reduced or curtailed in right when necessary to allow to full utilization of higher priority rights established in WAC 173-591-070. The department may limit or otherwise condition junior water rights permits as necessary to ensure availability of the reserved ground waters for public water supply purposes consistent with this chapter.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-080, filed 7/14/86.]

WAC 173-591-090 Monitoring program. (1) The department, in cooperation with local government agencies, shall implement a comprehensive monitoring program, the purpose of which is to maintain accurate information on the quality and quantity of ground water reserved in WAC 173-591-070(2).

(2) Under this monitoring program surface and ground water levels will be periodically recorded as well as the levels of any lakes that are maintained by ground waters.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-090, filed 7/14/86.]

WAC 173-591-100 Water quality. As a general rule, an element of a ground water right is the right to use waters of quality appropriate to the beneficial use. In addition to the protection of the availability of ground water to the water withdrawal facilities of ground water right holders, it shall be the policy of the department to protect the quality of the ground waters of the state and in relation thereto to discourage any withdrawal facilities, construction methods, water use, or disposal practices which would contaminate or otherwise reduce the quality of the ground waters or impair the beneficial uses of ground waters of the state. Local governments with land use authority are urged to exercise their authorities in such a manner as to protect the quality of the public ground waters reserved for future public water supply by this chapter.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-100, filed 7/14/86.]

WAC 173-591-110 Exemptions. Wells for single family domestic, stock watering, or other purposes for which the withdrawal is less than 5,000 gallons per day, with priority dates subsequent to the effective date of this regulation, shall be junior to rights issued pursuant to WAC 173-591-070. The quantities of water withdrawn by such wells will not be subtracted from the waters reserved by this regulation.

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-110, filed 7/14/86.]

WAC 173-591-115 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

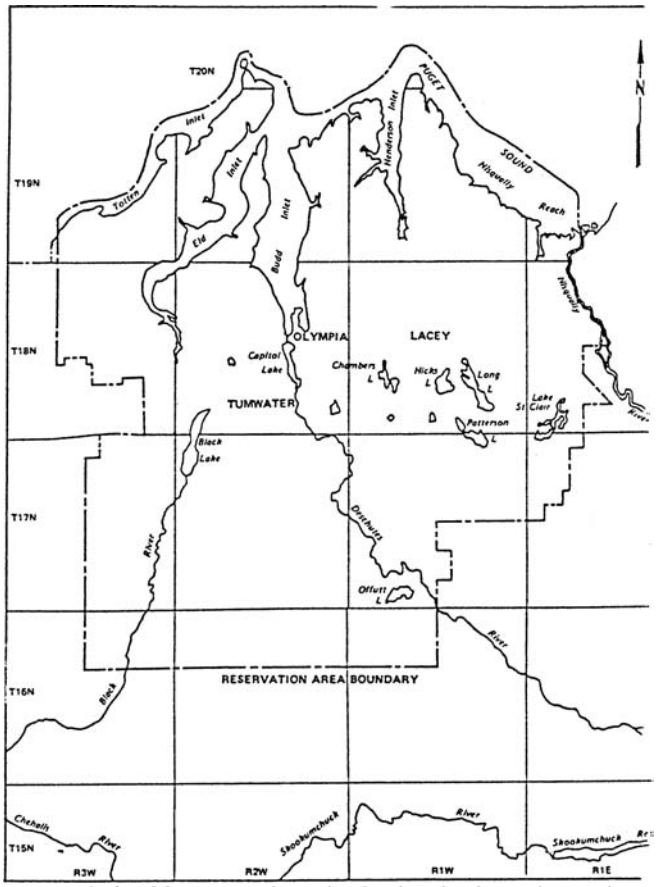
[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-591-115, filed 6/9/88.]

WAC 173-591-120 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-591-120, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-120, filed 7/14/86.]

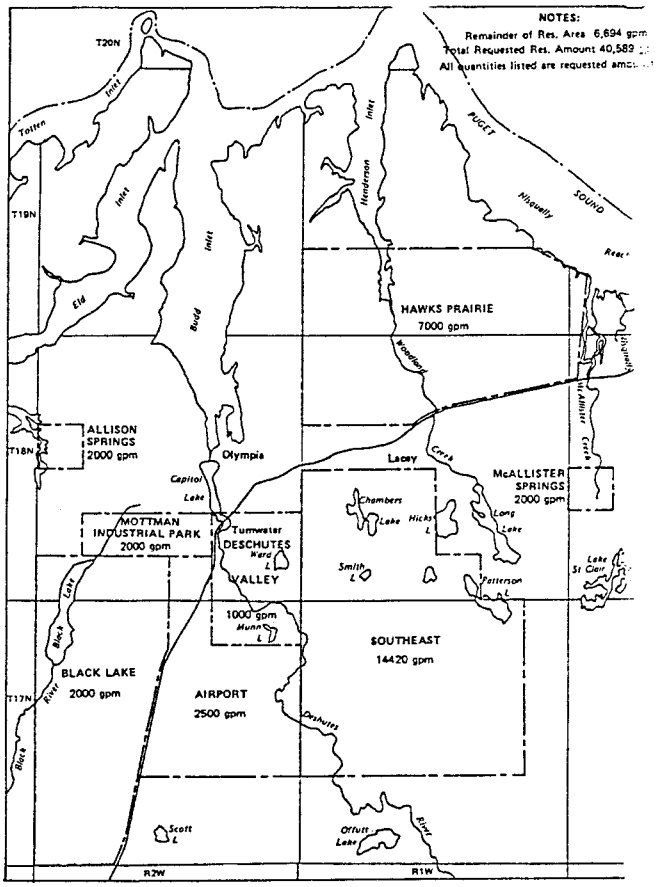
WAC 173-591-130 Reservation boundary maps. Thurston County reservation area and reservation source of supply subareas shall include those lands that lie within the heavy outline on the following maps:

THURSTON COUNTY RESERVATION AREA BOUNDARY MAP



THURSTON COUNTY RESERVATION AREA BOUNDARY MAP
WAC 173-591-130
ILLUSTRATION 1

THURSTON COUNTY RESERVATION SOURCE OF SUPPLY SUB-AREAS BOUNDARY MAP



THURSTON COUNTY RESERVATION SOURCE OF SUPPLY SUBAREAS BOUNDARY MAP
WAC 173-591-130
ILLUSTRATION 2

[Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-130, filed 7/14/86.]

Chapter 173-802 WAC
SEPA PROCEDURES

WAC

173-802-010	Authority.
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173-802-060	Additional timing considerations.
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173-802-080	Mitigated DNS.
173-802-090	EIS preparation.
173-802-100	Public notice requirements.
173-802-110	Policies and procedures for conditioning or denying permits or other approvals.
173-802-120	Environmentally sensitive areas.
173-802-130	Threshold levels adopted by cities/counties.
173-802-140	Responsibilities of individuals and work units within the department.
173-802-150	Coordination on combined department—Federal action.
173-802-190	Severability.

WAC 173-802-010 Authority. These rules are promulgated under RCW 43.21C.120 (the State Environmental Policy Act) and chapter 197-11 WAC (SEPA rules).

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-010, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-020 Adoption by reference. The department of ecology adopts the following sections or subsections of chapter 197-11 WAC by reference.

197-11-040	Definitions.
197-11-050	Lead agency.
197-11-055	Timing of the SEPA process.
197-11-060	Content of environmental review.
197-11-070	Limitations on actions during SEPA process.
197-11-080	Incomplete or unavailable information.
197-11-090	Supporting documents.
197-11-100	Information required of applicants.
197-11-300	Purpose of this part.
197-11-305	Categorical exemptions.
197-11-310	Threshold determination required.
197-11-315	Environmental checklist.
197-11-330	Threshold determination process.
197-11-335	Additional information.
197-11-340	Determination of nonsignificance (DNS).
197-11-350	Mitigated DNS.
197-11-360	Determination of significance (DS)/initiation of scoping.
197-11-390	Effect of threshold determination.
197-11-400	Purpose of EIS.
197-11-402	General requirements.
197-11-405	EIS types.
197-11-406	EIS timing.
197-11-408	Scoping.
197-11-410	Expanded scoping. (Optional)
197-11-420	EIS preparation.
197-11-425	Style and size.
197-11-430	Format.
197-11-435	Cover letter or memo.
197-11-440	EIS contents.
197-11-442	Contents of EIS on nonproject proposals.
197-11-443	EIS contents when prior nonproject EIS.
197-11-444	Elements of the environment.
197-11-448	Relationship of EIS to other considerations.
197-11-450	Cost-benefit analysis.
197-11-455	Issuance of DEIS.
197-11-460	Issuance of FEIS.
197-11-500	Purpose of this part.
197-11-502	Inviting comment.
197-11-504	Availability and cost of environmental documents.
197-11-508	SEPA register.
197-11-535	Public hearings and meetings.
197-11-545	Effect of no comment.
197-11-550	Specificity of comments.
197-11-560	FEIS response to comments.
197-11-570	Consulted agency costs to assist lead agency.
197-11-600	When to use existing environmental documents.
197-11-610	Use of NEPA documents.

197-11-620 Supplemental environmental impact statement—Procedures.
197-11-625 Addenda—Procedures.
197-11-630 Adoption—Procedures.
197-11-635 Incorporation by reference—Procedures.
197-11-640 Combining documents.
197-11-650 Purpose of this part.
197-11-655 Implementation.
197-11-660 Substantive authority and mitigation.
197-11-680 Appeals.
197-11-700 Definitions.
197-11-702 Act.
197-11-704 Action.
197-11-706 Addendum.
197-11-708 Adoption.
197-11-710 Affected tribe.
197-11-712 Affecting.
197-11-714 Agency.
197-11-716 Applicant.
197-11-718 Built environment.
197-11-720 Categorical exemption.
197-11-722 Consolidated appeal.
197-11-724 Consulted agency.
197-11-726 Cost-benefit analysis.
197-11-728 County/city.
197-11-730 Decisionmaker.
197-11-732 Department.
197-11-734 Determination of nonsignificance (DNS).
197-11-736 Determination of significance (DS).
197-11-738 EIS.
197-11-740 Environment.
197-11-742 Environmental checklist.
197-11-744 Environmental document.
197-11-746 Environmental review.
197-11-748 Environmentally sensitive area.
197-11-750 Expanded scoping.
197-11-752 Impacts.
197-11-754 Incorporation by reference.
197-11-756 Lands covered by water.
197-11-758 Lead agency.
197-11-760 License.
197-11-762 Local agency.
197-11-764 Major action.
197-11-766 Mitigated DNS.
197-11-768 Mitigation.
197-11-770 Natural environment.
197-11-772 NEPA.
197-11-774 Nonproject.
197-11-776 Phased review.
197-11-778 Preparation.
197-11-780 Private project.
197-11-782 Probable.
197-11-784 Proposal.
197-11-786 Reasonable alternative.
197-11-788 Responsible official.
197-11-790 SEPA.
197-11-792 Scope.
197-11-793 Scoping.
197-11-794 Significant.
197-11-796 State agency.
197-11-797 Threshold determination.
197-11-799 Underlying governmental action.
197-11-800 Categorical exemptions.
197-11-810 Exemptions and nonexemptions applicable to specific state agencies.
197-11-855 Department of ecology.
197-11-880 Emergencies.
197-11-890 Petitioning DOE to change exemptions.
197-11-900 Purpose of this part.
197-11-908 Environmentally sensitive areas.
197-11-912 Procedures on consulted agencies.
197-11-916 Application to ongoing actions.
197-11-917 Relationship to chapter 197-10 WAC.
197-11-920 Agencies with environmental expertise.
197-11-922 Lead agency rules.
197-11-924 Determining the lead agency.
197-11-926 Lead agency for governmental proposals.
197-11-928 Lead agency for public and private proposals.
197-11-930 Lead agency for private projects with one agency with jurisdiction.
197-11-932 Lead agency for private projects requiring licenses from more than one agency, when one of the agencies is a county/city.
197-11-934 Lead agency for private projects requiring licenses from a local agency, not a county/city, and one or more state agencies.
197-11-936 Lead agency for private projects requiring licenses from more than one state agency.
197-11-938 Lead agencies for specific proposals.
197-11-940 Transfer of lead agency status to a state agency.
197-11-942 Agreements on lead agency status.
197-11-944 Agreements on division of lead agency duties.
197-11-946 DOE resolution of lead agency disputes.
197-11-948 Assumption of lead agency status.
197-11-960 Environmental checklist.
197-11-965 Adoption notice.
197-11-970 Determination of nonsignificance (DNS).
197-11-980 Determination of significance and scoping notice (DS).
197-11-985 Notice of assumption of lead agency status.
197-11-990 Notice of action.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-020, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-030 Purpose. This chapter implements the statewide rules in chapter 197-11 WAC as they apply to the department of ecology.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-030, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-040 Additional definitions. In addition to the definitions contained in WAC 197-11-700 through

197-11-799, the following terms shall have the listed meanings:

(1) "Office" means one of the five offices in the department of ecology supervised by an assistant director.

(2) "Region" means any one of the four regional offices of the department.

(3) "Program" means any one of the department's headquarters sections or divisions that administers a program, such as water quality, water resources, shorelands, and hazardous waste.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-040, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-050 Designation of responsible official. Within the department of ecology, the ultimate responsible official is the director. The responsible official for a specific proposal shall be the person who has been delegated signature authority per WAC 173-06-030, unless more than one person has such authority in a proposal; if so, the responsible official shall be either the next higher supervisor common to all involved persons, or any senior professional staff designated by the deputy director.

[Statutory Authority: Chapter 43.21A RCW. 89-11-021 and 90-07-014 (Order 89-6 and 89-6A), § 173-802-050, filed 5/11/89 and 3/13/90, effective 4/13/90. Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-050, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-060 Additional timing considerations. (1) Department staff receiving a permit application will determine whether the proposal is an "action" and, if so, whether it is "categorically exempt" from SEPA. If the proposal is an action and is not exempt, the staff person should ask the applicant to complete an environmental checklist. A checklist is not needed if the department and applicant agree an EIS is required, SEPA compliance has been completed, SEPA compliance has been initiated by another agency, or a checklist is included with the application. The applicant should also complete an environmental checklist if the staff person is unsure whether the proposal is exempt.

(2) Department staff receiving a completed permit application and environmental checklist should determine whether WDOE or another agency is SEPA lead agency (see WAC 197-11-050 and 197-11-922 through 197-11-940) within five working days. If WDOE is not the lead agency, the staff person shall send the completed environmental checklist, a copy of the permit application, to the lead agency, and an explanation of the determination to the identified lead agency.

(3) When the department has prepared a draft regulation, the draft EIS or determination of nonsignificance (DNS) shall accompany the draft regulation to the ecological commission for its review.

(4) If the only nonexempt action is department approval of detailed project plans and specifications, an applicant may request that the department complete SEPA compliance before the applicant submits the detailed plans and specifications. If the applicant asks for early environmental review, the department shall complete such review at the final engineering report stage, but not earlier.

(5) Whenever possible, the department shall coordinate the comment periods for environmental documents and the planning documents and/or regulations for which they were written, circulating both documents together.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-060, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-070 Threshold determination process—Additional considerations. When reviewing a completed environmental checklist to make the threshold determination, the responsible official or his designee will:

(1) Independently evaluate the responses of the applicant and note comments, concerns, corrections, or new information in the right margin of the checklist.

(2) Conduct the initial review of the checklist and any supporting documents without requiring additional information from the applicant.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-070, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-080 Mitigated DNS. (1) An applicant may ask the department whether issuance of a DS is likely for a proposal. This request for early notice must:

(a) Be written;

(b) Follow submission of a permit application and environmental checklist for a nonexempt proposal for which the department is lead agency; and

(c) Precede the department's actual threshold determination for the proposal.

(2) The responsible official or his designee shall respond to the request within ten working days of receipt of the letter; the response shall:

(a) Be written;

(b) State whether the department is considering issuance of a DS;

(c) Indicate the general or specific area(s) of concern that led the department to consider a DS; and

(d) State that the applicant may change or clarify the proposal to mitigate the impacts indicated in the letter, revising the environmental checklist as necessary to reflect the changes or clarifications.

(3) The department shall not continue with the threshold determination until after receiving a written response from the applicant changing or clarifying the proposal or asking that the threshold determination be based on the original proposal.

(4) If the applicant submits a changed or clarified proposal, along with a revised environmental checklist, the department will make its threshold determination based on the changed or clarified proposal.

(a) If the department's response to the request for early notice indicated specific mitigation measures that would remove all probable significant adverse environmental impacts, and the applicant changes or clarifies the proposal to include all of those specific mitigation measures, the department shall issue a determination of nonsignificance and circulate the DNS for comments as in WAC 197-11-350(2).

(b) If the department indicated general or specific areas of concern, but did not indicate specific mitigation measures that would allow it to issue a DNS, the department shall determine if the changed or clarified proposal may have a probable significant environmental impact, issuing a DNS or DS as appropriate.

(5) The department may specify mitigation measures that would allow it to issue a DNS without a request for early notice from an applicant. If it does so, and the applicant changes or clarifies the proposal to include those measures, the department shall issue a DNS and circulate it for review under WAC 197-11-350(2).

(6) When an applicant changes or clarifies the proposal, the clarifications or changes may be included in written attachments to the documents already submitted. If the environmental checklist and supporting documents would be difficult to read and/or understand because of the need to read them in conjunction with the attachment(s), the department may require the applicant to submit a new checklist.

(7) The department may change or clarify features of its own proposals before making the threshold determination.

(8) The department's written response under subsection (2) of this section shall not be construed as a determination of significance. In addition, preliminary discussion of clarification of or changes to a proposal, as opposed to a written request for early notice, shall not bind the department to consider the clarifications or changes in its threshold determination.

(9) When an applicant submits a changed or clarified proposal pursuant to this section, it shall be considered part of the applicant's application for a permit or other approval for all purposes, including enforcement of the permit or other approval. Unless the department's decision expressly states otherwise, when a mitigated DNS is issued for a proposal, any decision approving the proposal shall be based on the proposal as changed or clarified pursuant to this section.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-080, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-090 EIS preparation. (1) Preparation of draft and final EISs and SEISs is the responsibility of the environmental review section. Before the department issues an EIS, the responsible official shall be satisfied that it complies with these rules and chapter 197-11 WAC.

(2) The department normally will prepare its own draft and final EISs. It may require an applicant to provide information that the department does not possess, including specific investigations. However, the applicant is not required to supply information that is not required under these rules.

(3) If the department would be unable to prepare a draft and/or final EIS due to its commitments or other constraints or when a local agency transfers lead agency status to the department under WAC 197-11-940, the department may allow an applicant the following option for preparation of the draft and/or final EIS for the applicant's proposal:

(a) The department retains a mutually agreed upon and independent outside party to prepare the document.

(b) The applicant and the department agree upon a method of funding in which the applicant will bear the expense of the EIS preparation, but the consultant will work directly for the department.

(c) The outside party will prepare the document under the supervision of the environmental review section and the responsible official.

(d) Normally, the department will print and distribute the documents.

(4) Whenever someone other than the department prepares a draft or final EIS, the department shall:

(a) Direct the areas of research and examination to be undertaken and the content and organization of the document.

(b) Initiate and coordinate scoping, ensuring that the individual preparing the EIS receives all substantive information submitted by any agency or person.

(c) Assist in obtaining information on file with another agency that is needed by the person preparing the EIS.

(d) Allow the person preparing the EIS access to department records relating to the EIS (under chapter 42.17 RCW—Public disclosure and public records law).

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-090, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-100 Public notice requirements. (1) The department shall give public notice when issuing a DNS under WAC 197-11-350(2), a scoping notice under WAC 173-802-090, or a draft EIS under WAC 197-11-455.

(2) Whenever possible, the department shall integrate the public notice required under this section with existing notice procedures for the department's permit or approval required for the proposal.

(a) When more than one permit or approval required from the department has public notice requirements, the notice procedures that would reach the widest audience should be used, if possible.

(b) If the public notice requirements for the permit or approval must be completed at a specific time in the permitting process and that timing does not coincide with the timing requirements for SEPA public notice, the department must use one or more public notice methods in subsection (4) of this section.

(c) If there are no public notice requirements for any of the permits/approvals required for a proposal, the department must use one or more public notice methods in subsection (4) of this section.

(3) The department may require an applicant to perform the public notice requirement at his or her expense.

(4) The department shall use one or more of the following methods of public notice, taking into consideration the geographic area affected by the proposal, the size and complexity of the proposal, the public notice requirements for the permit or approval required from the department, public interest expressed in the proposal, and whether the proposal is a project or regulation:

(a) Mailing to persons or groups who have expressed interest in the proposal, that type of proposal, or proposals in the geographic area in which the proposal will be implemented if approved;

(b) Publication in a newspaper of general circulation in the area in which the proposal will be implemented; and/or

(c) Posting the property, for site-specific proposals.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-100, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-110 Policies and procedures for conditioning or denying permits or other approvals. (1)(a) The overriding policy of the department of ecology is to avoid or mitigate adverse environmental impacts which may result from the department's decisions.

(b) The department of ecology shall use all practicable means, consistent with other essential considerations of state policy, to improve and coordinate plans, functions, programs, and resources to the end that the state and its citizens may:

(i) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(ii) Assure for all people of Washington safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

(iii) Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(iv) Preserve important historic, cultural, and natural aspects of our national heritage;

(v) Maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(vi) Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(vii) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(c) The department recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

(d) The department shall ensure that presently unquantified environmental amenities and values will be given appropriate consideration in decision making along with economic and technical considerations.

(2)(a) When the environmental document for a proposal shows it will cause significant adverse impacts that the proponent does not plan to mitigate, the responsible official shall consider whether:

(i) The environmental document identified mitigation measures that are reasonable and capable of being accomplished;

(ii) Other local, state, or federal requirements and enforcement would mitigate the significant adverse environmental impacts; and

(iii) Reasonable mitigation measures are sufficient to mitigate the significant adverse impacts.

(b) The responsible official may:

(i) Condition the approval for a proposal if mitigation measures are reasonable and capable of being accomplished and the proposal is inconsistent with the policies in subsection (1) of this section.

(ii) Deny the permit or approval for a proposal if reasonable mitigation measures are insufficient to mitigate significant adverse environmental impacts and the proposal is inconsistent with the policies in subsection (1) of this section.

(c) The procedures in WAC 197-11-660 must also be followed when conditioning or denying permits or other approvals.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-110, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-120 Environmentally sensitive areas. (1) In determining whether a proposal is exempt from SEPA, the department shall respect "environmentally sensitive area" designations made by local governments under WAC 197-11-908.

(2) The department shall maintain files of the maps and SEPA procedures that cities/counties must send to the department under WAC 197-11-908. The department shall allow the public, groups, and agencies to review these SEPA procedures and maps during normal business hours.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-120, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-130 Threshold levels adopted by cities/counties. (1) In determining whether a proposal is exempt from SEPA, the department shall respect the threshold levels adopted by cities/counties under WAC 197-11-800(1).

(2) The department shall maintain files of the SEPA procedures that cities/counties must send to the department under WAC 197-11-800 (1)(c). The department shall allow the public, groups, and agencies access to these SEPA procedures during normal business hours.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-130, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-140 Responsibilities of individuals and work units within the department. (1) The environmental review section of the department shall be responsible for the following:

(a) Coordinating agency activities to comply with SEPA, encouraging consistency in SEPA compliance among all regions and programs.

(b) Providing information and guidance on SEPA and the SEPA rules to department staff, agencies, groups, and citizens.

(c) Receiving all SEPA documents sent to the department for review and comment, distributing documents and coordinating review with appropriate regions and programs, preparing the department's response, ensuring a timely response, and requesting extensions to the comment period of an EIS, when needed.

(d) Preparing and publishing the SEPA register weekly as required under WAC 197-11-508.

(e) Maintaining the department's files for EISs, DNSs, scoping notices, and notices of action sent to the department under SEPA and the SEPA rules.

(f) Maintaining files for the city/county SEPA procedures designating environmentally sensitive areas and flexible thresholds and making the information available to department staff and the public.

(g) Writing and/or coordinating EIS preparation, including scoping and the scoping notice, making sure to work with appropriate regions and programs.

(h) Preparing for, coordinating, and presenting annual SEPA workshops and publishing an annual SEPA handbook.

(i) Publishing and distributing the SEPA rules and amending the SEPA rules, as necessary.

(j) Responding to petitions for changes in exemptions from SEPA.

(k) Responding to petitions to resolve lead agency disputes.

(l) Fulfilling the department's other general responsibilities under SEPA and the SEPA rules.

(2) Regional offices and programs of the department shall be responsible for the following:

(a) Determining whether their decision on a permit or other approval, program, policy, plan, or regulation is an "action" under SEPA and, if so, whether it is exempt from SEPA's requirements (the first department official contacted may make these determinations).

(b) Determining whether WDOE or another agency is SEPA lead agency, contacting the environmental review section if there is a question about which agency is the lead agency.

(c) Making the threshold determination (made by the responsible official, see WAC 173-802-050).

(i) Issuing a determination of nonsignificance, if appropriate (issued by responsible official) and ensuring compliance with the public notice requirements of WAC 173-802-100; or

(ii) Contacting the environmental review section if a determination of significance is appropriate.

(d) Reviewing SEPA documents and submitting comments to the environmental review section in a timely fashion, recognizing that SEPA and the SEPA rules impose strict time limits on commenting.

(e) Working with the environmental review section on preparation of EISs.

(f) Ensuring that permit decisions are consistent with the final EIS and DNS.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-140, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-150 Coordination on combined department—Federal action. When the department is considering an action which also involves federal actions, it shall attempt to coordinate the two governmental processes so that only one environmental impact statement need be prepared for that proposal.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-150, filed 6/15/84. Formerly chapter 173-801 WAC.]

WAC 173-802-190 Severability. If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of this chapter, or the application of the provision to other persons or circumstances, shall not be affected.

[Statutory Authority: RCW 43.21C.120 and 43.21C.135. 84-13-037 (Order DE 84-21), § 173-802-190, filed 6/15/84. Formerly chapter 173-801 WAC.]

Chapter 173-806 WAC
MODEL ORDINANCE

WAC

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173-806-055 Additional considerations in time limits applicable to the SEPA process. [Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-055, filed 6/15/84. Formerly WAC 173-805-040.] Repealed by 98-23-038 (Order 95-16 Phase 2), filed 11/10/98, effective 12/11/98. Statutory Authority: RCW 43.21C.130.

PART ONE
AUTHORITY

WAC 173-806-010 Authority. The city/county of . . . . . adopts this ordinance under the State Environmental Policy Act (SEPA), RCW 43.21C.120, and the SEPA rules, WAC 197-11-904.

This ordinance contains this city's/county's SEPA procedures and policies.

The SEPA rules, chapter 197-11 WAC, must be used in conjunction with this ordinance.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-010, filed 6/15/84. Formerly WAC 173-805-010.]

PART TWO
GENERAL REQUIREMENTS

WAC 173-806-020 Purpose of this part and adoption by reference. This part contains the basic requirements that apply to the SEPA process. The city/county adopts the following sections of chapter 197-11 of the Washington Administrative Code by reference:

WAC	
197-11-040	Definitions.
197-11-050	Lead agency.
197-11-060	Content of environmental review.
197-11-070	Limitations on actions during SEPA process.
197-11-080	Incomplete or unavailable information.
197-11-090	Supporting documents.
197-11-100	Information required of applicants.
197-11-158	GMA project review—Reliance on existing plans, laws, and regulations.
197-11-210	SEPA/GMA integration. (WAC 197-11-210 through 197-11-235 optional; does not apply for non-GMA jurisdictions.)
197-11-220	SEPA/GMA definitions.
197-11-228	Overall SEPA/GMA integration procedures.
197-11-230	Timing of an integrated GMA/SEPA process.
197-11-232	SEPA/GMA integration procedures for preliminary planning, environmental analysis, and expanded scoping.
197-11-235	Documents.
197-11-238	Monitoring. (optional)
197-11-250	SEPA/Model Toxics Control Act integration.
197-11-253	SEPA lead agency for MTCA actions.
197-11-256	Preliminary evaluation.
197-11-259	Determination of nonsignificance for MTCA remedial actions.
197-11-262	Determination of significance and EIS for MTCA remedial actions.
197-11-265	Early scoping for MTCA remedial actions.
197-11-268	MTCA interim actions.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-020, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-020, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-030 Additional definitions. In addition to those definitions contained within WAC 197-11-700 through 197-11-799 and 197-11-220, when used in this ordinance, the following terms shall have the following meanings, unless the context indicates otherwise:

(1) "Department" means any division, subdivision or organizational unit of the city/county established by ordinance, rule, or order.

(2) "SEPA rules" means chapter 197-11 WAC adopted by the department of ecology.

(3) "Ordinance" means the ordinance, resolution, or other procedure used by the city/county to adopt regulatory requirements.

(4) "Early notice" means the city's/county's response to an applicant stating whether it considers issuance of a determination of significance likely for the applicant's proposal (mitigated determination of nonsignificance (DNS) procedures).

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-030, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-030, filed 6/15/84. Formerly WAC 173-805-030.]

WAC 173-806-040 Designation of responsible official. (1) *(Note: Use Option 1 or 2, but not both.) (Option 1)* For those proposals for which the city/county is the lead agency, the responsible official shall be *(Note: Indicate position title, level within city's/county's organization, elected official title or legislative body)*…

(Option 2) For public proposals, the head (administrative official) of the department making the proposal shall be the responsible official. For private proposals, the head (administrative official) of the department with primary responsibility for approving the permits and licenses for the proposal shall be the responsible official. When multiple officials have permitting authority, the assignment of responsibility shall be reached by agreement.

(2) For all proposals for which the city/county is the lead agency, the responsible official shall make the threshold determination, supervise scoping and preparation of any required environmental impact statement (EIS), and perform any other functions assigned to the "lead agency" or "responsible official" by those sections of the SEPA rules that were adopted by reference in WAC 173-806-020.

(3) The city/county shall retain all documents required by the SEPA rules (chapter 197-11 WAC) and make them available in accordance with chapter 42.17 RCW.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-040, filed 6/15/84. Formerly WAC 173-805-115.]

WAC 173-806-050 Lead agency determination and responsibilities. (1) The department within the city/county receiving an application for or initiating a proposal that involves a nonexempt action shall determine the lead agency for that proposal under WAC 197-11-050, 197-11-253, and 197-11-922 through 197-11-940; unless the lead agency has been previously determined or the department is aware that another department or agency is in the process of determining the lead agency.

(2) When the city/county is the lead agency for a proposal, the department receiving the application shall determine the responsible official who shall supervise compliance with the threshold determination requirements, and if an EIS is necessary, shall supervise preparation of the EIS.

(3) When the city/county is not the lead agency for a proposal, all departments of the city/county shall use and consider, as appropriate, either the DNS or the final EIS of the lead agency in making decisions on the proposal. No city/county department shall prepare or require preparation of a DNS or EIS in addition to that prepared by the lead agency, unless required under WAC 197-11-600. In some cases, the

city/county may conduct supplemental environmental review under WAC 197-11-600.

(4) If the city/county or any of its departments receives a lead agency determination made by another agency that appears inconsistent with the criteria of WAC 197-11-253 or 197-11-922 through 197-11-940, it may object to the determination. Any objection must be made to the agency originally making the determination and resolved within fifteen days of receipt of the determination, or the city/county must petition the department of ecology for a lead agency determination under WAC 197-11-946 within the fifteen-day time period. Any such petition on behalf of the city/county may be initiated by …

(5) Departments of the city/county are authorized to make agreements as to lead agency status or shared lead agency duties for a proposal under WAC 197-11-942 and 197-11-944: Provided, That the responsible official and any department that will incur responsibilities as the result of such agreement approve the agreement.

(6) Any department making a lead agency determination for a private project shall require sufficient information from the applicant to identify which other agencies have jurisdiction over the proposal (That is: Which agencies require nonexempt licenses?).

(7) When the city/county is lead agency for a MTCA remedial action, the department of ecology shall be provided an opportunity under WAC 197-11-253(5) to review the environmental documents prior to public notice being provided. If the SEPA and MTCA documents are issued together with one public comment period under WAC 197-11-253(6), the city/county shall decide jointly with ecology who receives the comment letters and how copies of the comment letters will be distributed to the other agency.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-050, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-050, filed 6/15/84. Formerly WAC 173-805-070.]

WAC 173-806-053 Transfer of lead agency status to a state agency. *(Optional for cities or towns under 5,000 population and counties with a population under eighteen thousand.)* For any proposal for a private project where the city/county would be the lead agency and for which one or more state agencies have jurisdiction, the city's/county's responsible official may elect to transfer the lead agency duties to a state agency. The state agency with jurisdiction appearing first on the priority listing in WAC 197-11-936 shall be the lead agency and the city/county shall be an agency with jurisdiction. To transfer lead agency duties, the city's/county's responsible official must transmit a notice of the transfer together with any relevant information available on the proposal to the appropriate state agency with jurisdiction. The responsible official of the city/county shall also give notice of the transfer to the private applicant and any other agencies with jurisdiction over the proposal.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-053, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-053, filed 6/15/84. Formerly WAC 173-805-053.]

WAC 173-806-058 Additional timing considerations. (1) For nonexempt proposals, the DNS or *(Note: Select either draft or final EIS.)* … EIS for the proposal shall accompany the city's/county's staff recommendation to any appropriate advisory body, such as the planning commission.

(2) *(This subsection may be used by non-GMA jurisdictions, and by GMA jurisdictions for permits not subject to the notice of application requirements of RCW 36.70B.110.)* If the city's/county's only action on a proposal is a decision on a building permit or other license that requires detailed project plans and specifications, the applicant may request in writing that the city/county conduct environmental review prior to submission of the detailed plans and specifications. *(Note: The following may be added.)* The point at which environmental review may be initiated for specific permits or other licenses requiring detailed project plans and specifications is …

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-058, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-058, filed 6/15/84. Formerly chapter 173-805 WAC.]

PART THREE
CATEGORICAL EXEMPTIONS AND THRESHOLD DETERMINATIONS

WAC 173-806-065 Purpose of this part and adoption by reference. This part contains the rules for deciding whether a proposal has a "probable significant, adverse environmental impact" requiring an environmental impact statement (EIS) to be prepared. This part also contains rules for evaluating the impacts of proposals not requiring an EIS. The city/county adopts the following sections by reference, as supplemented in this part:

WAC	
197-11-300	Purpose of this part.
197-11-305	Categorical exemptions.
197-11-310	Threshold determination required.
197-11-315	Environmental checklist.
197-11-330	Threshold determination process.
197-11-335	Additional information.
197-11-340	Determination of nonsignificance (DNS).
197-11-350	Mitigated DNS.
197-11-355	Optional DNS process.
197-11-360	Determination of significance (DS)/initiation of scoping.
197-11-390	Effect of threshold determination.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-065, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-065, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-070 Flexible thresholds for categorical exemptions. *(Note: This section is optional. The lowest exempt level in the ranges below apply unless the city/county raises the level based on local conditions, such as previous DNSs on the activities or city/county development codes. The city/county may raise the level for an exemption to any point up to the maximum specified in WAC 197-11-800 (1)(c); once levels are established in this ordinance, the city/county must apply a level to all projects within the geographic area to which the level applies.)*

(1)… city/county establishes the following exempt levels for minor new construction under WAC 197-11-800 (1)(b) based on local conditions:

(a) For residential dwelling units in WAC 197-11-800 (1)(b)(i) *(Note: Range 4 - 20 units)*: Up to … dwelling units.

(b) For agricultural structures in WAC 197-11-800 (1)(b)(ii) *(Note: Range 10,000 - 30,000 square feet)*: Up to … square feet.

(c) For office, school, commercial, recreational, service or storage buildings in WAC 197-11-800 (1)(b)(iii) *(Note: Range 4,000 - 12,000 square feet and 20 - 40 parking spaces)*: Up to …square feet and up to … parking spaces.

(d) For parking lots in WAC 197-11-800 (1)(b)(iv) *(Note: Range 20 - 40 parking spaces)*: Up to … parking spaces.

(e) For landfills and excavations in WAC 197-11-800 (1)(b)(v) *(Note: Range 100 - 500 cubic yards)*: Up to . . . . . cubic yards.

(2) Whenever the city/county establishes new exempt levels under this section, it shall send them to the Department of Ecology, Headquarters Office, Olympia, Washington, 98504 under WAC 197-11-800 (1)(c).

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-070, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-080 Use of exemptions. (1) Each department within the city/county that receives an application for a license or, in the case of governmental proposals, the department initiating the proposal, shall determine whether the license and/or the proposal is exempt. The department's determination that a proposal is exempt shall be final and not subject to administrative review. If a proposal is exempt, none of the procedural requirements of this ordinance apply to the proposal. The city/county shall not require completion of an environmental checklist for an exempt proposal.

(2) In determining whether or not a proposal is exempt, the department shall make certain the proposal is properly defined and shall identify the governmental licenses required (WAC 197-11-060). If a proposal includes exempt and nonexempt actions, the department shall determine the lead agency, even if the license application that triggers the department's consideration is exempt.

(3) If a proposal includes both exempt and nonexempt actions, the city/county may authorize exempt actions prior to compliance with the procedural requirements of this ordinance, except that:

(a) The city/county shall not give authorization for:

(i) Any nonexempt action;

(ii) Any action that would have an adverse environmental impact; or

(iii) Any action that would limit the choice of alternatives.

(b) A department may withhold approval of an exempt action that would lead to modification of the physical environment, when such modification would serve no purpose if nonexempt action(s) were not approved; and

(c) A department may withhold approval of exempt actions that would lead to substantial financial expenditures by a private applicant when the expenditures would serve no purpose if nonexempt action(s) were not approved.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-080, filed 6/15/84. Formerly WAC 173-805-060.]

WAC 173-806-090 Environmental checklist. (1) *(Use Option 1 or 2, but not both) (Option 1, using checklist from the rules without changes.)* Except as provided in subsection (4) of this section, a (this exception is added for jurisdictions wishing to use planned actions) completed environmental checklist (or a copy), in the form provided in WAC 197-11-960, shall be filed at the same time as an application for a permit, license, certificate, or other approval not specifically exempted in this ordinance; except, a checklist is not needed if the city/county and applicant agree an EIS is required, SEPA compliance has been completed, or SEPA compliance has been initiated by another agency. The city/county shall use the environmental checklist to determine the lead agency and, if the city/county is the lead agency, for determining the responsible official and for making the threshold determination.

(Option 2, adding questions to the checklist.) A completed environmental checklist shall be filed at the same time as an application for a permit, license, certificate, or other approval not exempted in this ordinance; except, a checklist is not needed if the city/county and applicant agree an EIS is required, SEPA compliance has been completed, or SEPA compliance has been initiated by another agency. Except as provided in subsection (4) of this section, the checklist shall be in the form of WAC 197-11-960 with the following additions: *(Indicate city's/county's additions.)*…

(2) For private proposals, the city/county will require the applicant to complete the environmental checklist, providing assistance as necessary. For city/county proposals, the department initiating the proposal shall complete the environmental checklist for that proposal.

(3) *(Optional.)* The city/county may require that it, and not the private applicant, will complete all or part of the environmental checklist for a private proposal, if either of the following occurs: *(Either one or both of the following may be included.)*

(a) The city/county has technical information on a question or questions that is unavailable to the private applicant; or

(b) The applicant has provided inaccurate information on previous proposals or on proposals currently under consideration.

(4) *(This subsection is to be used only by jurisdictions wishing to use planned actions.)* For projects submitted as planned actions under WAC 197-11-164, the city/county shall use its existing environmental checklist form or may modify the environmental checklist form as provided in WAC 197-11-315. The modified environmental checklist form may be prepared and adopted along with or as part of a planned action ordinance; or developed after the ordinance is adopted. In either case, a proposed modified environmental checklist form must be sent to the department of ecology to allow at least a thirty-day review prior to use.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-090, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-090, filed 6/15/84. Formerly WAC 173-805-090.]

WAC 173-806-100 Mitigated DNS. (1) As provided in this section and in WAC 197-11-350, the responsible official may issue a DNS based on conditions attached to the pro-

posal by the responsible official or on changes to, or clarifications of, the proposal made by the applicant.

(2) An applicant may request in writing early notice of whether a DS is likely under WAC 197-11-350. The request must:

(a) Follow submission of a permit application and environmental checklist for a nonexempt proposal for which the department is lead agency; and

(b) Precede the city's/county's actual threshold determination for the proposal.

(3) The responsible official should respond to the request for early notice within … working days. The response shall:

(a) Be written;

(b) State whether the city/county currently considers issuance of a DS likely and, if so, indicate the general or specific area(s) of concern that is/are leading the city/county to consider a DS; and

(c) State that the applicant may change or clarify the proposal to mitigate the indicated impacts, revising the environmental checklist and/or permit application as necessary to reflect the changes or clarifications.

(4) As much as possible, the city/county should assist the applicant with identification of impacts to the extent necessary to formulate mitigation measures.

(5) When an applicant submits a changed or clarified proposal, along with a revised or amended environmental checklist, the city/county shall base its threshold determination on the changed or clarified proposal and should make the determination within fifteen days of receiving the changed or clarified proposal:

(a) If the city/county indicated specific mitigation measures in its response to the request for early notice, and the applicant changed or clarified the proposal to include those specific mitigation measures, the city/county shall issue and circulate a DNS under WAC 197-11-340(2).

(b) If the city/county indicated areas of concern, but did not indicate specific mitigation measures that would allow it to issue a DNS, the city/county shall make the threshold determination, issuing a DNS or DS as appropriate.

(c) The applicant's proposed mitigation measures (clarifications, changes or conditions) must be in writing and must be specific. For example, proposals to "control noise" or "prevent stormwater runoff" are inadequate, whereas proposals to "muffle machinery to X decibel" or "construct 200-foot stormwater retention pond at Y location" are adequate.

(d) Mitigation measures which justify issuance of a mitigated DNS may be incorporated in the DNS by reference to agency staff reports, studies or other documents.

(6) *(Note: GMA counties/cities may use either Option 1 or 2; non-GMA counties/cities must use Option 1.) (Option 1)* A mitigated DNS is issued under WAC 197-11-340(2), requiring a fourteen-day comment period and public notice. *(Option 2)* A mitigated DNS is issued under either WAC 197-11-340(2), requiring a fourteen-day comment period and public notice, or WAC 197-11-355, which may require no additional comment period beyond the comment period on the notice of application.

(7) Mitigation measures incorporated in the mitigated DNS shall be deemed conditions of approval of the permit decision and may be enforced in the same manner as any term or condition of the permit, or enforced in any manner specifically prescribed by the city/county.

(8) If the city's/county's tentative decision on a permit or approval does not include mitigation measures that were incorporated in a mitigated DNS for the proposal, the city/county should evaluate the threshold determination to assure consistency with WAC 197-11-340 (3)(a) (withdrawal of DNS).

(9) The city's/county's written response under subsection (2) of this section shall not be construed as a determination of significance. In addition, preliminary discussion of clarifications or changes to a proposal, as opposed to a written request for early notice, shall not bind the city/county to consider the clarifications or changes in its threshold determination.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-100, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-100, filed 6/15/84. Formerly chapter 173-805 WAC.]

PART FOUR
ENVIRONMENTAL IMPACT STATEMENT (EIS)

WAC 173-806-110 Purpose of this part and adoption by reference. This part contains the rules for preparing environmental impact statements. The city/county adopts the following sections by reference, as supplemented by this part:

WAC	
197-11-400	Purpose of EIS.
197-11-402	General requirements.
197-11-405	EIS types.
197-11-406	EIS timing.
197-11-408	Scoping.
197-11-410	Expanded scoping. (Optional)
197-11-420	EIS preparation.
197-11-425	Style and size.
197-11-430	Format.
197-11-435	Cover letter or memo.
197-11-440	EIS contents.
197-11-442	Contents of EIS on nonproject proposals.
197-11-443	EIS contents when prior nonproject EIS.
197-11-444	Elements of the environment.
197-11-448	Relationship of EIS to other considerations.
197-11-450	Cost-benefit analysis.
197-11-455	Issuance of DEIS.
197-11-460	Issuance of FEIS.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-110, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-120 Preparation of EIS—Additional considerations. (1) Preparation of draft and final EISs (DEIS and FEIS) and draft and final supplemental EISs (SEIS) is the responsibility of *(department)* under the direction of the responsible official. Before the city/county issues an EIS, the responsible official shall be satisfied that it complies with this ordinance and chapter 197-11 WAC.

(2) The DEIS and FEIS or draft and final SEIS shall be prepared by city/county staff, the applicant, or by a consultant selected by the city/county or the applicant. If the responsible official requires an EIS for a proposal and determines that someone other than the city/county will prepare the EIS,

the responsible official shall notify the applicant immediately after completion of the threshold determination. The responsible official shall also notify the applicant of the city's/county's procedure for EIS preparation, including approval of the DEIS and FEIS prior to distribution.

(3) The city/county may require an applicant to provide information the city/county does not possess, including specific investigations. However, the applicant is not required to supply information that is not required under this ordinance or that is being requested from another agency. (This does not apply to information the city/county may request under another ordinance or statute.)

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-120, filed 6/15/84. Formerly WAC 173-805-100.]

WAC 173-806-125 Additional elements to be covered in an EIS. *(This entire section is optional. If used, you may select any of the listed elements or add your own.)* The following additional elements are part of the environment for the purpose of EIS content, but do not add to the criteria for threshold determinations or perform any other function or purpose under this ordinance:

(1) Economy.

(2) Social policy analysis.

(3) Cost-benefit analysis.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-125, filed 6/15/84. Formerly WAC 173-805-105.]

PART FIVE
COMMENTING

WAC 173-806-128 Adoption by reference. This part contains rules for consulting, commenting, and responding on all environmental documents under SEPA, including rules for public notice and hearings. The city/county adopts the following sections by reference, as supplemented in this part:

WAC	
197-11-500	Purpose of this part.
197-11-502	Inviting comment.
197-11-504	Availability and cost of environmental documents.
197-11-508	SEPA register.
197-11-510	Public notice.
197-11-535	Public hearings and meetings.
197-11-545	Effect of no comment.
197-11-550	Specificity of comments.
197-11-560	FEIS response to comments.
197-11-570	Consulted agency costs to assist lead agency.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-128, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-128, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-130 Public notice. *(This section is required for non-GMA cities and counties. Subsections (1) and (2) of this section may be combined.)* (1) Whenever… city/county issues a DNS under WAC 197-11-340(2) or a DS under WAC 197-11-360(3) the city/county shall give public notice as follows:

(a) If public notice is required for a nonexempt license, the notice shall state whether a DS or DNS has been issued and when comments are due.

(b) If no public notice is required for the permit or approval, the city/county shall give notice of the DNS or DS by: *(Note: Select at least one of the following)*

(i) Posting the property, for site-specific proposals;

(ii) Publishing notice in a newspaper of general circulation in the county, city, or general area where the proposal is located;

(iii) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(iv) Notifying the news media;

(v) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(vi) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (either general lists or lists for specific proposals for subject areas);

(vii) *(or, specify other method)*…

(c) Whenever the city/county issues a DS under WAC 197-11-360(3), the city/county shall state the scoping procedure for the proposal in the DS as required in WAC 197-11-408 and in the public notice.

(2) Whenever the city/county issues a DEIS under WAC 197-11-455(5) or a SEIS under WAC 197-11-620, notice of the availability of those documents shall be given by:

(a) Indicating the availability of the DEIS in any public notice required for a nonexempt license; and *(Note: In addition select at least one of the following or insert all of the list and require that at least one method be used.)*

(b) Posting the property, for site-specific proposals;

(c) Publishing notice in a newspaper of general circulation in the county, city, or general area where the proposal is located;

(d) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(e) Notifying the news media;

(f) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(g) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (general lists or specific lists for proposals or subject areas); *(and/or*

(h) *specify other)*…

(3) Whenever possible, the city/county shall integrate the public notice required under this section with existing notice procedures for the city's/county's nonexempt permit(s) or approval(s) required for the proposal.

(4) The city/county may require an applicant to complete the public notice requirements for the applicant's proposal at his or her expense.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-130, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-130, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-132 Public notice. *(This section is required for GMA cities and counties. Subsections (1) and (2) of this section may be combined.)* (1) Whenever possible, the city/county shall integrate the public notice required under this section with existing notice procedures for the city's/

county's nonexempt permit(s) or approval(s) required for the proposal.

(2) Whenever…city/county issues a DNS under WAC 197-11-340(2) or a DS under WAC 197-11-360(3) the city/county shall give public notice as follows:

(a) If public notice is required for a nonexempt license, the notice shall state whether a DS or DNS has been issued and when comments are due.

(b) If an environmental document is issued concurrently with the notice of application, the public notice requirements for the notice of application in RCW 36.70B.110(4) will suffice to meet the SEPA public notice requirements in WAC 197-11-510(1).

(c) If no public notice is otherwise required for the permit or approval, the city/county shall give notice of the DNS or DS by: *(Note: Select at least one of the following.)*

(i) Posting the property, for site-specific proposals;

(ii) Publishing notice in a newspaper of general circulation in the county, city, or general area where the proposal is located;

(iii) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(iv) Notifying the news media;

(v) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(vi) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (either general lists or lists for specific proposals for subject areas);

(vii) (or, specify other method)…

(d) Whenever the city/county issues a DS under WAC 197-11-360(3), the city/county shall state the scoping procedure for the proposal in the DS as required in WAC 197-11-408 and in the public notice.

(3) If a DNS is issued using the optional DNS process, the public notice requirements for a notice of application in RCW 36.70B.110(4) as supplemented by the requirements in WAC 197-11-355 will suffice to meet the SEPA public notice requirements in WAC 197-11-510 (1)(b).

(4) Whenever the city/county issues a DEIS under WAC 197-11-455(5) or a SEIS under WAC 197-11-620, notice of the availability of those documents shall be given by:

(a) Indicating the availability of the DEIS in any public notice required for a nonexempt license; and (Note: In addition select at least one of the following or insert all of the list and require that at least one method be used.)

(b) Posting the property, for site-specific proposals;

(c) Publishing notice in a newspaper of general circulation in the county, city, or general area where the proposal is located;

(d) Notifying public or private groups which have expressed interest in a certain proposal or in the type of proposal being considered;

(e) Notifying the news media;

(f) Placing notices in appropriate regional, neighborhood, ethnic, or trade journals; and/or

(g) Publishing notice in agency newsletters and/or sending notice to agency mailing lists (general lists or specific lists for proposals or subject areas);

(h) (and/or specify other)…

(5) Public notice for projects that qualify as planned actions shall be tied to the underlying permit as specified in WAC 197-11-172(3).

(6) The city/county may require an applicant to complete the public notice requirements for the applicant's proposal at his or her expense.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-132, filed 11/10/98, effective 12/11/98.]

WAC 173-806-140 Designation of official to perform consulted agency responsibilities for the city/county. (1) The …*(position title, department, or office)* shall be responsible for preparation of written comments for the city/county in response to a consultation request prior to a threshold determination, participation in scoping, and reviewing a DEIS.

(2) This *(person, department or office)* shall be responsible for the city's/county's compliance with WAC 197-11-550 whenever the city/county is a consulted agency and is authorized to develop operating procedures that will ensure that responses to consultation requests are prepared in a timely fashion and include data from all appropriate departments of the city/county.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-140, filed 6/15/84. Formerly WAC 173-805-110.]

PART SIX
USING EXISTING ENVIRONMENTAL DOCUMENTS

WAC 173-806-150 Purpose of this part and adoption by reference. This part contains rules for using and supplementing existing environmental documents prepared under SEPA or National Environmental Policy Act (NEPA) for the city's/county's own environmental compliance. The city/county adopts the following sections by reference:

WAC	
197-11-164	Planned actions—Definition and criteria.
197-11-168	Ordinances or resolutions designating planned actions—Procedures for adoption.
197-11-172	Planned actions—Project review.
197-11-600	When to use existing environmental documents.
197-11-610	Use of NEPA documents.
197-11-620	Supplemental environmental impact statement—Procedures.
197-11-625	Addenda—Procedures.
197-11-630	Adoption—Procedures.
197-11-635	Incorporation by reference—Procedures.
197-11-640	Combining documents.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-150, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-150, filed 6/15/84. Formerly WAC 173-805-020.]

PART SEVEN
SEPA AND AGENCY DECISIONS

WAC 173-806-155 Purpose of this part and adoption by reference. This part contains rules (and policies) for SEPA's substantive authority, such as decisions to mitigate or reject proposals as a result of SEPA. This part also contains

procedures for appealing SEPA determinations to agencies or the courts. The city/county adopts the following sections by reference:

WAC

197-11-650	Purpose of this part.
197-11-655	Implementation.
197-11-660	Substantive authority and mitigation.
197-11-680	Appeals.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-155, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-160 Substantive authority. (1) The policies and goals set forth in this ordinance are supplementary to those in the existing authorization of the city of … /… county.

(2) The (city/county) may attach conditions to a permit or approval for a proposal so long as:

(a) Such conditions are necessary to mitigate specific probable adverse environmental impacts identified in environmental documents prepared pursuant to this ordinance; and

(b) Such conditions are in writing; and

(c) The mitigation measures included in such conditions are reasonable and capable of being accomplished; and

(d) The city/county has considered whether other local, state, or federal mitigation measures applied to the proposal are sufficient to mitigate the identified impacts; and

(e) Such conditions are based on one or more policies in subsection (4) of this section and cited in the license or other decision document.

(3) The (city/county) may deny a permit or approval for a proposal on the basis of SEPA so long as:

(a) A finding is made that approving the proposal would result in probable significant adverse environmental impacts that are identified in a FEIS or final SEIS prepared pursuant to this ordinance; and

(b) A finding is made that there are no reasonable mitigation measures capable of being accomplished that are sufficient to mitigate the identified impact; and

(c) The denial is based on one or more policies identified in subsection (4) of this section and identified in writing in the decision document.

(4) The city/county designates and adopts by reference the following policies as the basis for the city's/county's exercise of authority pursuant to this section:

(a) The city/county shall use all practicable means, consistent with other essential considerations of state policy, to improve and coordinate plans, functions, programs, and resources to the end that the state and its citizens may:

(i) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(ii) Assure for all people of Washington safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

(iii) Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(iv) Preserve important historic, cultural, and natural aspects of our national heritage;

(v) Maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(vi) Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(vii) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(b) The city/county recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

(c) *(Optional.)* The city/county adopts by reference the policies in the following city/county *(codes, ordinances, resolutions, plans)* … *(List the codes, ordinances, resolutions, or plans you have selected, such as zoning ordinance, building codes or comprehensive plans.)* …

(d) *(Optional.)* The city/county establishes the following additional policies: …

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-160, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-160, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-170 Appeals. (1) *(Agency administrative appeal is optional. If allowed, the statute requires that all of this subsection be included, except (c) of this subsection which is optional.)* … city/county establishes the following administrative appeal procedures under RCW 43.21C.075 and WAC 197-11-680:

(Note: No model ordinance language has been prepared for administrative appeals, as there are many different choices a city or county can make. If you choose to offer administrative appeals, state your procedures here. Special note: If you do not wish to offer one specific type of administrative appeal, that of a nonelected official's decision conditioning or denying a proposal, RCW 43.21C.060 requires you to clearly state that you are eliminating that type of appeal.)

(b) For any appeal under this subsection, the city/county shall provide for a record that shall consist of the following:

(i) Findings and conclusions;

(ii) Testimony under oath; and

(iii) A taped or written transcript.

(c) *(Optional.)* The city/county may require the appellant to provide an electronic transcript.

(d) The procedural determination by the city's/county's responsible official shall carry substantial weight in any appeal proceeding.

(2) The city/county shall give official notice under WAC 197-11-680(5) whenever it issues a permit or approval for which a statute or ordinance establishes a time limit for commencing judicial appeal. *(The following is optional.)* The following permits or approvals require official notice: …

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-170, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-170, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-173 Notice/statute of limitations. *(Optional.)* (1) The city/county, applicant for, or proponent of an action may publish a notice of action pursuant to RCW 43.21C.080 for any action.

(2) The form of the notice shall be substantially in the form provided in WAC 197-11-990. The notice shall be published by the city clerk or county auditor, applicant or proponent pursuant to RCW 43.21C.080.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-173, filed 6/15/84. Formerly WAC 173-805-135.]

PART EIGHT
DEFINITIONS

WAC 173-806-175 Purpose of this part and adoption by reference. This part contains uniform usage and definitions of terms under SEPA. The city/county adopts the following sections by reference, as supplemented by WAC 173-806-030:

WAC	
197-11-700	Definitions.
197-11-702	Act.
197-11-704	Action.
197-11-706	Addendum.
197-11-708	Adoption.
197-11-710	Affected tribe.
197-11-712	Affecting.
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197-11-716	Applicant.
197-11-718	Built environment.
197-11-720	Categorical exemption.
197-11-721	Closed record appeal.
197-11-722	Consolidated appeal.
197-11-724	Consulted agency.
197-11-726	Cost-benefit analysis.
197-11-728	County/city.
197-11-730	Decision maker.
197-11-732	Department.
197-11-734	Determination of nonsignificance (DNS).
197-11-736	Determination of significance (DS).
197-11-738	EIS.
197-11-740	Environment.
197-11-742	Environmental checklist.
197-11-744	Environmental document.
197-11-746	Environmental review.
197-11-750	Expanded scoping.
197-11-752	Impacts.
197-11-754	Incorporation by reference.
197-11-756	Lands covered by water.
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197-11-760	License.
197-11-762	Local agency.
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197-11-770	Natural environment.
197-11-772	NEPA.
197-11-774	Nonproject.
197-11-775	Open record hearing.
197-11-776	Phased review.
197-11-778	Preparation.
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197-11-797	Threshold determination.
197-11-799	Underlying governmental action.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-175, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-175, filed 6/15/84. Formerly WAC 173-805-020.]

PART NINE
CATEGORICAL EXEMPTIONS

WAC 173-806-180 Adoption by reference. The city/county adopts by reference the following rules for categorical exemptions, as supplemented in this ordinance, including WAC 173-806-070 (Flexible thresholds), WAC 173-806-080 (Use of exemptions), and WAC 173-806-190 (Critical areas):

WAC	
197-11-800	Categorical exemptions.
197-11-880	Emergencies.
197-11-890	Petitioning DOE to change exemptions.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-180, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-180, filed 6/15/84. Formerly WAC 173-805-020.]

PART TEN
AGENCY COMPLIANCE

WAC 173-806-185 Purpose of this part and adoption by reference. This part contains rules for agency compliance with SEPA, including rules for charging fees under the SEPA process, designating categorical exemptions that do not apply within critical areas, listing agencies with environmental expertise, selecting the lead agency, and applying these rules to current agency activities. The city/county adopts the following sections by reference:

WAC	
197-11-900	Purpose of this part.
197-11-902	Agency SEPA policies.
197-11-916	Application to ongoing actions.
197-11-920	Agencies with environmental expertise.
197-11-922	Lead agency rules.
197-11-924	Determining the lead agency.
197-11-926	Lead agency for governmental proposals.
197-11-928	Lead agency for public and private proposals.
197-11-930	Lead agency for private projects with one agency with jurisdiction.
197-11-932	Lead agency for private projects requiring licenses from more than one agency, when one of the agencies is a county/city.
197-11-934	Lead agency for private projects requiring licenses from a local agency, not a county/city, and one or more state agencies.

WAC
197-11-936 Lead agency for private projects requiring licenses from more than one state agency.
197-11-938 Lead agencies for specific proposals.
197-11-940 Transfer of lead agency status to a state agency.
197-11-942 Agreements on lead agency status.
197-11-944 Agreements on division of lead agency duties.
197-11-946 DOE resolution of lead agency disputes.
197-11-948 Assumption of lead agency status.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-185, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-185, filed 6/15/84. Formerly WAC 173-805-020.]

WAC 173-806-190 Critical areas. *(Optional.)* (1) The city/county has selected certain categorical exemptions that will not apply in one or more critical areas identified in the critical areas ordinances required under RCW 36.70A.060. For each critical area listed below, the exemptions within WAC 197-11-800 that are inapplicable for that area are:

(a) …(list each critical area and exemptions that do not apply within that critical area; exemptions that do not apply can be chosen from the list in WAC 197-11-908)…

(b) …

(2) The scope of environmental review of actions within these areas shall be limited to:

(a) Documenting whether the proposal is consistent with the requirements of the critical areas ordinance; and

(b) Evaluating potentially significant impacts on the critical area resources not adequately addressed by GMA planning documents and development regulations, if any, including any additional mitigation measures needed to protect the critical areas in order to achieve consistency with SEPA and with other applicable environmental review laws.

(3) All categorical exemptions not listed in subsection (1) of this section apply whether or not the proposal will be located in a critical area.

[Statutory Authority: RCW 43.21C.130. 98-23-038 (Order 95-16 Phase 2), § 173-806-190, filed 11/10/98, effective 12/11/98; 84-13-036 (Order DE 84-25), § 173-806-190, filed 6/15/84. Formerly WAC 173-805-050.]

WAC 173-806-200 Fees. *(This entire section is optional. You may use any or none of subsections (1), (2) or (4) of this section but you must use subsection (3) of this section if other subsections are used.)* The city/county shall require the following fees for its activities in accordance with the provisions of this ordinance:

(1) Threshold determination. For every environmental checklist the city/county will review when it is lead agency, the city/county shall collect a fee of *($50.00 or enter a different amount)* … from the proponent of the proposal prior to undertaking the threshold determination. The time periods provided by this ordinance for making a threshold determination shall not begin to run until payment of the fee. *(Note: The following option may be added*: When the city/county completes the environmental checklist at the applicant's request or under WAC 173-806-090(3) of this ordinance, an additional … shall be collected.)

(2) Environmental impact statement.

(a) When the city/county is the lead agency for a proposal requiring an EIS and the responsible official determines that the EIS shall be prepared by employees of the city/county, the city/county may charge and collect a reasonable fee from any applicant to cover costs incurred by the city/county in preparing the EIS. The responsible official shall advise the applicant(s) of the projected costs for the EIS prior to actual preparation; the applicant shall post bond or otherwise ensure payment of such costs.

(b) The responsible official may determine that the city/county will contract directly with a consultant for preparation of an EIS, or a portion of the EIS, for activities initiated by some persons or entity other than the city/county and may bill such costs and expenses directly to the applicant. The city/county may require the applicant to post bond or otherwise ensure payment of such costs. Such consultants shall be selected by mutual agreement of the city/county and applicant after a call for proposals.

(c) If a proposal is modified so that an EIS is no longer required, the responsible official shall refund any fees collected under (a) or (b) of this subsection which remain after incurred costs are paid.

(3) The city/county may collect a reasonable fee from an applicant to cover the cost of meeting the public notice requirements of this ordinance relating to the applicant's proposal.

(4) The city/county shall not collect a fee for performing its duties as a consulted agency.

(5) The city/county may charge any person for copies of any document prepared under this ordinance, and for mailing the document, in a manner provided by chapter 42.17 RCW.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-200, filed 6/15/84. Formerly WAC 173-805-130.]

WAC 173-806-205 Effective date. (Optional.) The effective date of this ordinance is …

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-205, filed 6/15/84. Formerly chapter 173-805 WAC.]

WAC 173-806-220 Severability. If any provision of this ordinance or its application to any person or circumstance is held invalid, the remainder of this ordinance, or the application of the provision to other persons or circumstances, shall not be affected.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-220, filed 6/15/84. Formerly WAC 173-805-140.]

PART ELEVEN
FORMS

WAC 173-806-230 Adoption by reference. The city/county adopts the following forms and sections by reference:

WAC
197-11-960 Environmental checklist.
197-11-965 Adoption notice.
197-11-970 Determination of nonsignificance (DNS).
197-11-980 Determination of significance and scoping notice (DS).

WAC

197-11-985 Notice of assumption of lead agency status.

197-11-990 Notice of action.

[Statutory Authority: RCW 43.21C.130. 84-13-036 (Order DE 84-25), § 173-806-230, filed 6/15/84. Formerly WAC 173-805-020.]

Chapter 173-900 WAC
ELECTRONIC PRODUCTS RECYCLING PROGRAM

WAC

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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-900-040 Required brand labeling. [Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-040, filed 11/7/06, effective 12/8/06.] Repealed by 07-21-013 (Order 07-05), filed 10/5/07, effective 11/5/07. Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW.

173-900-050 Offering for sale or selling covered electronic products (CEPs) in or into Washington. [Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-050, filed 11/7/06, effective 12/8/06.] Repealed by 07-21-013 (Order 07-05), filed 10/5/07, effective 11/5/07. Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW.

PART I
GENERAL REQUIREMENTS

WAC 173-900-010 Purpose. (1) The Washington state legislature has required that a convenient, safe, and environmentally sound system for the collection, transportation, and recycling of covered electronic products (CEPs) be established throughout Washington state. The legislature determined that such a system must encourage the design of electronic products that are less toxic and more recyclable and that the responsibility for this system must be shared among all stakeholders, with manufacturers financing the collection, transportation, and recycling system.

(2) This chapter implements the Electronic Product Recycling Act, chapter 70.95N RCW. This chapter:

(a) Defines the administrative and enforcement responsibilities delegated to the department of ecology; and

(b) Describes the processes and procedures that ecology will use to carry out those responsibilities.

[Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-010, filed 11/7/06, effective 12/8/06.]

WAC 173-900-020 Applicability. This chapter applies to:

(1) Any manufacturer, as defined in this chapter.

(2) The authority or authorized party for a covered electronic product (CEP) recycling plan.

(3) Any person who collects covered electronic products (CEPs) in Washington state for a CEP recycling plan approved under this chapter.

(4) Any person who transports covered electronic products (CEPs) in Washington state for a CEP recycling plan approved under this chapter.

(5) Any person who directly processes covered electronic products (CEPs) for a CEP recycling plan approved under this chapter.

(6) Any retailer that offers for sale or sells electronic products and covered electronic products (CEPs) in or into Washington state.

(7) Any local government in Washington state.

(8) Any nonprofit charitable organization that collects covered electronic products (CEPs) in Washington state.

(9) Any household, charity, school district, small business, or small government (covered entities) in Washington state that wants to recycle unwanted covered electronic products (CEPs).

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-020, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-020, filed 11/7/06, effective 12/8/06.]

WAC 173-900-030 Definitions. **"Authority"** means the Washington materials management and financing authority.

"Authorized party" means a manufacturer who submits an individual independent plan or the entity authorized to submit an independent plan for more than one manufacturer.

"Board" means the board of directors of the Washington materials management and financing authority.

"Brand" means a name used to identify an electronic product in the consumer marketplace which attributes the electronic product to the owner of the name as the manufacturer.

"Brand label" typically includes but is not limited to name, logos, trademarks, and other visual elements including fonts, color schemes, shapes, symbols, and icons, which, when set in a special typeface or arranged in a particular way, differentiate electronic products by their manufacturers and brand owners.

"Cathode ray tube" or **"CRT"** means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.

"Certified" means certified by signature on a form or other "hard copy," or by electronic signature or certification by a means implemented and approved by ecology, to be sent by mail or faxed or otherwise submitted to ecology.

"Charity" means an organization that qualifies for a taxation exemption under section 501 (c)(3) of the Internal Revenue Code of 1986 (26 U.S.C. Sec. 501 (c)(3)).

"Collection services" include drop-off collection sites or alternative collection services such as residential at-home pick-up services, curb-side collection, or premium services such as those provided when performing system up-grades at small businesses.

"Collector" means an entity that is licensed to do business in Washington state and that gathers unwanted covered electronic products from households, small businesses, school districts, small governments, and charities for the purpose of recycling and meets the registration and collector performance standard requirements in Part IV, WAC 173-900-400 through 173-900-490.

"Component" includes but is not limited to televisions, computers, laptops, portable computers, monitors, keyboards, mice, and external hard drives.

"Computer" means a machine, used by one user at a time, designed for manipulating data according to a list of instructions known as a program, and are generally known as desktops, laptops, and portable computers. **"Computer"** does not include any of the following:

(a) A machine capable of supporting two or more work stations simultaneously for computing;

(b) Computer servers marketed to professional users; or

(c) Retail store terminals or cash registers, used at customer checkout in the retail industry.

"Contract for services" means an instrument executed by the authority and one or more persons or entities that delineates collection, transportation, processing and recycling services, in whole or in part, that will be provided to the citizens of Washington state within service areas as described in the approved standard plan.

"Covered electronic product" or **"CEP"** includes any one of the following four types of products that has been used in Washington state by any covered entity, regardless of original point of purchase:

(a) Any monitor having a viewable area greater than four inches when measured diagonally;

(b) A desktop computer;

(c) A laptop or a portable computer; or

(d) Any video display device having a viewable area greater than four inches when measured diagonally.

"Covered electronic product" does not include:

(a) A motor vehicle or replacement parts for use in motor vehicles or aircraft, or any computer, computer monitor, or television that is contained within, and is not separate from, the motor vehicle or aircraft;

(b) Monitoring and control instruments or systems;

(c) Medical devices;

(d) Products including materials intended for use as ingredients in those products as defined in the federal Food, Drug, and Cosmetic Act (21 U.S.C. Sec. 301 et seq.) or the Virus-Serum-Toxin Act of 1913 (21 U.S.C. Sec. 151 et seq.), and regulations issued under those acts;

(e) Equipment used in the delivery of patient care in a health care setting;

(f) A computer, computer monitor, or television that is contained within a clothes washer, clothes dryer, refrigerator, refrigerator and freezer, microwave oven, conventional oven or range, dishwasher, room air conditioner, dehumidifier, or air purifier; automatic teller machines, vending machines or similar business transaction machines; or

(g) Hand-held portable voice or data devices used for commercial mobile services as defined in 47 U.S.C. Sec. 332 (d)(1).

"Covered entity" means any household, charity, school district, small business, or small government located in Washington state.

"Curbside service" means a collection service providing regularly scheduled pickup of covered electronic products from households or other covered entities in quantities generated from households.

"Desktop" is a computer designed for nonportable use.

"Direct processor" means a processor contracted with a CEP recycling plan to provide processing services for the plan.

"Ecology" means the department of ecology.

"Electronic product" includes any monitor having a viewable area greater than four inches when measured diagonally; a desktop computer; a laptop or portable computer; or any video display device having a viewable area greater than four inches when measured diagonally.

"Equivalent share" means the weight in pounds of covered electronic products identified for an individual manufacturer as described in Part IX, WAC 173-900-930, 173-900-940, and 173-900-950.

"Existing manufacturers" are those entities whose covered electronic products are offered for sale or sold in or into Washington state, through any sales method, as of December 8, 2006.

"Household" means a single detached dwelling unit or a single unit of a multiple dwelling unit and appurtenant structures.

"Implement" or **"plan implementation"** means that collection, transportation, processing, and recycling services and other plan requirements are fully operational as described in the approved CEP recycling plan.

"Independent plan" means a plan for the collection, transportation, processing and recycling of unwanted covered electronic products that is developed, implemented, and financed by an individual manufacturer or by an authorized party.

"Laptop" is a computer.

"Manufacturer" means the person who:

(a) Has legal ownership of the brand, brand-name or cobrand of covered electronic products sold in or into Washington state;

(b) Imports an electronic product branded by a manufacturer that meets (a) of this subsection and that manufacturer has no physical presence in the United States of America; or

(c) Sells at retail a covered electronic product acquired from an importer that is the manufacturer as described in (b) of this subsection, and elects to register in lieu of the importer.

"Manufacturers whose CEPs are not directly sold in or into Washington state" are those entities who have never sold or offered for sale covered electronic products in or into Washington state and whose CEP brand names are identified on the return share list or their CEPs are returned for recycling by a covered entity.

"Manufacturers who previously manufactured" are those entities that previously manufactured covered electronic products but no longer do so and whose brand names of CEPs are identified on the return share list or their CEPs are returned for recycling by a covered entity.

"Market share" means a percent of covered electronic products sold in Washington state representing the manufacturer's share of all covered electronic products sold in Washington state assigned to a registered manufacturer based on the calculations in WAC 173-900-280.

"Material" means processed CEPs, components, and parts.

"Materials of concern" are any of the following:

(a) Any devices, including fluorescent tubes, containing mercury or PCBs;

(b) Batteries;

(c) CRTs and leaded glass; and

(d) Whole circuit boards.

"Monitor" is a video display device without a tuner that can display pictures and sound and is used with a computer.

"New entrant" means:

(a) A manufacturer of televisions that have been sold in Washington state for less than ten consecutive years; or

(b) A manufacturer of desktop computers, laptop and portable computers, or computer monitors that have been sold in Washington state for less than five consecutive years;

(c) However, a manufacturer of both televisions and computers or a manufacturer of both televisions and computer monitors that is deemed a new entrant under either only (a) or (b) of this subsection is considered an existing manufacturer and not a new entrant for purposes of this chapter.

"New manufacturers to Washington state" are those entities whose covered electronic products are offered for sale or sold in or into Washington state for the first time after December 8, 2006. These manufacturers become existing manufacturers for all program years after participation the first year.

"Nonprofit organization" means an organization that qualifies for a taxation exemption under section 501(c)(3) of the Internal Revenue Code of 1986 (26 U.S.C. Sec. 501 (c)(3)).

"Offering for sale" means providing electronic products for purchase, in or into Washington state, regardless of sales method.

"Orphan product" means a covered electronic product that lacks a manufacturer's brand or for which the manufacturer is no longer in business and has no successor in interest, or is a brand for which ecology cannot identify an owner.

"Part" means whole pieces out of CEPs, or components such as but not limited to processors, chips, or cathode ray tubes.

"Person" means any individual, business, manufacturer, transporter, collector, processor, retailer, charity, nonprofit organization, or government agency.

"Plan" means a CEP recycling plan.

"Plan's equivalent share" means the weight in pounds of covered electronic products for which a plan is responsible. A plan's equivalent share is equal to the sum of the equivalent shares of each manufacturer participating in that plan.

"Plan's return share" means the sum of the return shares of each manufacturer participating in that plan.

"Portable computer" is a computer.

"Preferred status" means that a direct processor is conforming with the performance standards for electronic product recycling as described in ecology's publication "*Environmentally Sound Management and Performance Standards for Direct Processors*."

"Premium service" means services such as at-location system upgrade services provided to covered entities and at-home pickup services offered to households or any handling requirements imposed by the covered entity in excess of those required in this chapter.

"Premium service" does not include curbside service.

"Processing facility" means a facility where the processing of CEPs for a plan is conducted by a direct processor.

"Providing processing services" means disassembling, dismantling, or shredding electronic products to recover materials contained in the CEPs received from registered collectors or transporters and preparing those materials for reclaiming or reuse in accordance with processing standards established by this chapter.

"Processor" means an entity:

(a) Engaged in disassembling, dismantling, or shredding electronic products to recover materials contained in the electronic products and preparing those materials for reclaiming or reuse in new products in accordance with processing standards established by this chapter; and

(b) That may salvage CEPs, components, and parts to be used in new products.

"Product type" means one of the following categories: Computer monitors; desktop computers; laptop and portable computers; and televisions.

"Program" means the collection, transportation, processing and recycling activities conducted to implement an independent plan or the standard plan. Programs can vary for different areas of the state.

"Program year" means each full calendar year after the program has been initiated.

"Recycling" means transforming or remanufacturing unwanted electronic products, components, and by-products into usable or marketable materials for use other than landfill disposal or incineration. **"Recycling"** does not include energy recovery or energy generation by means of combusting unwanted electronic products, components, and by-products with or without other waste. Smelting of electronic materials to recover metals for reuse in conformance with all applicable laws and regulations is not considered disposal or energy recovery.

"Residual" means leftover materials from processing CEPs, components, parts and materials. Residuals cannot be used for their original function or cannot be recycled and are sent by a processor to a disposal facility.

"Retailer" means a person who offers covered electronic products for sale at retail through any means including, but not limited to, remote offerings such as sales outlets, catalogs, or the internet, but does not include a sale that is either reused products or a wholesale transaction with a distributor or a retailer.

"Return share" means the percentage of covered electronic products by weight identified for an individual manufacturer, as determined by ecology.

"Reuse" means any operation by which an electronic product or a component of a covered electronic product changes ownership and is used, as is, for the same purpose for which it was originally purchased.

"Sell" or **"sold"** means an electronic product is purchased regardless of sales method.

"Small business" means a business employing less than fifty people.

"Small government" means a city in Washington state with a population less than fifty thousand, a county in Washington state with a population less than one hundred twenty-five thousand, and special purpose districts in Washington state.

"Standard plan" means the plan for the collection, transportation, processing and recycling of unwanted covered electronic products developed, implemented, and financed by the authority on behalf of manufacturers participating in the authority.

"Television" is an enclosed video display device with a tuner able to receive and output frequency waves or digital signals to display pictures and sounds.

"Transporter" means an entity that transports covered electronic products from collection sites or services to processors or other locations for the purpose of recycling, but does not include any entity or person that hauls their own unwanted electronic products.

"Unwanted electronic product" means a covered electronic product that has been discarded or is intended to be discarded by its owner.

"White box manufacturer" means a person who manufactured unbranded covered electronic products offered for sale in Washington state within ten consecutive years prior to a program year for televisions or within five consecutive years prior to a program year for desktop computers, laptop or portable computers, or computer monitors.

"Video display devices" include units capable of presenting images electronically on a screen, with a viewable area greater than four inches when measured diagonally, viewed by the user and may include cathode ray tubes, flat panel computer monitors, plasma displays, liquid crystal displays, rear and front enclosed projection devices, and other

similar displays that exist or may be developed. Televisions and monitors are video display devices.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-030, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-030, filed 11/7/06, effective 12/8/06.]

PART II
MANUFACTURER REQUIREMENTS

WAC 173-900-200 Manufacturers who must register and participate in a CEP recycling plan. (1) The following manufacturers must register with ecology and participate in a CEP recycling plan:

Table 200
Type of Manufacturer

Type of Manufacturer		Initial Registration Due Date	Must be Listed as a Plan Participant By:
Existing manufacturers	Those entities whose CEPs are offered for sale or sold in or into Washington state, as of December 8, 2006.	On or before January 1, 2007.	No later than February 1, 2008.
New manufacturers to Washington state	Those entities whose CEPs are offered for sale or sold in or into Washington state for the first time after December 8, 2006.	Prior to the offering for sale of their CEPs in or into WA.	Within thirty days of ecology approving registration.
Manufacturers whose CEPs are not directly sold in or into Washington state	If a CEP brand is identified in the Washington state return share list or is returned for recycling by a covered entity, a manufacturer must register even if that manufacturer has never sold or offered for sale the identified brands directly in or into Washington state.	Within sixty days of receiving notice from ecology that the manufacturer must register.	Within thirty days of ecology approving registration.
Manufacturers who previously manufactured	Those entities that previously manufactured CEPs but no longer do so and whose brand names of CEPs are identified in the Washington state return share list or their CEPs are returned for recycling by a covered entity.	Within sixty days of receiving notice from ecology that the manufacturer must register.	Within thirty days of ecology approving registration.

(2) A manufacturer is registered under this chapter when:

(a) Ecology has determined the manufacturer's registration form is complete and accurate; and

(b) The manufacturer has paid the required administrative fee (see WAC 173-900-280).

(3) Registration under this chapter is only for purposes of administering the electronic product recycling program, and does not constitute endorsement by ecology of a particular registrant.

(4) A manufacturer must participate in either the standard plan or, if approved, an independent plan.

(5) In the event that the plan fails to meet the manufacturers' obligations under this chapter, each manufacturer participating in the plan retains responsibility and liability, including financial liability, for the collection, transportation, processing, and recycling of the manufacturer's equivalent share of CEPs as described in this chapter.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-200, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-200, filed 11/7/06, effective 12/8/06.]

WAC 173-900-205 Manufacturer's brands of CEPs that can be offered for sale or sold in or into Washington state. (1) In order for a manufacturer's brands of CEPs to be offered for sale or sold in or into Washington state, the manufacturer's name and brand names must be listed on the "manufacturer registration list" as "in compliance" or "pending" status.

(2) To be in "in compliance" status a manufacturer must:

(a) **As of January 1, 2007:**

(i) Register annually with ecology;

(ii) Update registration information if it changes;

(iii) Label the manufacturer's CEPs with the manufacturer's brand name(s) included in the manufacturer's registration information.

(b) **As of February 1, 2008:**

(i) Register annually with ecology;

(ii) Update registration information if it changes;

(iii) Label the CEPs with the manufacturer's brand name(s) included in the manufacturer's registration information; and

(iv) Participate in a CEP recycling plan approved, or submitted for approval, by ecology.

Table 205
Manufacturer Status

Manufacturer Status	Can the manufacturer's brands of CEPs be offered for sale or sold in or into Washington state?	Explanation
Pending	Yes	"Pending" means ecology has received the manufacturer's registration form and administrative fee and ecology is reviewing the form.
In compliance	Yes	"In compliance" means ecology has approved the manufacturer's registration, the manufacturer is participating in a plan, and is complying with the requirements in this chapter.
In violation	No	"In violation" means the manufacturer is in violation of the requirements in this chapter.
Manufacturer's **brand name** is not on the "manufacturer registration list"	No	If a manufacturer's brand name is not on the "manufacturer registration list," that brand must not be offered for sale or sold in or into Washington state.
Manufacturer's name is not on the "manufacturer registration list"	No	If a manufacturer's name is not on the "manufacturer registration list," none of the manufacturer's brands of CEPs can be offered for sale or sold in or into Washington.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-205, filed 10/5/07, effective 11/5/07.]

WAC 173-900-210 Required brand labeling for manufacturers. (1) Beginning January 1, 2007, no person may sell or offer for sale an electronic product to any person in or into Washington state unless the electronic product is labeled with the manufacturer's brand.

(2) The label must be permanently affixed and readily visible.

(3) In-state retailers in possession of unlabeled, or white box, electronic products on January 1, 2007, may exhaust their stock through sales to the public.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-210, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-210, filed 11/7/06, effective 12/8/06.]

WAC 173-900-215 Initial CEP manufacturer registration.

Step 1: Complete the manufacturer registration form.

(1) CEP manufacturers must use the on-line or paper manufacturer registration form provided by ecology.

(2) A manufacturer must provide all of the following information to ecology:

(a) The name, contact, and billing information of the manufacturer;

(b) The manufacturer's brand names of CEPs, including:

(i) All brand names sold in Washington state in the past, including the years each brand was sold;

(ii) All brand names currently being sold in Washington state, including the year the manufacturer started using the brand name;

(c) All brand names of electronic products for which the registrant assembles but does not have legal ownership of the brand name placed on the product;

(d) When a word or phrase is used as the label, the manufacturer must include that word or phrase and a general description of the ways in which it may appear on the manufacturer's electronic products;

(e) When a logo, mark, or image is used as a label, the manufacturer must include a graphic representation of the logo, mark, or image and a general description of the logo, mark, or image as it appears on the manufacturer's electronic products;

(f) The method or methods of sale used in or into Washington state; and

(g) CEP recycling plan participation information.

Step 2: Submit the manufacturer registration form.

(3) The individual responsible for implementing the manufacturer's requirements under this chapter must sign the form. The signature means the manufacturer has provided accurate and complete information on the form and reviewed their responsibilities under the electronic product recycling program.

(4) The manufacturer must submit the form using one of the three options below:

(a) The on-line registration form;

(b) The original paper version through the U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

(c) The original paper version through a courier:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

Step 3: Pay the administrative fee.

(5) The following manufacturers must pay an annual administrative fee to ecology (see WAC 173-900-280 and ecology's web site for administrative fee schedule):

(a) Existing manufacturers;

(b) New manufacturers.

(6) Starting in 2007, ecology will send out billing statements by November 1 of each year to all registered manufacturers. The billing statement will include the amount of the administrative fee owed by the manufacturer.

(7) **New manufacturers** must send ecology the required administrative fee so that ecology receives the fee within sixty days of the date on the billing statement.

(8) **Existing manufacturers** must send ecology the appropriate administrative fee so that ecology receives it no later than January 1 of each calendar year.

(9) The manufacturer must send payment to one of the following addresses:

For U.S. Postal Service:

Department of Ecology
Electronic Product Recycling Program
P.O. Box 5128
Lacey, WA 98509-5128

For Courier to:

Department of Ecology
Attn: Fiscal Cashiering
300 Desmond Drive
Lacey, WA 98503

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-215, filed 10/5/07, effective 11/5/07.]

WAC 173-900-220 How manufacturers know if they are registered.

Step 1: Ecology review of the manufacturer registration form.

(1) Within five business days of ecology receiving a manufacturer registration form and the required administrative fee (see WAC 173-900-280), ecology will:

(a) Place the manufacturer in "pending" status on the "manufacturer registration list"; and

(b) Place the manufacturer's "currently owned and manufactured" brand names included on the form on the "manufacturer registration list."

(2) The manufacturer's brands of CEPs included on the "manufacturer registration list" can be sold or offered for sale in or into Washington state.

(3) Ecology will review the form to determine if the form is complete and accurate.

(4) If the form is not complete and accurate, or the manufacturer has not paid the required administrative fee, ecology will contact the manufacturer to request one or both of the following:

(a) A revised form that contains the complete and missing information;

(b) The unpaid administrative fee.

(5) The manufacturer must submit the administrative fee and all requested information within thirty days from the day ecology contacted the manufacturer.

Step 2: Approval or denial of manufacturer registration.

(6) **Approval.**

(a) Approval means that ecology has received the manufacturer's administrative fee and has determined the registration form is complete and accurate.

(b) If ecology approves the manufacturer's registration:

(i) Ecology will change the manufacturer's status from "pending" to "in compliance" on the "manufacturer registration list"; and

(ii) The manufacturer's registered brands of CEPs can continue to be offered for sale or sold in or into Washington state.

(7) **Denial.**

(a) Denial means that ecology either did not receive the administrative fee or ecology has determined the form is not complete and accurate and the manufacturer has not submitted the revised information as requested.

(b) If ecology denies a manufacturer's registration:

(i) Ecology will either change the manufacturer's status from "pending" to "in violation" on the "manufacturer registration list" or remove the manufacturer's name from the list;

(ii) Ecology will notify the manufacturer of the denial; and

(iii) The manufacturer's brands of CEPs are not allowed to be offered for sale or sold in or into Washington state.

(c) For initial manufacturer registration, if ecology denies a registration, the manufacturer may resubmit an initial registration form.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-220, filed 10/5/07, effective 11/5/07.]

WAC 173-900-230 Annual manufacturer registration. (1) After initial registration, to remain registered, manufacturers must submit a registration form and required administrative fee to ecology each year.

(2) Annual registration is due no later than January 1 of each calendar year for the next program year.

(3) The manufacturer must submit the annual registration form using one of the options below:

(a) Submit the manufacturer's on-line registration form;

(b) Submitting a paper version through:

U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(4) Ecology will review manufacturer registration forms submitted for annual registration under the process described in WAC 173-900-220.

(5) For annual registrations, if ecology denies the manufacturer's registration form, the manufacturer will be removed from the "manufacturer registration list."

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-230, filed 10/5/07, effective 11/5/07.]

WAC 173-900-240 Updates to manufacturer registration. (1) If there are any changes to the information on the manufacturer's registration approved by ecology, a registered manufacturer must submit an updated form within fourteen days of when any change occurs.

(2) The manufacturer must submit updates using one of the options below:

(a) Updating the manufacturer's registration information using the on-line form;

(b) Submitting a paper version of the form with updated information through:

U.S. Postal Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(3) Ecology will review manufacturer's updated registration forms under the process described in WAC 173-900-220.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-240, filed 10/5/07, effective 11/5/07.]

WAC 173-900-250 Ecology determination of manufacturer compliance. (1) Beginning January 1, 2007, ecology may inspect any retailer's CEP inventory offered for sale in or into Washington state to determine if the requirements in this chapter are met. If ecology determines a violation has occurred, ecology will document each violation and follow the warning, violations, and penalties procedures in Part II, WAC 173-900-255, 173-900-260, and 173-900-270 (for manufacturers) and Part VII, WAC 173-900-730, 173-900-740, and 173-900-750 (for retailers) of this chapter.

(2) Beginning January 1, 2007, ecology may check any retailer's CEP inventory offered for sale in or into Washington state to determine if brand labeling requirements in WAC 173-900-210 have been met. If ecology determines a violation has occurred, ecology will document each violation and follow the warning, violations, and penalties procedures in Part II, WAC 173-900-255, 173-900-260, and 173-900-270 (for manufacturers) and Part VII, WAC 173-900-730, 173-900-740, and 173-900-750 (for retailers) of this chapter.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-250, filed 10/5/07, effective 11/5/07.]

WAC 173-900-255 Manufacturer violations. (1) A manufacturer is in violation of this chapter when there is a:

(a) Registration violation;

(b) Labeling violation;

(c) Plan violation; or

(d) Return share violation.

Manufacturer registration violations:

(2) A manufacturer is in "registration violation" of this chapter if any of the following occurs:

(a) The manufacturer does not submit an updated registration form within fourteen days of changes in the registration information.

(b) A manufacturer offers for sale or sells its brand of CEPs in or into Washington state and:

(i) The manufacturer's brand is not listed as in "in compliance" or "pending" status on the "manufacturer registration list"; or

(ii) The manufacturer's brand name is not listed as part of the manufacturer's registration.

(c) A retailer offers for sale or sells a manufacturer's brand of CEP in or into Washington state and on the date the products were ordered from the manufacturer or their agent:

(i) The manufacturer's brand was not listed as in "in compliance" or "pending" status on the "manufacturer registration list";

(ii) The brand name of the CEP was not listed as in "in compliance" or "pending" status on the "manufacturer registration list."

(3) A manufacturer may notify retailers, in writing, if the manufacturer's brand of CEPs cannot be offered for sale or sold in or into Washington state. The manufacturer must provide ecology a copy of this notice to avoid a registration violation.

(4) Each unregistered CEP unit offered for sale or sold is a separate violation by the manufacturer.

Manufacturer labeling violation:

(5) A manufacturer is in "labeling violation" of this chapter if any of the following occurs:

(a) The manufacturer offers for sale or sells a manufacturer's electronic product in or into Washington state that does not have a permanently affixed or readily visible label with the manufacturer's brand name.

(b) A retailer offers for sale or sells the manufacturer's electronic product in or into Washington state that the manufacturer has not labeled with the manufacturer's brand name.

(6) Each of the manufacturer's unlabeled units offered for sale or sold is a separate violation by the manufacturer.

Manufacturer plan violation:

(7) Starting February 1, 2008, a manufacturer is in "plan violation" of this chapter if any of the following occurs, the manufacturer:

(a) Has not met the manufacturer's financial obligations to its plan; or

(b) Is not participating in a plan or complying with the manufacturer's responsibilities as described in their ecology approved plan; or

(c) Is participating in a plan that is not fully implemented and the authority or authorized party has not taken action approved by ecology to correct violations.

Return share violation:

(8) It is a "return share violation" when the manufacturer's brands of CEPs are identified on ecology's return share list posted on the agency web site and:

(a) Within sixty days of receiving notice from ecology, the manufacturer has not registered with ecology; or

(b) Within thirty days of registering is not participating in a plan.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-255, filed 10/5/07, effective 11/5/07.]

WAC 173-900-260 Warnings and penalties for manufacturer violations.

Table 260
Manufacturer Warning and Penalties

Type of Violation	Written Warning	First Penalty	Second and Subsequent Penalties
Registration Violation	Warning Letter	Up to $1,000	Up to $2,000
Labeling Violation	Warning Letter	Up to $1,000	Up to $2,000
Plan Violation	Warning Letter	Up to $10,000	Up to $10,000
Return Share Violation	Warning Letter	Up to $10,000 plus the percentage of their return share of the costs of operating the standard plan.	Up to $10,000 plus the percentage of their return share of the costs of operating the standard plan.

Warning letter:

(1) When ecology issues a written warning letter via certified mail, for any violation, the warning will include a copy of the requirements to let the manufacturer know what the manufacturer must do to be in compliance status.

Penalties:

(2) **First penalties:** If the manufacturer does not meet the compliance requirements in the warning letter within thirty days of receipt of the warning, ecology will assess a first penalty, as defined in Table 260 above and do one of the following:

(a) Change the manufacturer's status to "in violation";

(b) Add the manufacturer to the "manufacturer registration list" and put them in "in violation."

(3) **Second and subsequent penalties:** Ecology will issue second and subsequent penalties as defined in Table 260 no more often than every thirty days for the same violation.

(4) Ecology will deposit all penalties collected under this section into the electronic products recycling account created under RCW 70.95N.130.

Appeals:

(5) Violations and penalties may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-260, filed 10/5/07, effective 11/5/07.]

WAC 173-900-270 Corrective actions for manufacturer violations. (1) If a manufacturer is in "in violation" status, ecology will not return them to "in compliance" status until the manufacturer corrects the violation.

Corrective actions for manufacturer registration violations:

(2) To correct a registration violation the manufacturer must:

(a) Provide evidence that the violation has been corrected; and

(b) Pay or settle any penalties to ecology.

Corrective actions for manufacturer labeling violations:

(3) To correct a labeling violation the manufacturer must:

(a) Meet the requirements in WAC 173-900-210;

(b) Correct any other violations; and

(c) Pay or settle any penalties due to ecology.

Corrective actions for plan violations:

(4) To correct a plan violation the manufacturer must:

(a) Join and participate in an approved plan or a plan currently under review for approval;

(b) Correct any other violations; and

(c) Pay or settle any penalties due to ecology.

Corrective actions for return share violations:

(5) To correct a return share violation the manufacturer must:

(a) Join and participate in an approved plan or a plan currently under review for approval;

(b) Correct any other violations; and

(c) Pay or settle any penalties due to ecology.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-270, filed 10/5/07, effective 11/5/07.]

WAC 173-900-280 Administrative fee. (1) **Legislative mandate.** The administrative fee covers ecology's administrative costs related to implementing the electronic product recycling program authorized under chapter 70.95N RCW. It does not include the fees for ecology's review of the standard plan or independent plans.

(2) **Data.**

(a) Ecology will use data collected to extrapolate Washington market shares, and to calculate manufacturer unit sales. Ecology will use market share and/or CEP unit sales to assign each manufacturer to an administrative fee tier. Ecology may use any of, or a combination of, the following data:

(i) Generally available market research data;

(ii) CEP unit sales data supplied by manufacturers for brands they manufacture or sell; or

(iii) CEP unit sales data supplied by retailers for brands they sell.

(b) Ecology may put the data directly into the data base. Ecology will aggregate the data in sets of at least three companies for confidentiality when published.

(3) **Distribution:**

(a) Ecology will establish a fee schedule to distribute administrative fees on a sliding scale, based on tiers, that are representative of annual sales of CEPs in Washington state.

(b) Fees will be distributed to each tier in order to spread costs based on the estimated unit sales given the number of manufacturers and the amount of revenue that needs to be generated to cover ecology's administrative costs.

(c) Tier 7 will have no fee amount associated with it, but the manufacturers assigned to this tier must still complete the registration form (see WAC 173-900-215) and join a plan.

Table 280
Market Share Tiers

Tiers	Manufacturer's Market Share
Tier 1	5% or greater
Tier 2	1% to < 5%
Tier 3	0.1% to < 1%
Tier 4	0.03% to < 0.1%
Tier 5	0.01% to < 0.03%
Tier 6	< 0.01%
Tier 7	Manufacturers who previously manufactured Manufacturers whose CEPs are not directly sold in or into Washington state

(4) **Calculating the administrative fee:** Ecology will calculate the tiers based on the combined unit sales of CEPs sold under manufacturer brands as a percentage of the total sales of electronic products sold in or into Washington state.

(a) **Administrative fee tier calculations for program year 2007:** For administrative fees due January 1, 2007, ecology will base fees on the amount appropriated in the budget for the electronic product recycling program by the legislature. Year one includes start-up costs and it funds the first eighteen months of operations. This amount is four hundred seventy-five thousand dollars.

(b) **Administrative fee tier calculations for program year 2008 and future years:**

(i) For administrative fees due January 1, 2008, and thereafter, ecology will base the fee on the expenditure authority for the electronic product recycling program which for program year 2008 is two hundred twenty-one thousand five hundred dollars.

(ii) The total administrative fee amount will be adjusted biannually by the fiscal growth factor (FGF) as calculated under chapter 43.135 RCW (Fee_{FGF}).

(5) **Tier placement:**

(a) **Existing manufacturers:** Ecology will place existing manufacturers in the appropriate tier based on data obtained or received as described in subsection (2) of this section. If ecology has no data, ecology will place the manufacturer in Tier 4.

(b) **New manufacturers to Washington state:** Ecology will assign these manufacturers to Tier 6 for their initial program year. After the initial program year, ecology will treat these manufacturers as an existing manufacturer (see (a) of this subsection).

(c) **Manufacturers whose CEPs are not directly sold in or into Washington state:** Ecology will assign these manufacturers to Tier 7.

(d) **Manufacturers who previously manufactured:** Ecology will assign these manufacturers to Tier 7.

(6) **Publication of tier assignment:**

(a) **Tiers for fees due January 1, 2007:** Ecology will publish the final tier schedule on ecology's web site by November 15, 2006, for fees due January 1, 2007. The tiers will be based on data available to ecology and received from manufacturers and retailers prior to November 9, 2006. When providing data to ecology, manufacturers must meet the requirements of subsection (7)(a) of this section prior to November 9, 2006.

(b) **Tiers for fees due January 1, 2008, and future years:** For administrative fees for 2008, and future years, ecology will publish a preliminary tier schedule for review and a final tier schedule.

(i) **Preliminary tier schedule:** Ecology will publish the preliminary tier schedule on ecology's web site by September 1 of each calendar year.

(A) This preliminary tier schedule will include the tiers and a list of manufacturers assigned to each tier.

(B) Ecology will also publish the estimated total percentage share of the market attributable to each tier and a list of the brand names for each manufacturer, which form the basis for the estimates used in the tier assignment.

(C) Manufacturers will have until October 1 to submit a request for tier reassignment if they believe they are assigned to the wrong tier. (See subsection (7)(b) of this section.)

(ii) **Final tier schedule:** Ecology will publish the agency's final tier schedule on ecology's web site by November 1 of each calendar year. This final tier schedule will reflect ecology's evaluation of all available data including but not limited to tier reassignment requests.

(7) **Tier reassignment requests:**

(a) **Requests for tier reassignment submitted for fees due January 1, 2007.** Manufacturers may request to be assigned to a different tier for fees due January 1, 2007.

(i) To submit a request for tier reassignment the manufacturer must, on or before November 9, 2006, do one of the following:

(A) Submit or update their on-line manufacturer registration form. The manufacturer must provide the number of

units of CEPs, sold in the prior year, in or into Washington state;

(B) Send a written letter to ecology including the number of units of CEPs sold in the prior year in or into Washington state; or

(C) Submit a complete tier request form available on ecology's web site.

(ii) If CEP unit sales data is provided, ecology will exempt this data from public disclosure in accordance with RCW 42.56.270(13).

(iii) In addition to submitting information about CEP unit sales as described above, ecology may request that the manufacturer submit the CEP unit sales data in writing certified by a certified public accountant. Ecology may request this if ecology finds the data gives a different market share than the national data collected and/or the information changes the tier assignment distribution.

(b) **Requests for tier reassignment for fees due after January 1, 2007.** If submitting a tier reassignment request:

(i) **Existing manufacturers** must submit the request on or before October 1 prior to the next billing cycle and must follow the steps in (c) of this subsection.

(ii) **New manufacturers** to Washington state may not submit a tier reassignment request for their first program year. Requests for tier reassignment for future program years must follow the process for existing manufacturers.

(iii) **Manufacturers whose CEPs are not directly sold in or into Washington state** may request to be assigned to a different tier at any time and must follow the steps in (c) of this subsection.

(iv) **Manufacturers who previously manufactured** may request to be assigned to a different tier at any time and must follow the steps in (c) of this subsection.

(c) **Submitting tier reassignment requests:** To request tier reassignment, the manufacturer must do one of the following:

(i) Submit or update their on-line manufacturer registration form. The manufacturer must provide the number of units of CEPs, sold in the prior calendar year, in or into Washington state; or

(ii) Send a letter to ecology including the number of units of CEPs sold in the prior calendar year in or into Washington state.

(iii) If CEP unit sales data is provided, ecology will exempt this data from public disclosure in accordance with RCW 42.56.270(13).

(iv) In addition to submitting information about CEP unit sales as described above, ecology may request that the manufacturer submit the CEP unit sales data in writing including a basis for the alternative unit sales number and may request this information is certified by a certified public accountant. Ecology may request this if the CEP unit sales data results in a different market share than the national data collected and/or the information changes the tier assignment distribution.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-280, filed 10/5/07, effective 11/5/07.]

WAC 173-900-290 Successor duties. Any person acquiring a manufacturer, or brand, or who has acquired a manufacturer, or brand, shall have all responsibility for the acquired company's CEPs, including CEPs manufactured prior to July 1, 2006, unless that responsibility remains with another entity per the purchase agreement and the acquiring manufacturer provides ecology with a letter from the other entity accepting responsibility for the CEPs. Cobranding manufacturers may negotiate with retailers for responsibility for those products and must notify ecology of the results of their negotiations.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-290, filed 10/5/07, effective 11/5/07.]

PART III
THE AUTHORITY, AUTHORIZED PARTIES, AND COVERED ELECTRONIC PRODUCT (CEP) RECYCLING PLANS

WAC 173-900-300 Covered electronic product (CEP) recycling plans. (1) CEP recycling plans (plans) must provide a program for the collection, transportation, processing, and recycling of CEPs from covered entities in Washington state.

(2) All plans intending to begin implementation on or before January 1, 2009, must be submitted to ecology no later than February 1, 2008.

(3) The authority or authorized party of a plan must:

(a) Provide collectors with information that can be shared with covered entities about how and where CEPs received into the program are recycled.

(b) Ensure that any CEP that is reused after being received by the processor is not included in any weight counts or used to satisfy an equivalent share.

(4) Collection, transportation, processing, and recycling systems and services for a plan:

(a) To implement the program described in the CEP recycling plan the authority or authorized party must only use the services of registered collectors, transporters, and processors that are in "in compliance" status.

(b) Processing services: The authority shall accept and use any processor that:

(i) Meets the requirements of this chapter; and

(ii) Meets any requirements described in the authority's operating plan or through contractual arrangements.

(c) Collection services: The authority of the standard plan must accept CEPs from registered collectors who meet the requirements of this chapter. The authority must compensate registered collectors for the reasonable costs associated with collection of CEPs. If a collector offers premium or curbside services, the compensation paid by the standard plan does not have to cover additional costs associated with those services.

(d) A plan must provide for the processing of large quantities of CEPs at no charge to small businesses, small governments, charities, and school districts.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-300, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-300, filed 11/7/06, effective 12/8/06.]

WAC 173-900-305 The standard plan. A manufacturer must participate in the standard plan administered by

the authority unless the manufacturer has approval to participate in an ecology approved independent plan.

(1) The authority is responsible for collecting, transporting, processing, and recycling the sum of the equivalent shares of all manufacturers participating in the standard plan.

(2) The "authority" is the Washington materials management and financing authority and is authorized to submit the standard plan for the participating manufacturers.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-305, filed 10/5/07, effective 11/5/07.]

WAC 173-900-310 An independent plan. (1) A single manufacturer or a group of manufacturers may submit an independent plan to ecology for approval if:

(a) The manufacturers participating in the proposed plan represent at least five percent return share of CEPs; and

(b) No manufacturer participating in the proposed plan is a new entrant or a white box manufacturer.

(2) If an independent plan does not represent five percent return share for two consecutive program years, ecology will dissolve the independent plan (see WAC 173-900-360).

(3) **Individual independent plan:** A single manufacturer submitting an independent plan to ecology is responsible for collecting, transporting, processing, and recycling its equivalent share of CEPs.

(4) **Collective independent plan:** Manufacturers collectively submitting an independent plan are responsible for collecting, transporting, processing, and recycling the sum of the equivalent shares of all manufacturers participating in the collective independent plan.

(5) Individual or collective groups of manufacturers submitting an independent plan must designate an "authorized party" that is responsible for submitting the independent plan to ecology. A letter of certification from each of the manufacturers designating the authorized party must be submitted to ecology together with their independent plan.

(6) Prior to beginning implementation of an independent plan, the authorized party for that plan must receive plan approval from ecology.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-310, filed 10/5/07, effective 11/5/07.]

WAC 173-900-320 CEP recycling plan content. (1) All plans must contain all of the following sections and required information:

(a) Binding agreement;

(b) Standard plan participant assessment of charges or apportionment of costs (standard plan only);

(c) Letter of certification (independent plan only);

(d) Use of Washington businesses;

(e) Collection services;

(f) Collectors;

(g) Transporters;

(h) Direct processors;

(i) Direct processor audit reports;

(j) Design for recycling;

(k) Direct processor contract face sheet;

(l) Recordkeeping;

(m) Implementation timeline;

(n) Public outreach and marketing requirements; and

(o) Fair compensation.

(2) **A binding agreement:** Each plan must include a written statement binding the authority or authorized party to the use of the plan.

(a) The binding agreement must be signed by:

(i) The person(s) designated by the board of the standard plan to sign such agreements on behalf of the authority; or

(ii) The person(s) designated by the authorized party for independent plans to sign such agreements on behalf of the authorized party.

(b) The binding agreement must include:

(i) Contact information for the authority or authorized party, including name, address, and phone number;

(ii) A list of all manufacturers participating in the plan, manufacturer electronic product registration (EPR) numbers issued by ecology, and their contact information of the responsible official, including their location address, mailing address (if different), phone number and e-mail address;

(iii) A statement that the plan members will comply with the terms and conditions of their ecology approved plan; and

(iv) A statement that in the event the plan fails to meet the manufacturers' obligations under this chapter, the manufacturers retain responsibility and liability, including financial liability, for the collection, transportation, processing, and recycling of their equivalent share of CEPs as described in this chapter.

(3) **Standard plan participant assessment of charges or apportionment of costs:** For the standard plan only, the plan must include the proposal for assessing charges and apportioning costs for manufacturers participating in the standard plan. This must include a description of what information or data the authority used to determine the charge or cost. This section of the plan may be submitted separate from the rest of the plan (see WAC 173-900-325).

(4) **Letter of certification:** For independent plans only, the plan must include a sworn letter from each of the manufacturers participating in the independent plan designating the authorized party.

(5) **Use of Washington state businesses:** A description of how the authority or authorized party has sought the use of businesses within the state, including retailers, charities, processors, and collection and transportation services.

(6) **Collection services:** A description of how the plan will meet the collection service requirements in WAC 173-900-355. At a minimum the authority or authorized party for each plan must work with the local government entities responsible for preparing local solid waste management plans.

(7) **Collectors:** Information about collectors providing collection services in subsection (6) of this section must include:

(a) Collector names and collector electronic product registration (EPR) numbers issued by ecology;

(b) Collection sites: Location and contact number for collection sites;

(c) Days and hours of operation for each site; and

(d) Types of CEPs collected.

(8) **Transporters:** Information about transporters providing transportation services for CEPs and components for the plan including:

(a) Transporter names and transporter electronic product registration (EPR) numbers issued by ecology;

(b) Counties and cities where the transporter provides service for the plan; and

(c) Types of CEPs transported.

(9) **Direct processors:** Information about direct processors of CEPs participating in the plan including:

(a) Direct processor names;

(b) Physical location of processing facilities;

(c) Contact information and mailing addresses for the processing facilities;

(d) Types of CEPs processed at each facility;

(e) A description of the processes and methods that each processor will use to recycle CEPs; and

(f) A written statement from the direct processor ensuring that the direct processor will comply with the performance standards for direct processors in WAC 173-900-650.

(10) **Direct processor compliance audit reports:** For each direct processor used by the plan include a compliance audit report that meets the requirements in WAC 173-900-365.

(11) **Design for recycling:** A description of how the plan participants will communicate and work with processors used by the plan to promote and encourage the design of electronic products that are less toxic and contain components that are more recyclable.

(12) **Direct processor contract face sheet:**

(a) Copies of the contract face sheet and signature sheet for each direct processor used by the plan; and

(b) If not included on the face sheet and signature sheet, the date of the start of the contract and the date of the conclusion of the contract.

(13) **Recordkeeping:** Procedures for how the authority or authorized party will collect and maintain records to meet and demonstrate compliance with the requirements of this chapter. Recordkeeping must include a description of the accounting and reporting systems that will be employed to track progress toward the plan's equivalent share.

(14) **Implementation timeline:** A timeline describing start-up, implementation, and progress toward milestones with anticipated results.

(15) **Public outreach and marketing requirements:** A description of how the plan will meet the public outreach requirements in WAC 173-900-980.

(16) **Fair compensation:** Substantiate that fair compensation is paid to collectors, transporters and direct processors for all services provided to a plan and that payments to service providers will be made within thirty days net from date of shipment or other time frame defined in contractual arrangements.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-320, filed 10/5/07, effective 11/5/07.]

WAC 173-900-325 CEP recycling plan submittal, approval, and implementation.

Step 1: Format of the CEP recycling plan.

(1) All plans must use the "CEP recycling plan template" provided by ecology.

(2) The authority or authorized party must submit paper copies of their plan in a three-ring binder so that individual pages can be submitted and replaced when updates or revisions are required.

Step 2: Submit the CEP recycling plan.

(3) The authority or authorized party must submit one paper copy and one usable electronic copy of their plan to ecology.

(4) All plans intending to begin implementation on or before January 1, 2009, must be submitted to ecology no later than February 1, 2008.

(a) The one paper copy must be submitted by mail to one of the following addresses:

For U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

For Courier:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(b) The electronic copy may be submitted by e-mail or other electronic format usable by ecology that allows electronic editing and commenting by ecology.

(5) The following section of a plan may be submitted to ecology for review and approval separate from the rest of the plan:

• Standard plan participant assessment of charges or apportionment of costs.

When submitting a section separate from the rest of the plan, the authority must follow the process described in this section.

Step 3: Approval process.

(6) Within ninety days after receipt of a complete plan, ecology will determine whether the plan complies with this chapter. Ecology will determine if the plan is:

(a) **Approved.** If approved, ecology will send a letter of approval to the authority or authorized party via certified mail. The approval letter will include an expiration date for the plan.

(b) **Disapproved.** If disapproved, ecology will send a letter of disapproval to the authority or authorized party via certified mail. The disapproval letter will provide ecology's reasons for not approving the plan.

(i) The authority or authorized party must submit a new or revised plan within sixty days after receipt of the disapproval letter.

(ii) Ecology then has an additional ninety days to review the new or revised plan.

(c) Ecology will approve plans for no more than five years. If an independent plan does not represent five percent return share for two consecutive program years, ecology will dissolve the independent plan (see WAC 173-900-360).

(7) **Approval criteria:** Ecology will consider the following when reviewing a plan for approval:

(a) The plan submittal dates were met;

(b) The plan meets the requirements in this chapter;

(c) The plan contains all of the information required in this chapter and provides descriptive information sufficient to allow ecology to determine that the implementation of the plan will be in compliance with this chapter;

(d) When reviewing a plan for service level, ecology may contact the local government or community identified in the plan; and

(e) The plan, when implemented, would meet or exceed required collection service levels (see WAC 173-900-355).

(8) Ecology may ask for additional information or clarification during the review of a plan.

(9) Ecology will post all plans on the agency web site.

(10) Proprietary information submitted to ecology under this chapter is exempt from public disclosure under RCW 42.56.270.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-325, filed 10/5/07, effective 11/5/07.]

WAC 173-900-330 Implementation of the CEP recycling plan. (1) The authority or authorized party of each plan approved for program year 2009 must implement the plan no later than January 1, 2009.

(2) All manufacturers registered as of January 1, 2009, must be participating in a fully operational, ecology approved, plan as of January 1, 2009.

(3) The authority or authorized party must notify ecology if any of the manufacturers listed as a participant in the plan are not meeting the requirements described in the ecology approved plan (see WAC 173-900-350).

(4) If the authority or authorized party of a plan, through implementation of the plan, fails to provide service in each county in Washington state or meet other plan requirements, the authority or authorized party must submit an updated plan to ecology within sixty days of failing to provide service.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-330, filed 10/5/07, effective 11/5/07.]

WAC 173-900-335 Updates and revisions to CEP recycling plans. (1) The authority or authorized party must update or revise the plan in the following situations:

(a) For five-year renewal;

(b) The plan has failed to provide services; and

(c) Plan updates or revisions are required.

(2) **Five-year renewal:** The authority or authorized party must:

(a) Review and update their plan every five years;

(b) Submit the plan to ecology at least one hundred twenty days prior to the expiration date on the plan approval letter.

(3) **Failure to provide service:**

(a) Failure to provide service means implementation of the plan fails to do any of the following:

(i) Provide service in each county in the state;

(ii) Provide service in each city or town with a population of ten thousand or greater; or

(iii) Meet other plan requirements.

(b) If the authority or authorized party of a plan, through implementation of the plan fails to provide services, the authority or authorized party must submit an updated plan to ecology within sixty days of failing to provide service.

(i) The updated plan must address how the program will be adjusted to meet the program geographic coverage and collection service requirements established in WAC 173-900-355.

(ii) When determining if the authority or authorized party fails to provide service, ecology will consider the collection services requirements in WAC 173-900-355 and the local government and community satisfaction reports if submitted under Part VIII, WAC 173-900-810.

(4) **Revisions or updates to the plan:** The authority or authorized party must submit a plan revision, including nonsignificant and significant plan revisions, to ecology within sixty days of any changes to the plan or receiving notice from ecology that an update is required.

(a) When submitting a plan revision, the authority or authorized party may submit only the sections or chapters related to the revision.

(b) **Nonsignificant revisions submitted but ecology approval is not required:** Nonsignificant revisions to CEP recycling plans are identified in Table 335 below. Ecology does not need to approve the nonsignificant revision prior to implementation.

(c) **Significant revisions submitted and ecology approval is required:** Significant revisions to CEP recycling plans are identified in Table 335 below. Ecology must approve the significant revisions prior to implementation.

Table 335
CEP Recycling Plan Revisions

Plan Content	Nonsignificant Revisions Submitted but no approval required to implement	Significant Revisions Submitted and approval is required to implement
Binding agreement	Changes to manufacturers participating in the plan or changes to contact information for manufacturers already included in the plan.	No revisions requiring approval.
Standard plan participant assessment of charges or apportionment of costs	No nonsignificant revisions.	Any changes to the assessment of charges or apportionment of costs.
Letter of certification	Changes to the contact information included for manufacturers already participating in the plan.	Addition or withdrawal of manufacturers participating in an independent plan.
Use of Washington businesses	Any changes to the use of Washington state businesses.	No changes requiring approval.

Plan Content	Nonsignificant Revisions Submitted but no approval required to implement	Significant Revisions Submitted and approval is required to implement
Collection services	Addition of collection site(s) or services without eliminating or changing existing services.	Changes to the level of services provided by the plan other than additional services.
Collectors	Any addition or change to registered collectors used by the plan.	No changes requiring approval.
Transporters	Adding, changing or removing registered transporters used by the plan.	No revisions requiring approval.
Direct processors	Any additions or changes to direct processors already used by an approved plan.	Use of a direct processor not already registered under this chapter.
Direct processor compliance audit report	Submission of copies of audit reports for any direct processor the plan uses after the plan was last approved or the plan's annual report was last submitted.	No revisions requiring approval.
Design for recycling	Any changes to the description of design for recycling included in the plan.	No revisions requiring approval.
Direct processor contract face sheet	Submission of copies of the contract face sheet as required in WAC 173-900-320(12) for any direct processor the plan uses after the plan was last approved or the plan's annual report was last submitted.	No revisions requiring approval.
Recordkeeping	Any changes to recordkeeping.	No revisions requiring approval.
Implementation timeline	No nonsignificant revisions.	Any changes to the implementation timeline.
Public outreach and marketing requirements	Additional public outreach and marketing efforts.	Any changes to the public outreach plan, other than additional public outreach and marketing.
Fair compensation	Any changes to fair compensation.	No changes requiring approval.

(5) **Approval process:** Within sixty days after receipt of a plan revision or update requiring approval, ecology will determine whether the plan complies with this chapter. Ecology will determine if the revision or update is:

(a) **Approved.** If approved, ecology will send a letter of approval to the authority or authorized party via certified mail. The approval letter will include an expiration date for the plan.

(b) **Disapproved.** If disapproved, ecology will send a letter of disapproval to the authority or authorized party via certified mail. The disapproval letter will provide ecology's reasons for not approving the plan.

(i) The authority or authorized party must submit a plan revision or plan update within sixty days after receipt of the letter of disapproval.

(ii) Ecology then has an additional sixty days to review the revised revision or plan update.

(6) **Approval criteria:** Ecology will consider the following when reviewing a plan revision or update for approval:

(a) The updated plan submittal dates were met;

(b) The updated plan meets the requirements in this chapter;

(c) The updated plan contains all of the information required in WAC 173-900-320 and provides descriptive information sufficient to allow ecology to determine that the implementation of the plan will be in compliance with this chapter;

(d) The updated plan, when implemented, would meet or exceed required service levels; and

(e) Additional information or clarification needed by ecology during the review of a revised or updated plan to determine if the plan is compliant with these rules and chapter 70.95N RCW.

(7) Ecology will post all updated plans on the agency web site.

(8) Proprietary information submitted to ecology under this chapter is exempt from public disclosure under RCW 42.56.270.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-335, filed 10/5/07, effective 11/5/07.]

WAC 173-900-340 CEP recycling plan review fee. (1) Ecology shall review and approve plans. The authority or

authorized party will pay ecology's plan review and approval costs.

(2) Plan review and approval includes ecology's costs for:

(a) Review;

(b) Approval; and

(c) Update and plan revision review and approval.

(3) Ecology shall base the plan review fee on actual costs as follows:

Plan Review Fee = Direct Costs + Indirect Costs

Where:

(a) **Direct costs** include ecology staff hourly time and other costs related to accomplishing the activities identified in subsection (2) of this section for each plan. Direct staff costs are the costs of hours worked, including salaries and benefits required by law to be paid to, or on behalf of, employees. Other direct costs are costs incurred as a direct result of ecology staff working on the plan including, for example, costs of: Travel related to plan review, printing and publishing of documents about the plan, and other work, contracted or otherwise, associated with plan review and approval, as necessary.

(b) **Indirect costs** are those general management and support costs of ecology. Ecology applies them using the agency's approved federal indirect cost rate.

(4) **Plan review fee invoicing and payment.** Invoices are generally sent about the last week of the month, for the previous month's activity. Payment is expected within thirty days after the date that ecology has issued the invoice. Ecology will grant final approval of plans and post approved plans on ecology's web site, when all outstanding invoices have been paid by the authority or authorized party for the activities delineated in subsection (2) of this section.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-340, filed 10/5/07, effective 11/5/07.]

WAC 173-900-345 Changing CEP recycling plan participation. (1) After January 1, 2008, no manufacturer may change CEP recycling plans for program year 2009.

(2) For program year 2010 and thereafter, registered CEP manufacturers may change participation in plans if the manufacturer meets the requirements in this section.

The following is the process for changing plan participation:

(3) The plan the manufacturer is joining must, by August 1 prior to the program year for which the change will take effect, submit:

(a) For an existing plan, an update or revision under WAC 173-900-335; or

(b) For a new independent plan, a plan that meets the requirements of WAC 173-900-310.

(4) Ecology will review the plan under the process described in WAC 173-900-325 or 173-900-335, as appropriate. If approved, ecology will send notice, via certified mail, to:

(a) The manufacturer requesting the change; and

(b) The authorized party(ies) and the authority affected by the change.

(5) If ecology does not approve the submitted plan or plan update by January 1 of the program year for which the change was submitted, the change cannot be implemented that program year. Ecology may still review the plan or plan update for approval for the following program year.

(6) Within fourteen days of receiving plan approval notice from ecology, the manufacturer must submit an updated registration form to ecology (see Part II, WAC 173-900-240).

(7) Within sixty days of receiving the notice, the plan the manufacturer left must submit a plan revision to ecology that meets the requirements in WAC 173-900-335.

(8) If an independent plan does not represent five percent return share after the manufacturer leaves the plan, the independent plan has until the end of the following program year to increase participation to represent the five percent return share. If the independent plan does not represent five percent return share at that time, the remaining members will then become members of the standard plan (see WAC 173-900-360).

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-345, filed 10/5/07, effective 11/5/07.]

WAC 173-900-350 CEP recycling plan compliance. (1) **Financial obligations of manufacturers:**

(a) If a manufacturer has not met its financial obligations as determined by the authority, the authority must notify ecology within sixty days that the manufacturer is no longer participating in the standard plan.

(b) Manufacturers who do not meet their financial obligations in their plan are in plan violation. Ecology will follow the violations, warning and penalty procedures in Part III, WAC 173-900-255 and 173-900-260.

(2) **Noncompliance with plan responsibilities:**

(a) It is the responsibility of the authority or the authorized party to notify ecology within sixty days if a manufacturer, who is participating in their plan, is not complying with the manufacturer's responsibilities as described in the ecology approved plan.

(b) Manufacturers who do not comply with the responsibilities identified and agreed to in their plan are in plan violation. Ecology will follow the violations, warning and penalty procedures in Part III, WAC 173-900-255 and 173-900-260.

(3) **Notifications to ecology:**

(a) The notification to ecology about manufacturers in the plan must include:

(i) Name of manufacturer and EPR number issued by ecology;

(ii) Description of noncompliance; and

(iii) Date of notice submittal.

(b) The notification to ecology about direct processors in the plan must include:

(i) Name of direct processor and facility address;

(ii) Description of noncompliance; and

(iii) Date of notice submittal.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-350, filed 10/5/07, effective 11/5/07.]

WAC 173-900-355 Collection services. (1) Each plan must include a description of the method(s) for the reasonably convenient collection of all CEPs in rural and urban

areas throughout the state at no cost to the covered entities according to the requirements in this section.

(2) **County:** The plan must provide collection services of CEPs in each county of the state.

(3) **Urban, city or towns with a population greater than ten thousand:** The plan must provide at least:

(a) One collection site; or

(b) Alternative collection service; or

(c) A combination of sites and alternative service(s).

Together, these sites and/or alternative services must provide at least one collection opportunity for all CEPs for every city or town in the state with a population of greater than ten thousand. A county's collection site may be the same as a collection site for a city or town in the county.

(4) **Rural areas:** For rural areas without commercial centers, or areas with widely dispersed population, a plan may provide collection at:

(a) The nearest commercial centers or solid waste sites;

(b) Collection events;

(c) Mail-back systems; or

(d) A combination of these options.

(5) **Collectors:** The plan must use only registered collectors that are listed as being in "in compliance" status on the "collector registration list."

(6) **Standard plan:** The standard plan must accept CEPs from any collector that is listed on the "collector registration list" as in "in compliance" status.

(7) **Limiting CEPs collected:** A plan may limit the number of CEPs that will be accepted.

(a) CEPs may be limited by:

(i) Number of a product type accepted per a covered entity per day; or

(ii) Number of product type accepted per delivery at a collection site; or

(iii) Number of a product type accepted by an alternative collection service.

(b) All covered entities may use a collection site as long as the covered entities adhere to any restrictions established in the approved plans.

(8) **Large quantities:** If a plan provides specific collection services or has restrictions for large quantities of CEPs, the plan must include a definition of "large quantity."

(9) **Providing joint services:** A plan may provide collection sites and services jointly with another plan or plans.

(10) **Collection sites:**

(a) Collection sites must be:

(i) Staffed during operating hours;

(ii) Open to the public at a frequency adequate to meet the needs of the area being served; and

(iii) Open regularly scheduled hours and on an ongoing basis.

(b) Collection sites may include:

(i) Electronics recyclers and repair shops;

(ii) Recyclers of other commodities;

(iii) Reuse organizations;

(iv) Charities;

(v) Retailers;

(vi) Government recycling sites; or

(vii) Other suitable locations.

(11) **Alternatives to collection sites:**

(a) A plan may provide alternative collection services to covered entities if those alternative collection services provide:

(i) Equal or better convenience than a collection site; and

(ii) Equal or increased collection of unwanted CEPs than would be achieved through a collection site.

(b) If a plan provides alternative services at a cost, the plan must also provide free collection service to covered entities in that county and for cities or towns with a population greater than ten thousand.

(c) These alternatives must be included in the plan as required under Part III, WAC 173-900-320.

(d) To use an alternative collection service instead of a collection site, a plan must provide ecology documentation that demonstrates the alternative service meets (a)(i) and (ii) of this subsection.

(e) Alternative services may include curbside collection services and premium services:

(i) Curbside collection services may be used to collect CEPs from households and other covered entities in small quantities. Those providing curbside collection services may charge an additional fee to the covered entity using the service. The fee will cover the costs not paid by the standard or independent plans.

(ii) Premium services are services that are in addition to simple collection and are provided on-site.

(A) Examples are:

• At-location system upgrade or replacement services provided to covered entities; or

• At-home pickup services offered to households.

(B) Those providing premium services may charge an additional fee to the covered entity to cover the costs not paid by the standard or independent plans.

(12) **Alternatives for collecting large quantities of CEPs:**

(a) A plan may provide alternative collection services to small businesses, small governments, charities, and school districts that may have large quantities of CEPs that cannot be handled at collection sites or through curbside services.

(b) The plan must include a description of alternative collection services for large quantities of CEPs.

(13) **Approval criteria for collection services:** Ecology will determine approval of a plan's collection services based on the following criteria. Collection services are:

(a) Reasonably convenient;

(b) Available to all citizens of Washington state;

(c) Provided in both rural and urban areas;

(d) Provided in every county of the state; and

(e) Provided for each city or town with a population of greater than ten thousand.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-355, filed 10/5/07, effective 11/5/07.]

WAC 173-900-360 Dissolving an independent plan. (1) If an independent plan does not represent five percent return share for two consecutive program years, ecology will dissolve the independent plan.

(2) After August 1 but prior to the start of the next program year, ecology will dissolve any independent plan that

does not meet the independent plan criteria in WAC 173-900-310.

(a) Ecology will send notice, via certified mail, informing all participants in the plan that they must join the standard plan and update their manufacturer registration form (see Part II, WAC 173-900-240).

(b) If a manufacturer does not submit their updated registration form within fourteen days of receiving the notice, it is a registration violation (see WAC 173-900-255) and ecology will follow the warning and penalty procedures in Part II, WAC 173-900-255, 173-900-260, and 173-900-270 of this chapter.

(3) If ecology determines that this change may significantly alter the program described in the standard plan, the authority must submit an updated plan to ecology (see WAC 173-900-335).

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-360, filed 10/5/07, effective 11/5/07.]

WAC 173-900-365 Annual compliance audit reports for direct processors. (1) For each direct processor used by the plan, the authority or authorized party must provide an annual compliance audit report to ecology. These reports must demonstrate and certify that the direct processors meet either the minimum performance standards in WAC 173-900-650 or are in conformance with ecology's "*Environmentally Sound Management and Performance Standards for Direct Processors*."

(2) The authority or authorized party must submit the compliance audit report with their plan submittal (WAC 173-900-320), plan updates or revisions when there are additions or changes to direct processors used by the plan (WAC 173-900-335), and as part of the annual report (WAC 173-900-800).

Minimum performance standards.

(3) For demonstration of compliance with the minimum standards in WAC 173-900-650, the compliance audit must be conducted by an auditor not employed by the processor.

(4) Each annual compliance audit report submitted to ecology to demonstrate compliance with the minimum standards must include:

(a) A list of all the minimum performance standards;

(b) Documentation that the direct processor meets each of the performance standards, including a list of all applicable national, state, and local laws, rules, and ordinances, related to processing activities;

(c) Documentation of noncompliance with a performance standard: A direct processor may not comply with a specific minimum performance standard in WAC 173-900-650 when the national, state, or local laws or rules where the processor is located and a performance standard conflict. When a conflict exists, the audit report must include:

(i) Identification of which performance standard(s) is in conflict.

(ii) Document the conflict and the processor's compliance with the corresponding national, state, or local laws or rules that apply at that location;

(d) Documentation of the auditor's qualifications as described in subsection (5) of this section for the auditor signing the report;

(e) Certification from the auditor certifying whether or not the processor meets the standards in this section;

(f) Signature of the auditor certifying the accuracy of the report.

(5) This annual compliance audit must be completed by an auditor who through professional training, work experience and certification has appropriate knowledge to evaluate the environmental compliance of the processing facility.

Voluntary preferred performance standards.

(6) For demonstration of voluntary conformity with the "*Environmentally Sound Management and Performance Standards for Direct Processors*," the annual compliance audit report must meet the requirements in the environmentally sound management and performance standards document. The audit report required for the voluntary program for preferred performance standards may substitute for the audit report required in this section.

(7) Ecology will not list a direct processor in "preferred status" if:

(a) Ecology does not receive an audit report as required in "*Environmentally Sound Management and Performance Standards for Direct Processors*"; or

(b) The direct processor is not meeting all of the voluntary preferred performance standards.

(8) If a direct processor loses preferred status, and still is providing services to a CEP recycling plan, the direct processor must still be in compliance with the minimum performance standards in WAC 173-900-650. If the direct processor is not meeting the minimum standards, ecology will follow the warning, penalty, and violation procedures in WAC 173-900-370, 173-900-380, and 173-900-390.

Proprietary information.

(9) Proprietary information submitted to ecology under this chapter is exempt from public disclosure under RCW 42.56.270.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-365, filed 10/5/07, effective 11/5/07.]

WAC 173-900-370 Authority or authorized party violations. (1) The authority or authorized party is in violation of this chapter when there is:

(a) A plan violation; or

(b) An annual report violation; or

(c) A performance standards violation.

(2) **Plan violation:** As of January 1, 2009, it is a plan violation if the authority or authorized party:

(a) Does not implement the plan so that the plan meets the requirements in this chapter (see Part III of this chapter);

(b) Uses a collector, transporter, that is not in "in compliance" status; or

(c) Uses a direct processor for processing services that is not registered or has not updated their registration as required under this chapter.

(d) Does not implement return share sampling as required in WAC 173-900-900.

(3) **Annual report violation.**

As of March 1, 2010, it is an authority or authorized party violation if the plan's annual report is not submitted to ecology and approved under WAC 173-900-800.

(4) **Performance standards violation.**

As of January 1, 2009, it is an authority or authorized party "performance standards" violation if the plan uses a direct processor that does not meet the minimum performance standards in WAC 173-900-650.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-370, filed 10/5/07, effective 11/5/07.]

WAC 173-900-380 Authority and authorized party violation notice and penalties.

Table 380
Authority and Authorized Party Penalties

Type of Violation	Written Notice	First Penalty	Second and Subsequent Penalties
Plan Violation	Penalty Notice	Up to $5,000	Up to $10,000
Annual Report Violation	Warning Letter	Up to $1,000	Up to $2,000
Performance Standards Violation	Warning Letter	Up to $1,000	Up to $2,000

Penalty notice for plan violations.

(1) When ecology issues a penalty notice for a "plan violation," ecology will send the penalty notice to the authority or authorized party by certified mail, with a copy to each manufacturer listed as a plan participant. The penalty notice will include:

(a) A first penalty assessment as defined in Table 380;

(b) The requirements that need to be corrected; and

(c) A statement that the authority or authorized party must correct the violation within thirty days of receipt of the notice or the plan may no longer be approved.

(2) If after thirty days, the authority or authorized party fails to make the required corrections and implement the plan or submit a plan update as described in WAC 173-900-335, ecology:

(a) Must then assess a second penalty as defined in Table 380; and

(b) May inform the authority or authorized party that the plan is no longer approved; and

(c) Send a "manufacturer plan violation" warning letter to each manufacturer in the plan (see WAC 173-900-255).

(3) If the authority or authorized party does not correct the violation, ecology must assess subsequent penalties no more often than every thirty days.

Warning letter for annual report violations.

(4) When ecology issues a warning letter for an "annual report violation," ecology will send the letter to the authority or authorized party by certified mail, with a copy to each manufacturer listed in the plan. The warning letter will include:

(a) The requirements that need to be corrected; and

(b) A statement that the authority or authorized party must correct the violation within thirty days of receipt of the warning letter.

(5) If after thirty days, the authority or authorized party fails to make the required corrections, ecology must:

(a) Then assess a first penalty as defined in Table 380; and

(b) Send a "manufacturer plan violation" warning letter to each manufacturer in the plan (see WAC 173-900-255).

(6) If the authority or authorized party does not correct the violation, ecology must assess subsequent penalties no more often than every thirty days.

Warning letter for performance standards violations.

(7) When ecology issues a warning letter for a "performance standards violation," ecology will send the letter to the authority or authorized party by certified mail, with a copy to each manufacturer listed in the plan. The warning letter will include:

(a) The violations that need to be corrected; and

(b) A statement that the authority or authorized party must correct the violation within thirty days of receipt of the warning letter.

(8) If after thirty days, the authority or authorized party fails to make the required corrections, ecology must:

(a) Then assess a first penalty as defined in Table 380; and

(b) Send a "manufacturer plan violation" warning letter to each manufacturer in the plan (see WAC 173-900-255).

(9) If the authority or authorized party does not correct the violation, ecology must assess subsequent penalties no more often than every thirty days.

(10) Ecology will deposit all penalties collected under this section into the electronic products recycling account created under RCW 70.95N.130.

Appeals.

(11) Violations and penalties may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-380, filed 10/5/07, effective 11/5/07.]

WAC 173-900-390 Corrective actions for authority or authorized party.

Corrective actions for plan violations.

(1) The authority or authorized party must:

(a) Meet the plan requirements in Part III of this chapter;

(b) Ensure that all direct processors used by the plan are registered and have updated their registration as required in this chapter;

(c) Correct any other violations; and

(d) Pay or settle any penalties due to ecology.

Corrective actions for annual report violations.

(2) The authority or authorized party must:

(a) Submit their annual report to ecology or correct any deficiencies in the report and submit to ecology;

(b) Correct any other violations; and

(c) Pay or settle any penalties due to ecology.

Corrective actions for performance standards violations.

(3) The authority or authorized party must:

(a) Update information in the plan about direct processors by either:

(i) Discontinuing use of the direct processor and submitting a plan update. The plan update must remove the direct processor from the plan and explain how the plan will replace the processing services previously provided by that direct processor; or

(ii) Submitting a plan update including a new audit report for the direct processor documenting how the direct processor now meets all of the minimum performance standards in WAC 173-900-650.

(b) Correct any other violations; and

(c) Pay or settle any penalties due to ecology.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-390, filed 10/5/07, effective 11/5/07.]

PART IV
COLLECTORS FOR CEP RECYCLING PLANS

WAC 173-900-400 What collectors need to know to collect CEPs for a CEP recycling plan. (1) To collect CEPs for a plan under this chapter the collector must:

(a) Submit an initial registration;

(b) Update the registration information if it changes;

(c) Renew registration annually;

(d) Meet the collector performance standards; and

(e) Be in "in compliance" status on the "collector registration list" on ecology's web site.

Table 400
Collector Status

Collector's Status	Can a collector collect CEPs for a plan?	Definition
In compliance	Yes	**"In compliance"** means the collector is registered and meets the collector performance standards in this chapter.
In violation	No	**"In violation"** means the collector is in violation of the requirements in this chapter.
Collector's name is not on the "collector registration list"	No	Collectors who collect CEPs or other electronic products and do not want to participate in this program do not need to register to continue doing business. If a collector is not registered, the collector must not receive payment for CEPs from a plan.

(2) **Collection services:**

(a) Plans are not required to compensate collectors for any products other than CEPs submitted for recycling by covered entities (households, charities, school districts, small businesses, and/or small governments located in Washington state).

(b) Plans are not required to compensate collectors for CEPs collected prior to January 1, 2009.

(3) Registration under this chapter is only for purposes of administering the electronic product recycling program and does not constitute endorsement by ecology of a particular registrant.

(4) The authority of the standard plan must accept CEPs from registered collectors in "in compliance" status.

(5) The authority must compensate registered collectors, in "in compliance" status for the reasonable costs associated with collection of CEPs submitted by a collector to the plan.

(6) The standard plan will not pay for additional costs associated with premium or curbside services, unless a prior written agreement has been made between the authority and the service provider.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-400, filed 10/5/07, effective 11/5/07.]

WAC 173-900-410 Initial registration as a CEP collector.

Step 1: Complete the collector registration form.

(1) Each collector must complete the on-line or paper registration form provided by ecology and must include all of the following:

(a) Name of individual responsible for implementing the collector requirements;

(b) Contact and location information;

(c) Business license information;

(d) Permit information, when applicable;

(e) Description of services provided; and

(f) Geographic areas where services are provided.

Step 2: Submit the collector registration form.

(2) The individual responsible for implementing the collector requirements must sign the form. Signing the form means the collector has provided accurate and complete

information on the form and will comply with the collector performance standards in WAC 173-900-450.

(3) The collector must submit the form using one of the following options:

(a) On-line registration;

(b) Submitting the original paper version through:

U.S. Postal Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-410, filed 10/5/07, effective 11/5/07.]

WAC 173-900-420 How collectors know if their registration is approved.

Step 1: Ecology review of collector registration forms.

(1) After receiving a form, ecology will review the form to determine if the form is complete and accurate.

(2) If the form is not complete and accurate, ecology will contact the collector to:

(a) Tell the collector what information is missing or inaccurate; and

(b) Request a revised form.

(3) The collector must submit a revised form within thirty days from the day ecology contacted the collector.

Step 2: Approval or denial of collector registration forms.

(4) **Approval.**

(a) Approval means that ecology has determined the form is complete and accurate.

(b) If ecology approves the collector's registration, ecology will post the collector's name on the "collector registration list" and place the collector in "in compliance" status. The collector is allowed to collect CEPs for a plan.

(5) **Denial.**

(a) Denial means that ecology has determined the form is not complete and accurate and the collector did not revise information as requested.

(b) If ecology denies a collector's registration, ecology will remove the collector's name from the "collector registration list" if listed, and will notify the collector of the denial.

(c) The collector must not collect CEPs for a plan.

(d) For initial collector registration, if ecology denies a registration, the collector may resubmit an initial registration form.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-420, filed 10/5/07, effective 11/5/07.]

WAC 173-900-430 Annual renewal of collector registration. (1) A collector must submit its annual registration renewal form to ecology between June 1 and September 1 of each calendar year for the next program year.

(2) If a collector does not submit an annual registration renewal form, ecology will remove the collector from the "collector registration list."

(3) The collector must submit their annual registration form using one of the options below:

(a) Submit the on-line registration form;

(b) Submit a paper version of a form through:

U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(4) Ecology will review collector registration forms submitted for annual registration under the process described in WAC 173-900-420.

(5) For annual registrations, if ecology denies the collector's registration form, ecology will remove the collector from the "collector registration list." In order to resume collecting CEPs for a plan, the collector must resubmit an initial registration (WAC 173-900-410) and receive registration approval from ecology.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-430, filed 10/5/07, effective 11/5/07.]

WAC 173-900-440 Updates to collector registration. (1) A registered collector must submit an updated registration form to ecology within fourteen days of any change to the information provided in its registration form.

(2) The collector must submit updates to its registration form by using one of the options below:

(a) Updating the collector's registration information using the on-line form;

(b) Submitting a paper version of the form with updated information through:

U.S. Postal Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(3) Ecology will review collector updated registration forms under the process described in WAC 173-900-420.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-440, filed 10/5/07, effective 11/5/07.]

WAC 173-900-450 Performance standards for collectors. (1) CEPs collected for a plan must be collected from covered entities free of charge except for the following services:

(a) Premium services as described in an approved plan to cover the costs not paid by the standard or independent plans;

(b) Curbside collection services to cover the costs not paid by the standard or independent plans; or

(c) Collection of large quantities of CEPs from small businesses, small governments, charities, and school districts as defined in WAC 173-900-355(7).

(2) A registered collector must not process CEPs, or components, for purposes of recycling or disposal, unless they also meet the direct processor performance standards and are a registered direct processor under this chapter.

(3) In addition to the requirements in this chapter, all registered collectors must comply with all applicable environmental laws, rules, and local ordinances.

(4) When providing collection services for a plan, the registered collector must:

(a) Staff the site during operating hours.

(b) Notify the authority and/or authorized party of any changes in hours and days of operation and types of CEPs accepted if the collection services provided are identified in an ecology approved plan.

(c) Cooperate with CEP sampling efforts conducted by CEP recycling programs approved under this chapter.

(d) Provide enclosed storage areas with impervious floors so that the CEPs and components collected are protected from the weather.

(e) Collectors must post, in a readily visible location, information that can be shared with covered entities about how and where CEPs received into the program are recycled. Recycling information is provided by the plan(s) for which the collector is providing services.

(f) If a registered collector also gleans CEPs or components for reuse, they must notify the covered entity.

(5) A registered collector must allow access to ecology or their authorized third party representative for purposes of conducting sampling to determine return share.

(6) A registered collector must allow access to ecology for inspections to determine compliance with the requirements in this chapter.

(7) No entity shall claim to be collecting CEPs for a plan unless the entity is registered as a collector and submits all collected CEPs to a plan. Except fully functional CEPs and components may be gleaned for reuse. Collectors shall not include gleaned CEPs and components for reuse in the weight totals for plan compensation.

(8) A registered collector must notify the authority and authorized parties for all plans that the collector submits CEPs if the collector's days/hours of operations change or the collector changes the CEPs collected.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-450, filed 10/5/07, effective 11/5/07.]

WAC 173-900-460 Ecology determination of collector compliance. (1) Beginning January 1, 2009, ecology may inspect any collector used by a plan for compliance with this chapter.

(2) If ecology determines a violation has occurred, ecology will document each violation and follow the warning, violation, and penalties procedures in Part IV, WAC 173-900-470, 173-900-480, and 173-900-490.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-460, filed 10/5/07, effective 11/5/07.]

WAC 173-900-470 Collector violations. Collector violations are described in Table 470.

Table 470
Collector Violations

Starting	If	Then	and Ecology Will
September 1, 2007	A collector has collected CEPs for a plan and is not registered under this chapter.	It is a **collector registration violation.**	Follow the warning, violation, and penalties procedures in Part IV, WAC 173-900-480 and 173-900-490.
Effective date of this chapter	A collector does not update its registration information within fourteen days of a change.	It is a **collector registration violation.**	Follow the warning, violation, and penalties procedures in Part IV, WAC 173-900-480 and 173-900-490.
January 1, 2009	A collector collecting CEPs for a plan is out of compliance with the collector standards in WAC 173-900-450.	It is a **collector standards violation.**	Follow the warning, violation, and penalties procedures in Part IV, WAC 173-900-480 and 173-900-490.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-470, filed 10/5/07, effective 11/5/07.]

WAC 173-900-480 Warnings and penalties for collector violations.

Table 480
Collector Warning and Penalties

Type of Violation	Written Warning	First Penalty	Second and Subsequent Penalties
Collector Registration Violation	Warning Letter	Up to $1,000	Up to $2,000
Collector Standards Violation	Warning Letter	Up to $1,000	Up to $2,000

Warning letter:

(1) When ecology issues a written warning letter via certified mail to a collector, for any collector violation the warning will include a copy of the requirements to let the collector know what must be done to be in compliance.

(2) Ecology will send a copy of the warning letter to the authority and authorized party of each plan.

Penalties:

(3) **First penalties:** If the collector does not meet the compliance requirements in the warning letter within thirty days of receipt of the warning, ecology will assess a first penalty, as defined in Table 480 above and ecology will:

(a) Either change the collector's status to "in violation" or add the collector to the "collector registration list" and put them in "in violation" status; and

(b) Send a penalty notice for a "plan violation" to the authority and authorized party of each plan that uses the collector (see WAC 173-900-380).

(4) **Second and subsequent penalties:** Ecology will issue second and subsequent penalties as defined in Table 480 no more often than every thirty days for the same violation.

(5) Ecology will deposit all penalties collected under this section into the electronic products recycling account created under RCW 70.95N.130.

Appeals:

(6) Violations and penalties may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-480, filed 10/5/07, effective 11/5/07.]

WAC 173-900-490 Corrective action for collector violations. For ecology to change a collector from the "in violation" status to "in compliance" status on the "collector registration list," the collector must:

(1) Provide evidence that the violation has been corrected; and

(2) Pay or settle any penalties to ecology.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-490, filed 10/5/07, effective 11/5/07.]

PART V
TRANSPORTERS FOR CEP RECYCLING PLANS

WAC 173-900-500 What transporters need to know to collect CEPs for a CEP recycling plan. (1) To transport CEPs for a plan under this chapter a transporter must:

(a) Submit an initial registration;

(b) Update the registration information if it changes;

(c) Renew registration annually;

(d) Meet the transporter performance standards in WAC 173-900-550; and

(e) Be in "in compliance" status on the "transporter registration list" on ecology's web site.

Table 500
Transporter Status

Transporter's Status	Can a transporter transport CEPs for a plan?	Definition
In compliance	Yes	**"In compliance"** means the transporter is registered and meets the transporter performance standards in this chapter.
In violation	No	**"In violation"** means the transporter is in violation of the requirements in this chapter.
Transporter's name is not on the "transporter registration list"	No	Transporters who transport CEPs or other electronic products and do not want to participate in this program do not need to register to continue doing business. If a transporter is not registered, the transporter must not receive payment for CEPs from a plan.

(2) Registration under this chapter is only for purposes of administering the electronic product recycling program and does not constitute endorsement by ecology of a particular registrant.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-500, filed 10/5/07, effective 11/5/07.]

WAC 173-900-510 Initial registration as a CEP transporter.

Step 1: Complete the transporter registration form.

(1) Each transporter must use the form provided by ecology and must include all of the following:

(a) Contact and location information;

(b) Business license information;

(c) Permit information;

(d) Description of services provided; and

(e) Geographic areas where services are provided.

Step 2: Submit the registration form.

(2) The individual responsible for implementing the transporter requirements must sign the form. Signing the form means the transporter has provided accurate and complete information on the form and will comply with the transporter standards in WAC 173-900-550.

(3) The transporter must submit the form using one of the options below:

(a) On-line registration;

(b) The original paper version through:

U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-510, filed 10/5/07, effective 11/5/07.]

WAC 173-900-520 How transporters know if their registration is approved.

Step 1: Ecology review of transporter registration form.

(1) After receiving a form, ecology will review the form to determine if the form is complete and accurate.

(2) If the form is not complete and accurate, ecology will contact the transporters to:

(a) Tell the transporter what information is missing or inaccurate; and

(b) Request a revised form.

(3) The transporter must submit a revised form within thirty days from the day ecology contacted the transporter.

Step 2: Approval or denial of transporter registration forms.

(4) **Approval.**

(a) Approval means that ecology has determined the form is complete and accurate.

(b) If ecology approves the transporter's registration, ecology will post the transporter's name on the "transporter registration list" and place the transporter in "in compliance" status. The transporter is allowed to transport CEPs for a plan.

(5) **Denial.**

(a) Denial means that ecology has determined the form is not complete and accurate and the transporter did not revise information as requested.

(b) If ecology denies a transporter's registration, ecology will remove the transporter's name from the "transporter registration list" if listed, and will notify the transporter of the denial.

(c) The transporter must not transport CEPs for a plan.

(d) For initial transporter registration, if ecology denies a registration, the transporter may resubmit an initial registration form.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-520, filed 10/5/07, effective 11/5/07.]

WAC 173-900-530 Annual renewal of transporter registration. (1) A transporter must submit its annual renewal registration form to ecology between June 1 and September 1 of each calendar year for the next program year.

(2) If a transporter does not submit a renewal registration form, ecology will remove the transporter from the "transporter registration list."

(3) The transporter must submit its annual registration form using one of the options below:

(a) Submit the on-line registration form;

(b) Submit a paper version through:

U.S. Postal Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(4) Ecology will review transporter registration forms submitted for annual registration under the process described in WAC 173-900-520.

(5) For annual registrations, if ecology denies the transporter's registration form, ecology will remove the transporter from the "transporter registration list." In order to resume transporting CEPs for a plan, the transporter must resubmit an initial registration (WAC 173-900-510) and receive registration approval from ecology.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-530, filed 10/5/07, effective 11/5/07.]

WAC 173-900-540 Updates to transporter registration. (1) A registered transporter must submit an updated registration form to ecology within fourteen days of a change to the information provided in a registration form.

(2) The transporter must submit updates to its registration form by using one of the options below:

(a) Updating the transporter's registration information using the on-line form;

(b) Submitting a paper version of the form with updated information through:

U.S. Postal Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service to:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(3) Ecology will review transporter updated registration forms under the process described in WAC 173-900-520.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-540, filed 10/5/07, effective 11/5/07.]

WAC 173-900-550 Performance standards for transporters. (1) All registered transporters must comply with all applicable laws, rules, and local ordinances.

(2) A registered transporter must allow access to ecology or their authorized third party representative for purposes of conducting sampling to determine return share.

(3) A registered transporter must allow access to ecology for inspections to determine compliance with the requirements in this chapter.

(4) Transporters must deliver CEPs for a plan to registered direct processors.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-550, filed 10/5/07, effective 11/5/07.]

WAC 173-900-560 Ecology determination of transporter compliance. (1) Beginning January 1, 2009, ecology may inspect any transporter used by a plan for compliance with this chapter.

(2) If ecology determines a violation occurred, ecology will document each violation and follow the warning, violation, and penalties procedures in Part V, WAC 173-900-570, 173-900-580, and 173-900-590.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-560, filed 10/5/07, effective 11/5/07.]

WAC 173-900-570 Transporter violations. Transporter violations are described in Table 570.

Table 570
Transporter Violations

Starting	If	Then	and Ecology Will
September 1, 2007	A transporter has transported CEPs for a plan and is not registered under this chapter.	It is a **transporter registration violation.**	Follow the warning, violation, and penalties procedures in Part V, WAC 173-900-580 and 173-900-590.

Starting	If	Then	and Ecology Will
Effective date of this chapter	A transporter does not update its registration information within fourteen days of a change.	It is a **transporter registration violation.**	Follow the warning, violation, and penalties procedures in Part V, WAC 173-900-580 and 173-900-590.
January 1, 2009	A transporter transporting CEPs for a plan is out of compliance with the transporter standards in WAC 173-900-550.	It is a **transporter standards violation.**	Follow the warning, violation, and penalties procedures in Part V, WAC 173-900-580 and 173-900-590.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-570, filed 10/5/07, effective 11/5/07.]

WAC 173-900-580 Warnings and penalties for transporters.

Table 580
Transporter Warning and Penalties

Type of Violation	Written Warning	First Penalty	Second and Subsequent Penalties
Transporter Registration Violation	Warning Letter	Up to $1,000	Up to $2,000
Transporter Standards Violation	Warning Letter	Up to $1,000	Up to $2,000

Warning letter:

(1) When ecology issues a written warning letter via certified mail to a transporter, for any transporter violation the warning will include a copy of the requirements to let the transporter know what must be done to be in compliance.

(2) Ecology will send a copy of the warning letter to the authority and authorized party of each plan.

Penalties:

(3) **First penalties:** If the transporter does not meet the compliance requirements in the warning letter within thirty days of receipt of the warning, ecology will assess a first penalty, as defined in Table 580 above and ecology will:

(a) Either change the transporter's status to "in violation" or add the transporter to the "transporter registration list" and put them in "in violation" status; and

(b) Send a penalty notice for a "plan violation" to the authority and authorized party of each plan that uses the transporter (see WAC 173-900-380).

(4) **Second and subsequent penalties:** Ecology will issue second and subsequent penalties as defined in Table 580 no more often than every thirty days for the same violation.

(5) Ecology will deposit all penalties collected under this section into the electronic products recycling account created under RCW 70.95N.130.

Appeals:

(6) Violations and penalties may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-580, filed 10/5/07, effective 11/5/07.]

WAC 173-900-590 Corrective actions for transporter violations. For ecology to change a transporter from the "in violation" status to "in compliance" status on the "transporter registration list," the transporter must:

(1) Provide evidence that the violation has been corrected; and

(2) Pay or settle any penalties to ecology.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-590, filed 10/5/07, effective 11/5/07.]

PART VI
DIRECT PROCESSOR REQUIREMENTS

WAC 173-900-600 What direct processors need to know to process CEPs for a CEP recycling plan. (1) To be a direct processor and process CEPs for a plan under this chapter the direct processor must:

(a) Submit an initial registration form;

(b) Update registration information if it changes;

(c) Renew registration annually;

(d) Be identified as a direct processor in an ecology approved plan;

(e) Be in "in compliance" status on the "direct processor registration list" on ecology's web site; and

(f) Meet the minimum or preferred performance standards, throughout the program year, assigned to the direct processor on the "direct processor registration list."

(2) At least thirty days prior to receiving CEPs for processing, the direct processor must submit a registration form to ecology and may not begin processing until ecology places the direct processor in "in compliance" status on the "direct processor registration list" on ecology's web site.

Table 600
Direct Processor Status

Direct Processor's Status	Can a direct processor process CEPs for a plan?	Definition
In compliance	Yes	**"In compliance"** means the direct processor is registered and complies with the requirements in WAC 173-900-650.

Table 600
Direct Processor Status

Direct Processor's Status	Can a direct processor process CEPs for a plan?	Definition
In violation	No	**"In violation"** means the direct processor is in violation of the requirements in this chapter and the plan cannot use the services of the direct processor until compliance is achieved.
Processor's name is not on the "processor registration list"	No	If the direct processor's name is not on the "direct processor registration list," that processor must not provide processing services to a plan or receive compensation from a plan for processing services.

(3) The authority shall contract with any processor that meets the direct processor performance standards in this chapter and meets any requirements described in the authority's operating plan or through contractual arrangements with the authority.

(a) Processors used by the standard plan shall:

(i) Provide documentation to the authority at least annually regarding how they are meeting the performance standards in WAC 173-900-650, including enough detail to allow the standard plan to meet the plan's annual reporting requirements (see annual reporting in WAC 173-900-800); and

(ii) Submit to annual compliance audits meeting the audit requirements in WAC 173-900-365 conducted by or for the authority.

(b) The authority shall compensate such processors for the reasonable costs, as determined by the authority, associated with processing unwanted electronic products.

(c) Such processors must demonstrate that the unwanted electronic products have been received from registered collectors or transporters and provide other documentation, as may be required by the authority.

(4) Registration under this chapter is only for purposes of administering the electronic product recycling program, and does not constitute endorsement by ecology of a particular registrant.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-600, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-600, filed 11/7/06, effective 12/8/06.]

WAC 173-900-610 Initial registration for direct processors.

Table 610
Direct Processor Registration Types

Type of Registration	Definition	Due Date
Initial registration	Direct processor is not currently registered with ecology under this chapter.	Submit registration form to ecology at any time.
Annual renewal	Direct processor is currently registered with ecology under this chapter.	Submit renewal form to ecology between June 1 and September 1 of each year.

At least thirty days prior to receiving CEPs for processing, the direct processor must submit a registration form to ecology and may not begin processing until ecology places the direct processor in "in compliance" status on the "direct processor registration list" on ecology's web site.

Step 1: Complete a direct processor registration form.

(1) Each direct processor must complete a registration form which includes all the following:

(a) Contact and location information;

(b) Business license information;

(c) Documentation of any necessary operating permits issued as required by local, state, or national authorities;

(d) Description of services provided;

(e) Geographic areas from which electronic products are accepted; and

(f) The names of plans the direct processor is contracted to provide processing services to meet the requirements of this chapter.

Step 2: Submit the direct processor registration form.

(2) The person responsible for implementing the direct processor requirements under this chapter must sign the registration form. The signature certifies the company has provided accurate and complete information on the form and is complying with all applicable state, local, and national laws and regulations.

(3) The person must submit the form to ecology. When mailing in an original paper copy, the person must use one of the addresses below:

U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service:

Department of Ecology
Electronic Product Recycling

Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-610, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-610, filed 11/7/06, effective 12/8/06.]

WAC 173-900-620 How direct processors know if their registration is approved.

Step 1: Ecology review of direct processor registration forms.

(1) After receiving a registration form, ecology will review the form to determine if the form is complete and accurate.

(2) If the form is not complete and accurate, ecology will contact the direct processor to:

(a) Tell the direct processor what information is missing or inaccurate; and

(b) Request a revised form.

(3) The direct processor must submit the revised form within thirty days from the day ecology contacted the direct processor.

Step 2: Approval or denial of direct processor registration.

(4) **Approval.**

(a) Approval means that ecology has determined the form is complete and accurate.

(b) If ecology approves the direct processor's registration, ecology will:

(i) Place the direct processor's name on the "direct processor registration list"; and

(ii) Place the direct processor in "in compliance" status.

(c) The direct processor may process CEPs for a plan.

(5) **Denial.**

(a) Denial means that ecology has determined the form is not complete and accurate and the direct processor did not revise information as requested.

(b) If ecology denies a direct processor's registration, ecology will notify the direct processor of the denial and either:

(i) Remove the direct processor's name from the "direct processor registration list"; or

(ii) For renewals and updates, change the direct processor's status to "in violation" on the "direct processor registration list."

(iii) For initial direct processor registration, if ecology denies a registration, the direct processor may resubmit an initial registration form.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-620, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-620, filed 11/7/06, effective 12/8/06.]

WAC 173-900-630 Annual renewal of direct processor registration. (1) Direct processors must submit their annual renewal registration form to ecology between June 1 and September 1 of each calendar year for the next program year.

(2) If an annual renewal registration form is not received during this time period, and subsequently approved by ecology, the direct processor will be removed from the "direct processor registration list" and must not process CEPs for a plan until a registration form is submitted and approved.

(3) When mailing in the original paper copy, the direct processor must use one of the addresses below:

U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(4) Ecology will review direct processor registration forms submitted for annual renewal under the process described in WAC 173-900-620.

(5) For annual registrations, if ecology denies the direct processor's registration form, ecology will remove the direct processor from the "direct processor registration list." In order to resume processing services for a plan, the processor must resubmit an initial registration (WAC 173-900-610) and receive registration approval from ecology.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-630, filed 10/5/07, effective 11/5/07. Statutory Authority: Chapter 70.95N RCW. 06-23-040 (Order 06-07), § 173-900-630, filed 11/7/06, effective 12/8/06.]

WAC 173-900-640 Updates to direct processor registration. (1) A direct processor must submit an updated registration form to ecology thirty days prior to providing new, additional, or reducing processing services for a plan.

(2) When mailing in the original paper copy, the direct processor must use one of the addresses below:

U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Courier Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(3) Ecology will review direct processor updated registration forms under the process described in WAC 173-900-620.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-640, filed 10/5/07, effective 11/5/07.]

WAC 173-900-650 Performance standards for direct processors. (1) This section includes performance standards for environmentally sound handling and management of CEPs by direct processors to protect human health and the environment. There are two levels of performance standards:

(a) Minimum standards (required);

(b) Preferred standards (voluntary program).

(2) Ecology will list all registered direct processors on the agency web site and indicate which level of performance standards, minimum or preferred, the processor meets.

(3) Each registered direct processor used by a plan must meet the minimum performance levels in this section to provide processing services for a plan.

Minimum performance standards for direct processors.

(4) Minimum performance standards for direct processors include the following requirements:

Responsible management priorities.

Legal requirements.

Environmental, health, and safety, management systems (EHSMS).

Recordkeeping.

On-site requirements.

Materials of concern.

Recycling, reuse, and disposal.

Transport.

Prison labor.

Facility access.

Notification of penalties and violations.

Noncompliance with minimum performance standards.

(5) **Responsible management priorities.**

A direct processor must periodically evaluate its management strategies to assure it takes advantage of new more effective technologies and is otherwise continuously improving its practices and processes.

(6) **Legal requirements.**

(a) A direct processor must comply with all federal, state, and local requirements and, if it exports, those of all transit and recipient countries that are applicable to the operations and transactions in which it engages related to the processing of CEPs, components, parts, and materials and disposal of residuals. These include but are not limited to applicable legal requirements relating to:

(i) Waste and recyclables processing, storage, handling, and shipping; and

(ii) Air emissions and waste water discharge, including storm water discharges; and

(iii) Worker health and safety; and

(iv) Transboundary movement of electronic equipment, components, materials, waste, or scrap for reuse, recycling, or disposal.

(b) Upon request by a covered entity, a direct processor must make available information to that covered entity about any financial penalties, regulatory orders, or violations the direct processor received in the previous three years. If the direct processor receives subsequent penalties or regulatory orders, the direct processor must make that information available within sixty days after any subsequent penalties or regulatory orders are issued.

(7) **Environmental, health, and safety management systems (EHSMS).**

(a) A direct processor must develop, document, fully implement, and update at least annually a written EHSMS that includes all of the following:

(i) Written goals and procedures that require the direct processor to systematically manage its environmental, health, and safety matters.

(ii) Utilization of a "plan, do, check, act" model that identifies environmental aspects, implements operational controls, and provides corrective action procedures. Elements of this model must include:

(A) **Plan**

(I) Identification of environmental impacts, and legal and regulatory requirements;

(II) Establishment of environmental goals, objectives and targets;

(III) Plan actions that work toward achieving identified goals;

(IV) Plan for emergency preparedness and response; and

(V) Commitment of management support.

(B) **Do**

(I) Establish roles and responsibilities for the EHSMS and provide adequate resources;

(II) Assure that staff are trained and capable of carrying out responsibilities; and

(III) Establish a process for communicating about the EHSMS within the business.

(C) **Check**

(I) Monitor key activities and track performance;

(II) Identify and correct problems and prevent recurrence; and

(III) Provide a measurement system that quantifies the application of the model.

(D) **Act**

(I) Conduct annual progress reviews;

(II) Act to make necessary changes to the EHSMS; and

(III) Create and implement an action plan for continual improvement.

(iii) A worker safety and health management plan that conforms to a consensus-based standard covering worker health and safety such as ANSI Z10 or to a similarly rigorous in-house standard.

(iv) A plan for responding to and reporting exceptional releases that could pose a risk to worker safety, public health, or the environment. Such releases include emergencies such as accidents, spills, fires, and explosions. The direct processor must submit this plan to all appropriate emergency responders, e.g., police, fire department, hospitals.

(v) A plan is conformable with ISO 14001, Institute of Scrap Recycling Industries' Recycling Industry Operating Standards ("RIOS"), the International Association of Electronic Recyclers' ("IAERs'") standard, or other standards designed at a level appropriate for processing at the facility.

(b) A direct processor must ensure all employees understand and follow the portions of the EHSMS relevant to the activities they perform.

(8) **Recordkeeping.**

(a) A direct processor must maintain documentation such as commercial contracts, bills of lading, or other commercially accepted documentation for all transfers of CEPs,

components, parts, materials, and residual into and out of its facilities.

(b) A direct processor must retain the documents required in this subsection (8) for at least three years.

(9) **On-site requirements.**

(a) **General**

(i) Direct processors must take all practicable steps to maximize recycling.

(ii) A direct processor must have the expertise and technical capability to process each type of CEP and component it accepts in a manner protective of worker safety, public health, and the environment.

(iii) A direct processor must use materials handling, storage and management practices, that assure that all work and storage areas are kept clean and orderly.

(iv) Speculative accumulation:

(A) "Speculative accumulation" means holding, storing or accumulating CEPs, components, parts, materials, or residual derived therefrom for more than one hundred eighty days.

(B) Generators and facilities holding, storing, or accumulating CEPs, components, parts, materials, or residual derived therefrom for more than one hundred eighty days will be considered holding, storing, accumulating solid or hazardous waste and subject to applicable treatment, storage or disposal regulations or equivalent.

(v) A direct processor must use a certified scale to weigh CEPs and components counted towards a plan's equivalent share.

(b) **Storage**

A direct processor must store materials of concern removed from CEPs, components, parts, materials, or residuals in accordance with subsection (11) of this section in a manner that:

(i) Protects them from adverse atmospheric conditions and floods and, as warranted, includes a catchment system;

(ii) Is secure from unauthorized entrance; and

(iii) Is in clearly labeled containers and/or storage areas.

(c) **Exceptional releases posing risks**

A direct processor must be prepared to immediately implement the practices set forth in its EHSMS for responding to and reporting exceptional releases that could pose a risk to worker safety, public health, or the environment, including emergencies such as accidents, spills, fires, and explosions.

(10) **Materials of concern.**

Materials of concern must be handled according to the standards in this section. "Materials of concern" are any of the following:

(a) Any devices, including fluorescent tubes, containing mercury or PCBs;

(b) Batteries;

(c) CRTs and leaded glass; and

(d) Whole circuit boards.

(11) **Recycling, reuse, and disposal.**

(a) **Recycling**

(i) A direct processor must remove from CEPs and components destined for recycling any parts that contain materials of concern that would pose a risk to worker safety, public health, or the environment during subsequent processing.

(ii) A direct processor must remove any parts that contain materials of concern prior to mechanical or thermal processing and handle them in a manner consistent with the regulatory requirements that apply to the items, or any substances contained therein. Circuit boards and materials derived therefrom will be allowed to be shredded prior to separating.

(b) **Reuse**

(i) "Reuse" means any operation by which an electronic product or component of a covered electronic product changes ownership and is used, as is, for the same purpose for which it was originally purchased.

(ii) For a CEP, component or part to be put to reuse it must be fully functioning.

(iii) CEPs, components and parts gleaned for reuse shall not be included in the weight totals submitted to a plan for compensation.

(c) **Disposal of residuals**

(i) "Residuals" are leftover materials from processing CEPs, components, parts and materials. Residuals cannot be used for their original function or cannot be recycled and are sent by a processor to a disposal facility.

(ii) Residuals must be properly designated and managed under applicable solid waste and hazardous waste laws at the location where disposal occurs.

(iii) A direct processor must not send residuals containing materials of concern to incinerators or solid waste landfills if doing so will pose a higher risk to worker safety, public health, or the environment than alternative management strategies.

(iv) Residuals from processing of materials of concern must not be mixed with other residuals for the purpose of disposal.

(12) **Transport.**

A direct processor must ensure that all CEPs, CEP components and materials to be transported are packaged in compliance with all applicable transport laws and rules.

(13) **Prison labor.**

Direct processors may not use federal or state prison labor for processing.

(14) **Facility access.**

Direct processors must allow access to the facility and the documentation required in this section for the purposes of assessing compliance with the requirements in this chapter and for sampling to:

(a) Ecology and ecology's designee(s);

(b) Third-party observers for the purposes of sampling;

(c) For processors used by the standard plan:

(i) The authority;

(ii) The authority's designee(s);

(d) For processors used by an independent plan:

(i) That plan's authorized party;

(ii) The authorized party's designee(s) for that plan.

(15) **Notification of penalties and violations.**

Each direct processor must notify ecology within thirty days if the direct processor receives any penalties, violations or regulatory orders related to processing activities.

(16) **Noncompliance with minimum performance standards.**

A direct processor may not comply with a specific minimum performance standard in this section when the national,

state, or local laws or rules where the processor is located and a performance standard conflict. When a conflict exists, the processor's audit report must document the conflict and processor's compliance with the corresponding laws or rules (see WAC 173-900-365).

Voluntary preferred performance standards.

(17) In addition to meeting the minimum performance standards in this section, a processor may receive preferred status from ecology if the processor conforms with the voluntary performance standards in ecology's "*Environmentally Sound Management and Performance Standards for Direct Processors*."

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-650, filed 10/5/07, effective 11/5/07.]

PART VII
RETAILER REQUIREMENTS

WAC 173-900-700 Retailer—Offering for sale or selling CEPs in or into Washington state. In order for a retailer to offer for sale or sell a CEP in or into Washington state, on the date the product was ordered:

(1) The brand name on the CEP must be on the "manufacturer registration list" posted on ecology's web site; and

(2) The manufacturer must be in "pending" or "in compliance" status.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-700, filed 10/5/07, effective 11/5/07.]

WAC 173-900-710 CEP required brand labeling. (1) Beginning January 1, 2007, no person may sell or offer for sale an electronic product to any person in Washington state unless the electronic product is labeled with the manufacturer's brand.

(2) The label must be permanently affixed and readily visible.

(3) In-state retailers in possession of unlabeled, or white box, electronic products on January 1, 2007, may exhaust their stock through sales to the public.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-710, filed 10/5/07, effective 11/5/07.]

WAC 173-900-720 Ecology determination of compliance for retailers. Retailers:

(1) Beginning January 1, 2007, ecology may inspect any retailer's CEP inventory offered for sale in or into Washington state to determine if the requirements in this chapter are met. If ecology determines a violation has occurred, ecology will document each violation and follow the warning, violations, and penalties procedures in WAC 173-900-730, 173-900-740 and 173-900-750.

(2) Beginning January 1, 2007, ecology may check any retailer's CEP inventory offered for sale in or into Washington state to determine if brand labeling requirements in WAC 173-900-710 have been met. If ecology determines a violation has occurred, ecology will document each violation and follow the warning, violations, and penalties procedures in WAC 173-900-730, 173-900-740 and 173-900-750.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-720, filed 10/5/07, effective 11/5/07.]

WAC 173-900-730 Retailer violations. (1) A retailer is "in violation" of this chapter when one or more of the following retailer violations occurs:

(a) Offering for sale or selling violation;

(b) Labeling violation; or

(c) Public outreach violation.

(2) **Retailer offering for sale or selling violation.**

A retailer is in "offering for sale or selling violation" of this chapter when a retailer offers for sale or sells CEPs and:

(a) On the date the electronic products are ordered from the manufacturer or their agent, the manufacturer's name or brand name does not appear on ecology's "manufacturer registration list."

(i) This means that brand of the manufacturer's electronic products must not be sold in or into Washington state.

(ii) Each unit offered for sale or sold is a separate violation by the retailer.

(iii) If the retailer can prove that the retailer ordered the electronic products from the manufacturer or their agent prior to January 1, 2007, the offering for sale, or selling, of those products is not a retailer violation.

(b) On the date the electronic products were ordered from the manufacturer or their agent, the manufacturer was in "in violation" status on ecology's "manufacturer registration list."

(i) Each unit offered for sale or sold is a separate violation for the retailer.

(ii) If the retailer can prove that the products were ordered from the manufacturer or their agent when the brand and manufacturer name was on ecology's "manufacturer registration list" and was in "in compliance" or "pending" status, the offering for sale, or selling, of those products is not a violation.

(3) **Retailer labeling violations.**

(a) It is a retailer "labeling violation" when a retailer offers for sale or sells an electronic product in or into Washington state that is not labeled with the manufacturer's brand name.

(b) Each unlabeled unit offered for sale or sold is a separate violation by the retailer.

(c) If the retailer can demonstrate to ecology that the retailer was in possession of the unlabeled electronic products prior to January 1, 2007, the offering for sale or selling of these electronic products is not a violation.

(4) **Retailer public outreach violation.**

It is a retailer violation if the retailer does not meet the public outreach requirements in WAC 173-900-980.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-730, filed 10/5/07, effective 11/5/07.]

WAC 173-900-740 Warning, penalties, and corrective action for all retailer violations.

Table 740
Retailer Warning and Penalties

Type of Violation	Written Warning	First Penalty	Second and Subsequent Penalties
Offering for Sale or Selling Violation	Warning Letter	Up to $1,000	Up to $2,000

Type of Violation	Written Warning	First Penalty	Second and Subsequent Penalties
Labeling Violation	Warning Letter	Up to $1,000	Up to $2,000
Public Outreach Violation	Warning Letter	Up to $1,000	Up to $2,000

Warning letter:

(1) When ecology issues a written warning letter via certified mail to a retailer, for any violation, the warning will include a copy of the requirements to let the retailer know what the retailer must do to be in compliance.

Penalties:

(2) **First penalties:** If the retailer does not meet the compliance requirements in the warning letter within thirty days of receipt of the warning, ecology will assess a first penalty, as defined in Table 740 above.

(3) **Second and subsequent penalties:** Ecology will issue second and subsequent penalties as defined in Table 740 no more often than every thirty days for the same violation.

(4) Ecology will deposit all penalties collected under this section into the electronic products recycling account created under RCW 70.95N.130.

Appeals:

(5) Violations and penalties may be appealed to the pollution control hearings board, pursuant to chapter 43.21B RCW.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-740, filed 10/5/07, effective 11/5/07.]

WAC 173-900-750 Corrective action for all retailer violations. (1) For offering for sale and selling violations, the retailer must stop offering for sale or selling CEPs until the manufacturer is listed as "pending" or "in compliance" status on ecology's "manufacturer registration list."

(2) For a labeling violation, the retailer must meet the requirements in WAC 173-900-710;

(3) For a public outreach violation, the retailer must meet the requirements in WAC 173-900-980; and

(4) The retailer must pay or settle any penalties.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-750, filed 10/5/07, effective 11/5/07.]

PART VIII
REPORTING REQUIREMENTS

WAC 173-900-800 CEP recycling plan annual reports. (1) By March 1, 2010, and each program year thereafter, the authority and each authorized party must file an annual report with ecology for the preceding year's program. Ecology will review the report and notify the authority or authorized party of any deficiencies that need to be addressed.

(2) **Annual report content:** The annual report must include the following information:

(a) The total weight in pounds of CEPs, including orphans, for the preceding program year including documentation verifying collection and processing of that material for:

(i) CEPs collected, reported by county, not including CEPs gleaned for reuse;

(ii) CEPs recycled;

(iii) Nonrecycled residual from CEPs; and

(iv) Final destination for the processing of CEPs and components and final destination for disposal of residuals.

(b) The total weight in pounds of CEPs received from each nonprofit charitable organization primarily engaged in the business of reuse and resale used by the plan;

(c) The total weight in pounds of CEPs that were received in large quantities from small businesses, small governments, charities and school districts;

(d) The collection services provided in each county and for each city with a population greater than ten thousand including a list of all collection sites and services operating in the state in the prior program year and the parties who operated them;

(e) Processor information:

(i) A list of all direct processors used;

(ii) The weight of CEPs processed by each direct processor;

(iii) A description of the processes and methods used by each direct processor to recycle the CEPs including a description of the processing and facility locations; and

(iv) A compliance audit report meeting the requirements in WAC 173-900-365 for each direct processor listed in the authority or authorized party's ecology approved plan;

(f) A list of subcontractors used by the direct processor including their facility addresses;

(g) Educational and promotional efforts that were undertaken to inform covered entities about where and how to reuse and recycle their CEPs;

(h) The results of sampling as required in WAC 173-900-900;

(i) The amount of unwanted electronic products, electronic components, and electronic scrap that have been exported from Washington state to countries that are not members of the organization for economic cooperation and development or the European Union;

(j) The list of manufacturers that are participating in the plan;

(k) Signature of the authority or the authorized party;

(l) Any other clarifying information deemed necessary by ecology to determine compliance with this chapter; and

(m) Documentation of work done with the processors used by the plan to promote and encourage the design of electronic products that are less toxic and contain components that are more recyclable.

(3) **Submittal:** The authority or authorized party must submit:

(a) One electronic copy in a format usable by ecology that allows electronic editing and commenting; and

(b) Two paper copies to one of the following addresses:

For U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Or

For Courier:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(c) Faxes are not accepted.

(4) All reports must use the "CEP recycling report template" provided by ecology.

(5) **Review and approval:** Ecology will review each report within ninety days of receipt and will notify the authority or authorized party of any need for additional information or documentation, or any deficiency in its program or the report.

(a) Within five business days of receipt of the report, ecology will notify the authority or authorized party that the report has been received and it is under review.

(b) If ecology determines that there are no deficiencies in the report, a written notice of approval will be sent via certified mail.

(c) If ecology determines that additional information is needed, the authority or authorized party must submit the additional information to ecology within thirty days of receipt of the notice.

(d) If ecology determines that there are deficiencies in the authority's or authorized party's program, the authority or authorized party must submit an updated plan to ecology following the process in WAC 173-900-335.

(6) Ecology will post all reports on the agency web site.

(7) Proprietary information submitted to ecology under this chapter is exempt from public disclosure under RCW 42.56.270.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-800, filed 10/5/07, effective 11/5/07.]

WAC 173-900-810 Local government and community satisfaction reports. (1) Starting January 1, 2010, local governments and local communities are encouraged to submit an annual satisfaction report to ecology by March 1 of each calendar year.

(2) The entity responsible for preparing the solid waste management plan for an area is responsible for submitting the satisfaction report to ecology.

(3) **Report content:** If submitting a report to ecology, the report must include information about local government and community satisfaction with the services provided by plans in their community including:

(a) Accessibility and convenience of services;

(b) How services are working in their community;

(c) What services are not working and why;

(d) Suggestions for improvements to the services being provided by plans;

(e) Description of public outreach and education; and

(f) Any other information the local government determines is important to include.

(4) **Submittal:** If submitting a report, the submitting entity must submit:

(a) One electronic copy, by e-mail or other electronic means, in a format usable by ecology that allows electronic editing and commenting; and

(b) One paper copy by mail to one of the following addresses:

For U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Or

For Courier:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(5) All reports must use the "local government satisfaction report template" prescribed by ecology.

(6) **Review and approval:** Ecology will review each report within ninety days of receipt and will notify the submitting entity of any need for additional information or documentation.

(a) Within five business days of receipt of the report, ecology will notify the submitting entity that the satisfaction report has been received and it is under review.

(b) If ecology determines that no additional information is needed, ecology will send a written notice of approval to the submitting entity.

(c) If ecology determines that additional information is needed, the submitting entity must submit the additional information to ecology within thirty days of receipt of the notice.

(7) If a report is submitted, ecology will use the information provided in these reports when reviewing plan updates and revisions.

(a) Reports indicating dissatisfaction will be sent to the authority or authorized party.

(b) The authority or authorized party has sixty days to respond to the report submittee(s) and ecology addressing issues raised in the report.

(c) If based on this response, ecology determines that the plan is failing to provide service in a community, ecology will send written notice, via certified mail, to the authority or authorized party.

(d) The authority or authorized party will have sixty days from receipt of the notice to submit an updated plan to ecology (see WAC 173-900-335).

(8) At any time, communities may submit comments to ecology about the CEP recycling programs in their area.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-810, filed 10/5/07, effective 11/5/07.]

WAC 173-900-820 Nonprofit charitable organization collection reports. (1) Starting in 2010, and every calendar year thereafter, nonprofit charitable organizations that

are primarily engaged in the business of reuse and resale that collect CEPs for a plan must submit an annual report to ecology by March 1.

(2) The report must indicate and document the weight of CEPs sent for recycling during the previous program year attributed to each plan that the nonprofit charitable organization is participating in.

(3) **Submittal:** The nonprofit charitable organization must submit:

(a) One electronic copy, by e-mail or other electronic means, in a format usable by ecology that allows electronic editing and commenting; and

(b) One paper copy by mail to one of the following addresses:

For U.S. Postal Service:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
P.O. Box 47600
Olympia, WA 98504-7600

Or

For Courier:

Department of Ecology
Electronic Product Recycling
Solid Waste and Financial Assistance Program
300 Desmond Drive
Lacey, WA 98503

(4) All reports must use the "nonprofit charitable organization report template" prescribed by ecology.

(5) **Review and approval:** Ecology will review each report within ninety days of receipt and will notify the nonprofit charitable organization of any need for additional information or documentation.

(a) Within five business days of receipt of the report, ecology will notify the nonprofit charitable organization that the collection report has been received and it is under review.

(b) If ecology determines no additional information is needed, ecology will send written notice to the nonprofit charitable organization.

(c) If ecology determines that additional information is needed, the nonprofit charitable organization must submit the additional information to ecology within thirty days of receipt of the notice.

(d) If a nonprofit charitable organization used by a plan does not submit an annual collection report, that is approved by ecology, the plan cannot receive the five percent credit for using that organization as a collector.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-820, filed 10/5/07, effective 11/5/07.]

PART IX
SAMPLING, RETURN SHARE, AND EQUIVALENT SHARE

WAC 173-900-900 Return share sampling. (1) Each plan must implement and finance an auditable, statistically significant sampling of CEPs entering its program every program year using the method described in this section.

(2) CEPs reclaimed for reuse, or use in new products shall not be included in the sampling data collected under this section.

(3) Sampling data collected must include:

(a) The data as required by the return share sampling program for each CEP unit;

(b) A list of the brand names of CEPs by product type (computer, laptop or portable computer, monitor, or television);

(c) The number of CEPs by product type;

(d) The weight of CEPs that are identified for each brand name;

(e) The weight of CEPs that lack a manufacturer's brand; and

(f) The total weight of the sample by product type.

(4) **Third-party observer.**

(a) The sampling must be conducted in the presence of a third-party observer approved by ecology. Ecology will create a list of approved third-parties that a plan must use when conducting sampling to meet the requirements in this section. Ecology will post a list of approved third-party observers on the agency web site.

(b) The third-party observer will:

(i) Receive the sampling instructions from ecology;

(ii) Keep a sampling log for each day the third-party observed sampling;

(iii) Notify the direct processor twenty-four hours, not including Saturdays, Sundays or holidays, prior to the day when sampling will occur at the processor's facility;

(iv) Verify that the sampling method in this section and the sampling instructions provided by ecology are followed during the sampling event;

(v) Certify the sampling data collected; and

(vi) Submit the data and sampling log to ecology.

(c) If the third-party observer notices that sampling is not conducted in accordance with the methods in this section or the sampling instructions provided by ecology, the third-party observer must follow the procedures in subsection (6)(a) of this section.

(d) The third-party observer must not share the sampling instructions with the direct processor or the plan prior to the sampling day.

(e) The third-party observer must make a sampling log for each day the third-party observes sampling. The sampling log must include:

(i) Date and time of sampling;

(ii) Location of sampling;

(iii) Name of the manager operating the facility on that day;

(iv) Names of the members of the sampling team and role of each team member in the sampling process;

(v) A general timeline of activities throughout the day including start time for CEP sampling process, breaks taken, changes in sampling team personnel or roles, unusual events, and time when sampling process ended;

(vi) Any deviation from the sampling method in this section or sampling instructions provided by ecology including but not limited to the functioning of sampling equipment and return share sampling program;

(vii) An approximate percentage of the types of CEPs present in deliveries coming from different collectors;

(viii) Changes in rate and volume of CEPs coming into the facility;

(ix) Observations or concerns about the procedures used by the sampling team and the CEPs sampled;

(x) When sampling is stopped, a description of why and what steps were taken to try and fix the problem;

(xi) Suggestions for improving future sampling events.

(f) If a third party fails to meet these protocols, ecology may remove the third party from the list of approved observers.

(g) A plan cannot end a contract with a third-party observer for reporting errors, concerns or discrepancies with sampling to ecology.

(5) **Observation of sampling by ecology.** Ecology may, at its discretion, observe sampling and audit the method and the results in addition to the third-party observer.

(6) **Incorrect sampling.**

(a) If the third-party observer sees that the sampling is not implemented according to the method set forth in this section or the sampling instructions provided by ecology, the third-party observer must note which samples were taken incorrectly in the sampling log and work with the sampling team to correct the problem for future samples. If the problem cannot be corrected for the next sampled unit, the third-party observer must:

(i) Stop the sampling for that day;

(ii) Notify ecology of the problem; and

(iii) Notify the authority or authorized party.

(b) If ecology observes, or is notified by a third-party observer, that the sampling is not implemented according to the method set forth in this section or the sampling instructions provided by ecology, ecology may:

(i) Notify the plan of the problem;

(ii) Stop sampling for that day; or

(iii) Eliminate the data about the CEPs sampled for that entire sampling day.

(c) Ecology may also use data analysis, inspections, sworn reports or complaints from individuals to determine incorrect sampling.

(d) If any plan has data from more than one sampling day eliminated for any reason, ecology may estimate that plan's equivalent share based on samples collected by other plans in order to ensure that bias in that plan's sample does not reduce its own return share. This adjustment may be used for three years (see subsection (7) of this section).

(e) If ecology or the third-party observer stops sampling, no alternative sampling date will be assigned to the plan.

(7) **Three year rolling average to be used to construct the statistics needed for the return share.**

(a) Ecology will construct the final average results for each plan using the most recent three years of sample data.

(b) For the first two years of sampling only the years available will be used.

(8) **Review of the sampling method.**

(a) After the fifth program year, ecology may reassess the sampling methods required in this section. Ecology may adjust:

(i) Who will do the sampling;

(ii) The sample size;

(iii) The frequency of sampling;

(iv) The distribution of the sampling places;

(v) Information collected during sampling; and

(vi) The method for collecting the sample.

(b) Prior to making any changes, ecology must notify the public and provide a public comment period.

(9) **Method for sampling.**

Steps in the sampling method	
Step 1:	Ecology creates a third-party observer list.
Step 2:	Selection and payment of third party by the plans.
Step 3:	Ecology determines the sample size for a program year.
Step 4:	Ecology assigns a sample allocation to each plan.
Step 5:	Ecology provides quarterly sampling instructions to each third-party observer identified by the plans.
Step 6:	The plan conducts and records the sampling.
Step 7:	Reporting the sample.
Step 8:	Ecology must adjust for over sampling or under sampling.
Step 9:	Ecology tabulates sampling results quarterly.
Step 10:	Ecology uses sampling results to calculate return share.

Step 1: Ecology creates a third-party observer list.

(a) Ecology will list approved third-party observers on the agency web site.

(b) By December 1 of every other year ecology will announce:

(i) The third-party qualifications; and

(ii) The process for a third party to seek approval to be listed as a third-party observer.

(c) A third party may submit a request to be listed at any time during the year.

Step 2: Selection and payment of a third party by a plan.

(d) Each plan must select a third party from ecology's list to observe sampling conducted for the plan and notify ecology of the third-party observer with which they have contracted.

(e) The plans must cover the costs, including travel, of any third-party observer used by the plan to observe its sampling activities.

(f) The authority or authorized party must remit payment to the third-party observer for sampling in and outside of Washington state.

Step 3: Ecology determines the sample size for a program year.

(g) **Sample size.**

(i) The sample size will be statistically determined by applying the formula below:

$$\text{Sample Size } n = \left[\frac{\pi(1-\pi)z^2}{d^2}\right](m)$$

Where

π = Maximum brand return share in the population, in the form of a fraction. For the first year this number is estimated from data collected by the National Center for Electronics Recycling from other jurisdictions where brand returns were tallied

z = Standardized statistical critical value associated with the confidence level of ninety-five percent is 1.96

d = The maximum margin of error which is .005 at the ninety-five percent confidence level

m = Sample size increase due to unidentifiable brands. In consideration of the fact that the brand names of some units are not identifiable (e.g., white box units with no brand, or returned units where the brand is no longer legible), the sample sizes taken must be larger than those determined purely by statistical techniques. Across all product categories the incident rate for nonidentifiable samples is equal to the orphan share of CEPs sampled.

(ii) Sample size is expressed as a number of individual units of CEPs, and each unit to be sampled will be individually weighed.

Step 4: Ecology assigns a sample allocation to each plan.

(h) Ecology will assign the minimum sample size annually on the basis of each plan's return share.

(i) Starting in 2008, ecology will announce the total sample size and the proportionate plan share for sampling for each plan by December 1st of each year.

Step 5: Ecology provides quarterly sampling instructions to each third-party observer identified by the plans.

(j) Ecology will provide the contracted third-party observers with quarterly sampling instructions. Quarters begin in January, April, July, and October.

(k) The sampling instructions will include the dates for sampling, the processing facility(ies) where sampling will take place, instructions for random selection of units for sampling, and the hours of sampling.

(l) Each plan must conduct sampling for each date listed in the third-party observer's sampling instructions provided by ecology.

Step 6: The plan conducts and records the sampling.

(m) **Field sampling.**

(i) Once the third-party observer arrives at the processing facility, the plan or direct processor must introduce the observer to the members of the sampling team that will be conducting sampling for that day and let the third-party observer know the role of each member of the sampling team.

(ii) The third-party observer must inform the sampling team how to select CEP units based on the sampling instructions provided by ecology for that sampling day.

(iii) The sampling team must place a unique bar code sticker on every CEP entering the processing facility during the assigned sampling period, whether by truckload, walk-in, or other method. Prior to placing the bar code on the CEP, no sorting of CEPs can occur at the processing facility.

(iv) Before any CEP is sent for processing the sampling team must use a hand held bar code reader to scan the bar code sticker placed on that unit by the sampling team.

(v) The return share sampling computer program provided by ecology will identify whether a particular unit should be sampled.

(vi) Units identified as requiring sampling must be set aside for sampling, and units identified as not requiring sampling would be available for processing immediately.

(vii) Units identified as requiring sampling become part of the sample for that day and the sampling team must record the required data for each of those units even if it takes more than one day.

(viii) The sampling team must record all the data for the sample using the return share sampling computer program provided by ecology.

(n) If a brand name is not listed in the computer program, the sampling team must record a minimum of three digital images. The images must be of sufficient clarity that ecology can identify any printed information on the CEP.

(i) The first image will be of the entire front of the CEP.

(ii) The second image will be focused on the brand identification logo (if available).

(iii) The third image will be of the label on the back or bottom of the CEP (if available).

(iv) The photographs must be attached to the appropriate electronic record in the return share sampling computer program in a jpeg format.

Step 7: Reporting the sample.

(o) At the end of the sampling day the plan must provide the results to the third-party observer. The results must include all of the data required in subsection (3) of this section.

(p) The third-party observer will certify the results and submit one paper and one electronic copy of the results to ecology and the authority or authorized party.

Step 8: Ecology must adjust for over sampling or under sampling.

(q) If ecology determines that over or under sampling has occurred, ecology must adjust such over or under sampling as follows:

Vi = Si x Sample size assigned/Sample size taken

Pi = Wi x Sample size assigned/Sample size taken

Where:

Si is the total number of units weighed for brand i

Wi is the total weight of units for brand i.

(r) Ecology may adjust the extrapolation of under sampling data to account for outliers that may over estimate small manufacturer returns.

Step 9: Ecology tabulates sampling results quarterly.

(s) Quarterly, ecology will combine the sampling results required in Step 7 from all plans. If ecology observes discrepancies, ecology will follow the method in subsection (4) of this section.

Step 10: Ecology uses sampling results to calculate return share.

(t) Ecology will combine the sampling results from each quarter and use this data when calculating return share as described in WAC 173-900-910.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-900, filed 10/5/07, effective 11/5/07.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-900-910 Calculating return share. (1) In order for a CEP to be counted in a plan's return share, the CEP or CEP components must go to a direct processor that meets the requirements in Part VI of this chapter.

(2) **Return shares issued in 2007 through 2009:**

(a) Ecology must determine return shares for all manufacturers in the standard plan or an independent plan by using all reasonable means and base those determinations on the best available information regarding return share data from other states and other pertinent data.

(b) If ecology does not have any return data on a particular manufacturer, ecology will assign that manufacturer to the lowest represented percentage of return share on the preliminary return list.

(c) Ecology will use the first return share to:

(i) Appoint five board members for the first term of appointments to the materials management and financing authority board of directors from the top ten manufacturers holding the highest return share; and

(ii) Establish the first program year return share for manufacturers in a plan.

(3) **Return shares issued 2010 and later:** For the second and all subsequent program years, ecology will determine the return share for each manufacturer in the standard plan or an independent plan by dividing the weight of CEPs identified for each manufacturer through the sampling methodology and protocol in WAC 173-900-900 by the total sampled weight of CEPs identified for all manufacturers in the plans. That quotient will then be multiplied by one hundred to establish a percentage share for each manufacturer.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-910, filed 10/5/07, effective 11/5/07.]

WAC 173-900-920 Use and publication of CEP return shares.

Return shares for program year 2009:

(1) Ecology will announce the preliminary return share for each manufacturer and each plan by June 1 of each year.

(2) Ecology will publish the preliminary return shares on the agency web site.

(3) Ecology will notify each registered manufacturer by June 1 of each year.

(4) Manufacturers may challenge their preliminary return share by written petition to ecology. The petition must be received by ecology within thirty days of the date of publication of the preliminary return shares.

(5) The petition must contain:

(a) A detailed explanation of the grounds for the challenge;

(b) An alternative calculation, and the basis for such a calculation;

(c) Documentary evidence supporting the challenge; and

(d) Complete contact information for requests for additional information or clarification.

(6) Sixty days after the publication of the preliminary return share, ecology will make a final decision on return shares, having fully taken into consideration any and all challenges to its preliminary calculations.

(7) A written record of challenges received and a summary of the basis for the challenges, as well as ecology's response, must be published at the same time as the publication of the final return shares.

(8) By August 1, 2007, ecology shall publish the final return shares for the first program year.

Return shares announced for program year 2010 and thereafter:

(9) Ecology will announce the preliminary return share and notify each registered manufacturer by June 1 of each year.

(10) Manufacturers may challenge their preliminary return share by written petition to ecology. The petition must be received by ecology within thirty days of the date of publication of the preliminary return shares.

(11) The petition must contain:

(a) A detailed explanation of the grounds for the challenge;

(b) An alternative calculation, and the basis for such a calculation;

(c) Documentary evidence supporting the challenge; and

(d) Complete contact information for requests for additional information or clarification.

(12) Sixty days after the publication of the preliminary return share, ecology will make a final decision on return shares, having fully taken into consideration any and all challenges to its preliminary calculations.

(13) A written record of challenges received and a summary of the basis for the challenges, as well as ecology's response, must be published at the same time as the publication of the final return shares.

(14) By August 1 of each program year, ecology shall publish the final return shares for use in the coming program year.

(15) Ecology will publish the final return shares on the agency web site.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-920, filed 10/5/07, effective 11/5/07.]

WAC 173-900-930 Calculating the total equivalent share.

Step 1: Calculating individual manufacturer equivalent share.

(1) Ecology must determine the total equivalent share for each manufacturer in the standard plan or an independent plan by dividing the return share percentage for each manufacturer by one hundred, then multiplying the quotient by the sum of total weight in pounds of CEPs collected, not including any CEPs, components or parts gleaned for reuse, for that program year and any additional credited pounds under WAC 173-900-940.

(2) The manufacturer is responsible for distributing responsibility for equivalent share among its past and present licensees.

Step 2: Calculating a plan's equivalent share.

(3) A plan's equivalent share is equal to the total of the equivalent shares for all manufacturers participating in the plan.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-930, filed 10/5/07, effective 11/5/07.]

WAC 173-900-940 Equivalent share credits. Plans that use the collection services of nonprofit charitable organizations that qualify for a taxation exemption under section 501(c)(3) of the Internal Revenue Code of 1986 (26 U.S.C. Sec. 501(c)(3)) that are primarily engaged in the business of reuse and resale must be given an additional five percent credit to be applied toward a plan's equivalent share for pounds that are received for recycling from those organizations. Ecology may adjust the percentage of credit annually.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-940, filed 10/5/07, effective 11/5/07.]

WAC 173-900-950 Notification of equivalent share. By June 1 of each program year starting in 2010, ecology will notify each:

(1) Manufacturer of the manufacturer's equivalent share of CEPs to be applied to the previous program year;

(2) Plan of the plan's equivalent share of CEPs to be applied to the previous program year;

(3) Manufacturer and plan of how its equivalent share was determined.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-950, filed 10/5/07, effective 11/5/07.]

WAC 173-900-960 Share payments. (1) For a CEP recycling plan, if the total weight in pounds of CEPs collected by the plan and processed by a processor during a program year is less than the plan's equivalent share of CEPs for that year, then the authority or authorized party must submit to ecology a payment equal to the weight in pounds of the deficit multiplied by the reasonable collection, transportation, processing, and recycling cost for CEPs and an administrative fee.

(2) Moneys collected by ecology must be deposited in the electronic products recycling account created under RCW 70.95N.130.

(3) For a plan, if the total weight in pounds of CEPs collected during a program year is more than the plan's equivalent share of CEPs for that year, then ecology shall submit to the authority or authorized party, a payment equal to the weight in pounds of the surplus multiplied by the reasonable collection, transportation, processing, and recycling cost for CEPs.

(4) For purposes of this section, the initial reasonable collection, transportation, processing, and recycling cost for CEPs is forty-five cents per pound and the administrative fee is five cents per pound.

(5) Ecology may annually adjust the reasonable collection, transportation, processing, and recycling cost for CEPs and the administrative fee described in this section. Prior to making any changes ecology will:

(a) Post the proposed new amounts on the agency web site;

(b) Send notice to all registered manufacturers;

(c) Provide a thirty-day comment period;

(d) Evaluate comments and make revisions to the amounts if appropriate; and

(e) Post the new amounts on the agency web site.

(6) Ecology will notify all registered manufacturers of any changes to the reasonable collection, transportation, processing, and recycling cost or the administrative fee by January 1 of the program year in which the change is to take place.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-960, filed 10/5/07, effective 11/5/07.]

WAC 173-900-970 Collecting and paying share payments.

Billing share payments.

(1) By June 1 of each program year, ecology will bill any authorized party or authority that has not attained its plan's equivalent share as determined in WAC 173-900-930 share payments. The authorized party or authority must remit payment to ecology within sixty days from the billing date.

Ecology payment of share payments.

(2) By September 1 of each program year, ecology must pay any authorized party or authority that exceeded its plan's equivalent share.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-970, filed 10/5/07, effective 11/5/07.]

PART X
PUBLIC OUTREACH

WAC 173-900-980 Public outreach.

Independent and standard plans:

(1) Public outreach and marketing requirements: An independent plan and the standard plan must inform covered

entities about where and how to reuse and recycle their CEPs at the end of the product's life. At a minimum, the plan must:

(a) Include a web site or a toll-free number that gives information about the recycling program in sufficient detail to educate covered entities regarding how to return their CEPs for recycling;

(b) Describe the method or methods used to provide outreach to covered entities; and

(c) Ensure outreach throughout the state.

Ecology:

(2) Ecology will promote CEP recycling by:

(a) Posting information describing where to recycle unwanted CEPs on its web site;

(b) Providing information about recycling CEPs through a toll-free telephone service; and

(c) Developing and providing artwork for use by others in flyers, signage, web content, and other advertising mechanisms.

(3) Ecology will determine the effectiveness of the public outreach and education campaign based on information supplied in the reports required under this chapter.

Local governments:

(4) Local governments must promote CEP recycling, including listings of local collection sites and services, through existing educational methods typically used by each local government.

Retailers:

(5) A retailer who sells new CEPs must provide information to consumers describing where and how to recycle CEPs and opportunities and locations for the convenient collection or return of the products at the point of sale. This outreach may include:

(a) Use of ecology's artwork in advertisements such as on flyers, shelf-tags, or brochures for this program.

(b) Providing ecology's toll-free telephone number and web site.

(c) Providing information about how to recycle CEPs in Washington either in, on, or with the packaging;

(6) Remote sellers may include the information in a visible location on their web site as fulfillment of this requirement.

Collaboration:

(7) Manufacturers, state government, local governments, retailers, and collection sites and services must collaborate in the development and implementation of the public information campaign.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-980, filed 10/5/07, effective 11/5/07.]

PART XI
THE MATERIALS MANAGEMENT AND FINANCE AUTHORITY (THE AUTHORITY)

WAC 173-900-990 Ecology's relationship to the authority. (1) The director of the department of ecology, or the director's designee, will serve as an ex officio member of the materials management and finance authority board of directors.

(a) Ex officio designations must be made in writing and communicated to the authority director.

(b) The function of ecology's membership is advisory only and carries no voting privileges on matters brought before the board.

(2) Ecology must provide staff to assist in the creation of the authority.

(a) If requested by the authority, ecology will also provide start-up support staff to the authority for its first twelve months of operation, or part thereof, to assist in the quick establishment of the authority.

(b) Staff expenses incurred by ecology must be paid back to ecology through funds collected by the authority and must be reimbursed to ecology from the authority's financial resources within the first twenty-four months of operation.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-990, filed 10/5/07, effective 11/5/07.]

WAC 173-900-993 Appointing the board of the authority. The board of directors of the authority is comprised of eleven participating manufacturers:

(1) Five board positions are reserved for representatives of the top ten brand owners by return share of covered electronic products.

(2) Six board positions are reserved for representatives of other brands. At least one of these board positions is reserved for a manufacturer who is also a retailer selling their own private label.

(3) The board must have representation from both television and computer manufacturers.

(4) The board of directors is appointed by the director of the department of ecology.

(a) Manufacturers will indicate their interest in serving on the board of directors to ecology.

(b) Manufacturers expressing interest will be asked to submit the name of their representative.

(c) Ecology will select board members from the candidates that have expressed interest using the following criteria:

(i) Five from the top ten brand owners by return share of CEPs willing to participate on the board;

(ii) One retailer that is also a manufacturer;

(iii) Representation of manufacturers from eastern Washington;

(iv) Representation from small, in-state manufacturers;

(v) Balance between manufacturers whose business is primarily that of television manufacturing and those whose business is primarily that of computer manufacturing; and

(vi) At least one manufacturer that is a new market entrant.

(5) The first board will be appointed from those manufacturers expressing interest in serving on the board in the first registration of manufacturers.

(6) The first board of directors will serve a term of one year.

(7) Subsequent appointments to the board of directors will be made on intervals established in the authority by-laws created by the board.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-993, filed 10/5/07, effective 11/5/07.]

WAC 173-900-995 Board reimbursement for use of ecology support staff. (1) The costs collected under this section are only for support provided during the start-up and the first twelve months of operation for the board.

(2) The board must reimburse all costs to ecology within twenty-four months of beginning operation.

(3) Ecology will calculate reimbursements based on actual costs:

Reimbursement Amount = Direct Costs + Indirect Costs

Where:

(a) **Direct costs** include ecology staff time and other costs related to accomplishing the activities identified in subsection (1) of this section. Direct staff costs are the costs of hours worked, including salaries and benefits required by law to be paid to, or on behalf of, employees. Other direct costs are costs incurred as a direct result of ecology staff working with the board including, for example, costs of: Travel, printing and publishing of documents, and other work, contracted or otherwise, associated with the board.

(b) **Indirect costs** are those general management and support costs of ecology. Ecology applies them using the agency's approved federal indirect cost rate.

(4) **Cost reimbursement invoicing and payment.** Invoices are generally sent about the last week of the month, for the previous month's activity. Payment is expected within thirty days after the date that ecology has issued the invoice. If the board uses ecology support staff, the authority must reimburse ecology from the authority's financial resources within the first twenty-four months of operation.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-995, filed 10/5/07, effective 11/5/07.]

WAC 173-900-997 The standard plan's assessment of charges and apportionment of costs. (1) Manufacturers participating in the standard plan must pay the authority to cover all administrative and operational costs associated with the collection, transportation, processing, and recycling of covered electronic products within the state of Washington incurred by the standard program operated by the authority to meet the standard plan's equivalent share obligation.

(2) The authority must assess charges on each manufacturer participating in the standard plan and collect funds from each participating manufacturer for the manufacturer's portion of the costs in subsection (1) of this section.

(a) Such apportionment must be based on return share, market share, any combination of return share and market share, or any other equitable method.

(b) The authority's apportionment of costs to manufacturers participating in the standard plan may not include nor be based on electronic products imported through the state and subsequently exported outside the state.

(c) Charges assessed under this section must not be formulated in such a way as to create incentives to divert imported electronic products to ports or distribution centers in other states.

(d) The authority must adjust the charges to manufacturers participating in the standard plan as necessary in order to ensure that all costs associated with the identified activities are covered.

(3) The authority may require financial assurances or performance bonds for manufacturers participating in the standard plan, including but not limited to new entrants and white box manufacturers, when determining equitable methods for apportioning costs to ensure that the long-term costs for collecting, transporting, and recycling of a covered electronic product are borne by the appropriate manufacturer in the event that the manufacturer ceases to participate in the program.

(4) Nothing in this section authorizes the authority to assess fees or levy taxes directly on the sale or possession of electronic products.

(5) If a manufacturer has not met its financial obligations as determined by the authority, the authority must notify ecology that the manufacturer is not participating in the standard plan (see WAC 173-900-350).

(6) The authority must submit its plan for assessing charges and apportioning cost on manufacturers as part of the standard plan (see Part III, WAC 173-900-320).

(7) **Appeals:** Any manufacturer participating in the standard plan may appeal an assessment of charges or apportionment of cost as collected by the authority.

(a) The manufacturer must pay their charges or apportionment to the authority and submit a written petition to the director of the department of ecology within fourteen calendar days of receipt of notification of charges or apportionment. The written petition must include proof that:

(i) The authority's assessments or apportionment of costs were an arbitrary administrative decision;

(ii) An abuse of administrative discretions is proven; or

(iii) It is not an equitable assessment of apportionment of costs.

(b) Within thirty calendar days of receipt of the written petition, the director or the director's designee will review the appeal.

(c) The director will reverse any assessments of charges or apportionment of costs if the appeal is determined to be correct.

(d) If the director reverses an assessment of charges, the authority must:

(i) Redetermine the assessment or apportionment of costs and submit a plan revision as described in WAC 173-900-335, CEP recycling plan update; and

(ii) Once the revision is approved by ecology, send refunds or assess additional charges to standard plan participants per the revision.

(8) **Arbitration:** Disputes regarding the final decision by the director or the director's designee may be challenged through arbitration.

(a) The director shall appoint one member to serve on the arbitration panel.

(b) The challenging party shall appoint one member to serve on the arbitration panel.

(c) These two members shall choose a third person to serve. If the two persons cannot agree on a third person, the presiding judge of the Thurston county superior court shall choose a third person.

(d) The decision of the arbitration panel shall be final and binding, subject to review by the superior court solely upon the question of whether the decision of the panel was arbitrary or capricious.

[Statutory Authority: Chapters 70.95N, 70.105, and 70.105D RCW. 07-21-013 (Order 07-05), § 173-900-997, filed 10/5/07, effective 11/5/07.]